



Gavin Bottom Ash Pond

2023 Annual Groundwater Monitoring
and Corrective Action Report

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ACRONYMS AND ABBREVIATIONS

Name	Description
ASD	Alternate Source Demonstration
BAC	Bottom Ash Complex
BAP	Bottom Ash Pond
CCR	Coal combustion residual
CFR	Code of Federal Regulations
ERM	ERM Consulting & Engineering, Inc.
Gavin	Gavin Power, LLC
K	Hydraulic conductivity
mya	Million years ago
NFAP	North Fly Ash Pond
ODNR	Ohio Department of Natural Resources
Plant	General James M. Gavin Power Plant
SSI	Statistically significant increase
TDS	Total dissolved solids
USEPA	United States Environment Protection Agency

EXECUTIVE SUMMARY

On behalf of Gavin Power, LLC (Gavin), ERM Consulting & Engineering, Inc. (ERM) has prepared this *2023 Annual Groundwater Monitoring and Corrective Action Report* summarizing groundwater monitoring activities at the Bottom Ash Pond (BAP) at the General James M. Gavin Power Plant (Plant) located in Cheshire, Ohio. The BAP is one of three regulated 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. A review of the CCR monitoring well network is documented in the *Updated Groundwater Monitoring System Evaluation and Certification—40 CFR 257.91* for the BAP (ERM 2021a).

This report documents the status of the groundwater monitoring program for the BAP, 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; and
- Identification of key activities for the coming year.

The BAP CCR unit groundwater monitoring program began 2023 in a “detection monitoring” program status as defined by 40 CFR § 257.94 and remained in detection monitoring at the end of the 2023 reporting period. Groundwater monitoring in 2023 consisted of two semi-annual monitoring events completed in March and September/October 2023 that included groundwater level measurements and subsequent groundwater sampling. Groundwater level measurements were used to construct updated groundwater potentiometric surface maps.

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. The following locations and analytes exhibited SSIs in 2023:

Well	Date Sampled	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids (TDS)
BAC-02	Mar-2023	X	X	X	φ	X	X	X
	Sep/Oct-2023	X	X	X	X	φ	X	X
BAC-03	Mar-2023	X	φ	X	φ	X	X	φ
	Sep/Oct-2023	X	φ	X	φ	X	X	φ
BAC-04	Mar-2023	X	φ	X	φ	X	X	φ
	Sep/Oct-2023	X	φ	X	φ	X	X	φ
BAC-05	Mar-2023	X	φ	X	φ	X	X	X
	Sep/Oct-2023	X	φ	X	φ	X	X	X

Notes: φ = No SSI; X = SSI; SSI = statistically significant increase

Each identified SSI was evaluated in the corresponding attached Alternate Source Demonstration (ASD) Reports. The ASD reports identify regional background (total dissolved solids [TDS], calcium, chloride, and fluoride), and the North Fly Ash Pond (NFAP) at the adjacent Kyger Creek Generating Station (boron, pH, and sulfate) as the sources of these SSIs; therefore, the BAP groundwater monitoring system remained in detection monitoring at the conclusion of 2023. Accordingly, no remedial actions were selected, initiated, or performed in 2023.

Some of the matters addressed herein 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 response to the Final Decision, 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. We note that USEPA's findings and determinations in the Final Decision are the subject of pending litigation.

1. INTRODUCTION

The General James M. Gavin Power Plant is a coal-fired generating station located in Gallia County in Cheshire, Ohio, along the border between Ohio and West Virginia (Figure 1-1). The Plant contains three regulated CCR management 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 Residual Waste Landfill, the Fly Ash Reservoir, and the BAP. The BAP has a total surface land area of approximately 49.1 acres and is located south of the main Plant area and adjacent to the Ohio River. The BAP, together with the smaller Reclaim Pond, makes up the Bottom Ash Complex (BAC), which has operated since 1974. Bottom ash slurry was previously pumped into the BAP where the surficial water was decanted through a reinforced concrete drop inlet structure into the Reclaim Pond. The water in the Reclaim Pond is either pumped to the Plant for reuse or discharged to the Ohio River via an overflow structure subject to the Gavin National Pollution Discharge Elimination System permit. The Reclaim Pond was not designed to retain an accumulation of CCR; did not and does not receive any significant amount of CCR; and did not and does not treat, store, or dispose of CCR. Therefore, it is not subject to the CCR Rule.

The conversion of Units 1 and 2 to dry ash handling systems was completed and the placement of bottom ash in the BAP ceased in 2022. The BAP continued to receive miscellaneous Plant wastewaters including coal-pile runoff, cooling-tower blowdown, pyrites, and various Plant sump wastewaters until April 7, 2023. Dewatering activities of the BAP commenced the week of March 20, 2023. The BAP last received influent wastewater on April 7, 2023, at which time the flow was entirely diverted directly into the Reclaim Pond (or, for some wastewater streams, to a pretreatment system and then into the Reclaim Pond). Dewatering of the BAP continued through May 31, 2023 at which time the BAP was considered drained for ash removal.

ERM produced this report on behalf of Gavin. The report documents the status of the groundwater monitoring program for the BAP, 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; and
- Identification of key activities for the coming year.

Consistent with the notification requirements of the CCR Rule, this annual groundwater monitoring report will be posted to the Plant operating record no later than 31 January 2024 (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 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-REFERENCES

Regulatory Citation in 40 CFR Part 257, Subpart D	Requirement (paraphrased)	Where Addressed in This Report
§ 257.90(e)	Status of the groundwater monitoring program.	Section 2
§ 257.90(e)	Summarize key actions completed.	Sections 4 and 5
§ 257.90(e)	Describe any problems encountered and actions taken to resolve problems.	Section 4
§ 257.90(e)	Key activities for upcoming year.	Section 6
§ 257.90(e)(1)	Map, aerial image, or diagram of CCR unit and all background and downgradient monitoring wells.	Figure 3-3
§ 257.90(e)(2)	Identification of new monitoring wells installed or abandoned during the preceding year and narrative description.	N/A
§ 257.90(e)(3)	Summary of groundwater data, wells sampled, date sampled, and whether sampling was required under detection or assessment monitoring.	Section 4.2, 5.3, Appendices C-D
§ 257.90(e)(4)	Narrative discussion of any transition between monitoring programs.	N/A
§ 257.93(c) (via § 257.90(e)(5))	Rate and direction of groundwater flow each time groundwater is sampled.	Sections 5.1, 5.2
§ 257.94(e)(2) (via § 257.90(e)(5))	Any ASD reports and related certifications pertaining to a detection monitoring program.	Appendices C–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 BAP groundwater monitoring system began the 2023 reporting period in detection monitoring. SSIs were identified for the BAP groundwater monitoring network for boron, calcium, chloride, fluoride, pH, sulfate, and TDS in 2023. Regional background (calcium, chloride, fluoride (H2 only), and TDS), and the Kyger Creek NFAP (boron, pH, and sulfate) were identified as alternate sources for the SSIs. Therefore, the BAP remains in detection monitoring at the end of the 2023 reporting period.

3. BACKGROUND

3.1 DESCRIPTION OF CCR UNIT

The BAP previously received bottom ash, miscellaneous Plant wastewaters including coal-pile runoff, cooling-tower blowdown, pyrites, and various Plant sump wastewaters, and is subject to the CCR Rule. The conversion of Units 1 and 2 to dry ash handling systems was completed and the receipt of CCR waste streams in the BAP ceased in 2022. The BAP received non-CCR waste streams until April 7, 2023 at which time flow was diverted to temporary water treatment infrastructure and then directly into the Reclaim Pond.

Prior to April 7, 2023, the water from the BAP was decanted through a reinforced concrete drop inlet structure into the Reclaim Pond before discharge through a permitted outfall. The 6.7-acre Reclaim Pond abuts and is located to the northwest of the Bottom Ash Pond (Figure 3-1). The two ponds comprise the BAC. The Reclaim Pond was not designed to retain an accumulation of CCR; did not and does not receive significant amounts of CCR; and did not and does not treat, store, or dispose of CCR, and therefore is not subject to the CCR Rule. Because the Reclaim Pond is not a CCR unit, and does not require groundwater monitoring, this report and the associated groundwater monitoring system pertains only to the BAP.

Gavin plans to achieve closure of the BAP through removal of CCR. CCR was excavated from the BAP throughout 2023 and disposed of in Gavin's lined landfill. All CCR material was removed by December 16, 2023.

3.2 GEOLOGY AND HYDROGEOLOGY

3.2.1 REGIONAL GEOLOGIC HISTORY

The Plant is located in the southeastern region of Ohio within the Allegheny Section of the Appalachian Plateau. Bedrock in Gallia County consists of sedimentary series of Allegheny, Conemaugh and Monongahela formations of Pennsylvanian age that were deposited about 298 to 302 million years ago (mya) (ODNR, 2006). The general dip of the underlying bedrock is east-southeast. The stratigraphic arrangement of the bedrock series in the region generally follows a cyclothymic sequence, defined by a cyclic repetition of sedimentary beds (Blake, 1952). The sedimentary beds include sandstone, siltstone/claystone and coal. The thickness and lateral extent of these beds vary in the area due to numerous drainage systems incising the bedrock. A prominent erosional force, originating over 2.5 mya in the Tertiary Period, was the Teays River (ODNR, 1995). The Teays Rivers headwaters began in western North Carolina, and its vast network of tributaries flowed to the north and northwest into West Virginia, Ohio, Indiana and Illinois (Erjavec, 2018). As the river moved through the landscape, it eroded bedrock material and deposited thick fluvial (deposited by a river system) sands and gravels in southeastern and central Ohio (Stout et al. 1943).

As time continued into the Pleistocene epoch (1.6 mya to 11,000 years ago), multiple glacial lobes advanced over the landscape and divided Ohio into its glaciated and non-glaciated regions. Early Pleistocene glaciation covered the northern and western sections of Ohio extending to its limit in central Ohio, near Chillicothe (Szabo, 2011). The glaciers of the Early Pleistocene created a

blockade in central Ohio where the Teays River dammed and ponded, forming long/narrow lakes (termed finger lakes) extending throughout the Teays River tributary valleys. These finger lakes were generally interconnected, and the overall territory of these finger lakes is referred to as Lake Tight (ODNR, 1995). Lake Tight was between 0.79 to 0.88 mya, comparable in size to present day Lake Erie and expanded to the south and east from central Ohio into parts of West Virginia and Kentucky (Erjavec, 2018). The historical extent of Lake Tight included the southeastern portion of Ohio in which the Gavin Site and the BAP currently exists. Lake Tight became the dominant depositional environment, creating very thick lacustrine beds (sedimentary beds formed in a lake depositional environment) of clays, silts and fine sands that lay on top of the coarser sands and gravels. The geologic combination of these deposits is referred to as the Teays Formation (Hoyer, 1976).

When Lake Tight breached, a new drainage system formed called Deep Stage. The Deep Stage drainage system had a reversed flow direction from the Teays River, now flowing from north to south and southwest (Stout et. al, 1943; Tight 1903). Deep Stage deeply incised the Teays Formation, eroding down to bedrock in areas of southern Ohio and creating high elevation terraces made up of Lake Tight silts and clays. Deep Stage created the Pomeroy River, which was the origin for the historic and present-day Ohio River Valley system (Stout et. Al, 1943). During the Wisconsin glacial stage in the Late Pleistocene (~24,000 to 11,000 years ago), the historic Ohio River valleys filled with sediments from the fluvio-glacial outwash (eroded and/or deposited by flowing meltwater from glaciers) (Bergolc, 2004). The glacial meltwater rivers deposited coarser-grained sands and gravels, which filled the incised valleys where the former Teays deposits existed, and over time increased the base elevations of the historic Ohio River valleys (Ray, 1974; Hoyer, 1976).

As the historic Ohio River had periods of high-energy sedimentation due to increased glacial meltwaters, it also experienced periods of low-energy sedimentation as meltwaters depleted. Low-energy environments, such as fluvial floodplains, deposit finer grained materials including clays, silts, and fine sands (Dunne et al., 2013). These postglacial lower-energy deposits occurred through the Quaternary Period into the Holocene Epoch (10,000 years ago to recent) (Ray, 1974; Bergolc, 2004). Simultaneously, erosion of the surrounding historic Ohio River valley walls deposited alluvial and colluvial sediments made of the previously deposited finer-grained Lake Tight beds (Ray, 1974; Hoyer 1976; Nelson et. al, 2022). As such, a fining upward sequence was created from the deposition of the alluvial and colluvial sediments, along with the low-energy fluvial deposition. This fining-upward sequence exists as a younger, finer-grained unit consisting of clays, silts and fine sands overlying the older, coarser-grained glacial sands and gravels.

3.2.2 SITE-SPECIFIC GEOLOGY

Observation of bedrock cores collected around the BAP indicate the uppermost bedrock layers are claystone/siltstone (interpreted to be the Round Knob) and an underlying sandstone stratum (interpreted to be the Cow Run). A sharp lithological contact exists between the bedrock units and the overlying coarser-grained glacial sands and gravels. These coarser sediments, consisting primarily of medium to coarse sands and gravels, are buried by the younger, finer-grained unit, which exists as a laterally extensive layer of clays and silts. This younger, finer-grained unit is also

known as the separation layer, existing between the base of the BAP and the coarser sediments, which make up the alluvial aquifer below. Some fine-grained sands are also observed within the clays and silts within the separation layer, primarily being intermixed within the clay and silt matrix. However, two instances of interbedded fine sands, clays and/or silts have been described in the boring/well logs for B-0904 on the northern border of the neighboring Kyger Creek property in April 2009 and BAC-13, which was installed on the eastern berm of the BAP in 2022. The descriptions of interbedding in B-0904 and BAC-13 were both described at the base of the separation layer where contact exists with the deeper, coarser sands and gravels. These intervals of interbedding are not laterally or vertically extensive, as evidenced by lithologic observations in adjacent borings. As such, these few descriptions of interbedding are not considered to be representative of the clay and silt separation layer located above the coarse sand and gravel. Rather these may be isolated depositional instances. The wells installed in 2022 around the BAP area show general agreement in Site lithology and provide more detailed geologic descriptions of the sediments beneath the BAP than did historical borings/wells installed in the area.

3.2.3 SITE HYDROLOGY AND HYDROGEOLOGY

The uppermost aquifer beneath the BAP is approximately 20 to 40 feet thick and consists primarily of the coarser-grained sands and gravels described in section 3.2.2, though some fine sand is also present. Also referred to as the alluvial aquifer, the uppermost aquifer is confined by the clay and silt separation layer above and by the siltstone/claystone bedrock units below (Figure 3-2). The Ohio River acts as a hydraulic boundary condition to the east. Water supply wells FW-15 and FW-1101, which are operated by the Gavin plant, exist to the north of the BAP (Figure 3-3). These wells are screened within the alluvial aquifer and have 20-to-30-foot screens. Pumping activities at these wells has a significant influence on groundwater flow at the BAP. Two additional water supply wells, FW-17 and FW-1102, are operated by Gavin but are not expected to have a significant influence on groundwater at the BAP due to their distance from the BAP (0.4 to 0.5 miles to the north) and the infrequency of their use.

Five undisturbed Shelby tube samples of the separation layer were collected using a barge within the BAP in 2020 for laboratory grain size distribution and permeameter testing (ERM 2021a). The samples ranged from 0.9% to 32.3% sand and 67.7% to 99.1% silt and clay. The permeameter testing of these samples yielded hydraulic conductivity (K) values ranging from 1.44×10^{-8} cm/sec to 1.18×10^{-7} cm/sec. The CCR Rule design criteria for in-place closure of CCR materials within existing CCR units require final cover systems and bottom liners to have a minimum hydraulic conductivity of 1×10^{-5} cm/sec. The CCR Rule design criteria for new CCR landfills and any lateral expansion of a CCR landfill require a two-component liner system with an upper composite liner consisting of a 30-mil geomembrane liner underlain by a lower liner of at least a two-foot layer of compacted soil (or similar non-geomembrane layer) with a hydraulic conductivity of no more than 1×10^{-7} cm/sec. The average hydraulic conductivity of the upper portion of the separation layer is two orders of magnitude lower than that required for final cover systems and bottom liners of in-place closure of CCR materials. It is also within the same order of magnitude and not significantly different than the design criteria for the compacted soil layer of new CCR landfills and expansions. Additionally, total unit thickness of the separation layer is substantial, and it far exceeds the design requirement thickness for liner systems in new CCR landfills and expansions.

Slug tests were completed by ERM in 2022 at 16 well locations. Slug test summary statistics for wells screened in the alluvial aquifer and bedrock are provided in Table 3-1, and individual slug test results are provided in Table 3-2.

TABLE 3-1. SUMMARY OF SLUG TEST RESULTS

Geologic Unit	Average K (cm/sec)	Low K (cm/sec)	High K (cm/sec)
Alluvial Aquifer (13 wells)	6.99×10^{-2}	1.05×10^{-2}	4.12×10^{-1}
Bedrock (3 wells)	1.39×10^{-2}	2.65×10^{-8}	4.17×10^{-2}

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

1. ERM 2022 slug tests at locations shown in Table 3-2 below.

TABLE 3-2. BAP SLUG TEST RESULTS BY WELL

Well	Geologic Unit	Estimated K (cm/sec)
BAC-01	Alluvial Aquifer	8.18×10^{-2}
BAC-02	Alluvial Aquifer	4.12×10^{-1}
BAC-04	Alluvial Aquifer	7.66×10^{-2}
BAC-05	Alluvial Aquifer	1.40×10^{-2}
BAC-06	Alluvial Aquifer	4.39×10^{-2}
BAC-07	Alluvial Aquifer	5.19×10^{-2}
BAC-08	Alluvial Aquifer	1.54×10^{-2}
BAC-09	Bedrock	1.23×10^{-6}
BAC-10	Alluvial Aquifer	7.35×10^{-2}
BAC-11	Bedrock	4.17×10^{-2}
BAC-12	Alluvial Aquifer	1.53×10^{-2}
BAC-16	Alluvial Aquifer	2.60×10^{-2}
BAC-18	Alluvial Aquifer	1.05×10^{-2}
BAC-19	Bedrock	2.65×10^{-8}
BAC-21	Alluvial Aquifer	4.43×10^{-2}
BAC-23	Alluvial Aquifer	4.37×10^{-2}

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

3.3 MONITORING WELL NETWORK AND SUPPLEMENTAL WELLS

The certified BAP groundwater monitoring well network consists of five upgradient monitoring wells (BAC-01, MW-1, MW-6, BAC-06, and BAC-07) and four downgradient monitoring wells (BAC-02, BAC-03, BAC-04, and BAC-05). All network monitoring wells are screened in the uppermost aquifer (alluvial aquifer) around the BAP. In 2020, BAC-06 and BAC-07 were installed at the

southern boundary of the Bottom Ash Pond and in 2021, were incorporated into the updated monitoring network (ERM 2021b).

In 2022, sixteen supplemental monitoring wells were proposed and successfully installed in key areas around the BAP (ERM 2023). Nine wells were installed in the coarse-grained alluvium (BAC-08, BAC-10, BAC-12, BAC-14, BAC-16, BAC-18, BAC-21, BAC-22, and BAC-23) and four wells were installed in shallow bedrock (BAC-09, BAC-11, BAC-13, and BAC-19). BAC-15 and BAC-20 were installed in the fine-grained silt and clay layer. BAC-17 was installed to span the alluvial aquifer and the separation layer. This well was installed to emulate the construction of well B-0904 which was previously sampled by Gavin but is not on Gavin's property. Figure 3-3 provides the monitoring well locations, including both the certified monitoring well network wells (shown in yellow and blue) and supplemental wells not in the federal program (shown in purple), on the Site location map. A summary of the well construction information for wells around the BAP is located in Appendix A, and boring logs and well construction logs are located in Appendix B.

The upgradient wells are positioned to accurately represent the quality of background groundwater flowing from the west (BAC-01, MW-1, MW-6) and groundwater flowing from the south (BAC-06 and BAC-07) from Kyger Creek Generating Station's NFAP. The downgradient wells are positioned at the downgradient boundary where bottom ash was previously placed prior to excavation to detect potential releases of CCR constituents from the BAP into groundwater in the uppermost aquifer. In addition, monitoring well B-0904 has historically been used to provide supplemental information to the monitoring network. This monitoring well is screened in both the separation and alluvial aquifer. The well is not located on Gavin's property and access issues have prevented consistent sampling, therefore this well is not included in the certified monitoring network.

3.4 PREVIOUS GROUNDWATER MONITORING ACTIVITIES

The BAP monitoring wells were initially sampled eight times between August 2016 and July 2017 to establish upgradient well baseline data. Consistent with the CCR Rule and the *Groundwater Monitoring Plan Appendix G Statistical Analysis Plan* (ERM 2017), a prediction limit approach was used to identify potential future impacts to groundwater. After each semi-annual groundwater sampling event in July 2017, May and September 2018, March and September 2019, March and September 2020, March and September 2021, and March/April and October 2022, the results from the downgradient wells were compared to the prediction limits to identify SSIs. ASD Reports were developed for each sampling event discussing each SSI, which concluded that the SSIs resulted from alternate sources, and thus the CCR unit remained in detection monitoring (ERM 2018b; ERM 2019; ERM 2020; ERM 2021c; ERM 2022; ERM 2023).

4. MONITORING ACTIVITIES

4.1 GROUNDWATER POTENTIOMETRIC ELEVATION MONITORING

Programmable electronic data loggers equipped with a pressure-sensitive water level transducer were installed at wells around the BAP (BAC-02, BAC-10, BAC-04, BAC-12, BAC-16, BAC-18, BAC-08 and BAC-01) in 2023. These monitoring well locations were selected based on their placement and proximity to one another and to the BAP. Locations were selected to evaluate the potential for mounding at the BAP, provide more precise monitoring of horizontal groundwater flow direction, and/or evaluate the direction, frequency, and intensity of vertical gradients.

As a measure of data quality, transducer data were reviewed against corresponding manual water level measurements to ensure accuracy and consistency between the two datasets. In addition, a stilling well was installed in the Ohio River adjacent to the BAP to collect river stage elevation data, which was also reviewed with the transducer-based potentiometric elevations. During the transducer deployment periods, water supply wells FW-15 and FW-1101 (located north of the BAP) were cycled on and off which allowed an evaluation of potentiometric elevations under both pumping and non-pumping conditions. A transducer deployed at monitoring well BAC-11 did not record data as planned in December 2023, possibly due to a deployment error or equipment malfunction. In early 2024, Gavin has commenced research on the cause of the error and will implement procedures to accurately collect water level information with a transducer at well BAC-11 in 2024.

4.2 2023 SAMPLING SUMMARY

Groundwater samples were collected in 2023 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 2023 sample dates and the well gradient designation (upgradient or downgradient) relative to the BAP. During the H1 2023 and H2 2023 sampling events, no significant field sampling issues were encountered, and therefore no actions were required for resolution. Samples were collected by bladder pump, were not filtered in the field or at the laboratory and were managed under chain-of-custody procedures from the field to the laboratory.

TABLE 4-1: SAMPLING DATES FOR EACH WELL

Monitoring Well	Location	Sampling Dates	
		H1	H2
BAC-01	Upgradient	10 April 2023	2 October 2023
BAC-02	Downgradient	10 April 2023	27 September 2023
BAC-03	Downgradient	07 April 2023	2 October 2023
BAC-04	Downgradient	07 April 2023	3 October 2023
BAC-05	Downgradient	07 April 2023	3 October 2023
BAC-06	Upgradient	12 April 2023	27 September 2023
BAC-07	Upgradient	12 April 2023	27 September 2023
MW-1	Upgradient	07 April 2023	28 September 2023
MW-6	Upgradient	07 April 2023	29 September 2023

Notes: H1 = spring 2023; H2 = fall 2023

In order to obtain more information on groundwater quality surrounding the BAP, the supplemental monitoring wells installed in mid-2022 were analyzed for the constituents listed in Appendices III and IV.

In addition to the semiannual groundwater monitoring events at the Site required under 40 CFR § 257.94, supplemental samples were collected from wells BAC-06 and BAC-07 towards the required minimum of eight independent samples for each background well for the constituents listed in Appendices III and IV per the requirements of 40 CFR § 257.94(b).

4.3 DATA QUALITY

Samples collected during 2023 were analyzed by Eurofins Canton/Cleveland located in Barberton Ohio. All resulting field and laboratory documentation was reviewed to assess the validity, reliability, and usability of the analytical results. Data quality information reviewed included field sampling forms, chain-of-custody documentation, holding times, laboratory methods, laboratory method blanks, laboratory control sample recoveries, field duplicate samples, matrix spikes/matrix spike duplicates, quantitation limits, and equipment blanks. Data qualifiers were appended to the 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). The 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

Synoptic gauging was completed in March 2023, September 2023 and November 2023 to collect depth to groundwater measurements. The March and September events were completed prior to semiannual sampling events. The synoptic gauging event completed in September 2023 was performed when nearby water supply wells FW-15 and FW-1101 were operational and actively pumping, and the gauging event on 29 November 2023 was conducted under non-pumping conditions. Resulting potentiometric elevations for each gauging round were calculated by subtracting the depth to groundwater from the surveyed reference elevation for each well. Groundwater potentiometric elevations, interpreted potentiometric surface maps, and interpreted groundwater flow directions for wells screened in the alluvium are presented on Figure 5-1 (2023 H1, non-pumping conditions), Figure 5-2 (2023 H2, pumping conditions), and Figure 5-3 (2023 H2, non-pumping conditions).

During the March gauging event, during which time the water supply wells FW-15 and FW-1101 were not active, the principal groundwater flow direction in the uppermost aquifer system (alluvial aquifer) under the BAP was from west to east with a northeasterly component of flow in the southern portion of the BAP (Figure 5-1). In the September 2023 gauging event, a stronger influence of the water supply wells FW-15 and FW-1101 was observed, resulting in groundwater flow from the south, west and east, toward the water supply wells which were operational at the time of the gauging event (Figure 5-2). In the November 2023 gauging event, when the water supply wells had been off approximately 48 hours, groundwater flow was generally from the southwest to the northeast (Figure 5-3). An evaluation of the potential for groundwater mounding at the BAP is included in the 2023 H2 ASD, included as Appendix D.

5.2 HYDRAULIC TESTING AND GROUNDWATER VELOCITY CALCULATION

The hydraulic gradient at the BAP is generally controlled by two main factors, the Ohio River and pumping of FW-15 and FW-1101, which contribute to the average groundwater-flow gradient to the northeast. The horizontal hydraulic gradients for the March 2023 and November 2023 gauging events, which occurred during non-pumping conditions, were generally to the east/northeast, toward the Ohio River. The horizontal hydraulic gradient for the September 2023 gauging event, which occurred while water supply wells FW-15 and FW-1101 were operational, was generally to the north, towards BAC-02 and BAC-10.

Measured horizontal hydraulic gradients across the BAP, as measured between MW-1 and BAC-03, were 0.0006 for the March 2023 event, 0.0008 for the September 2023 (pumping) event, and 0.0005 for the November 2023 (non-pumping) event. Based on the measured hydraulic gradients, an assumed porosity of 0.3, and an estimated average hydraulic conductivity of 6.99×10^{-2} cm/sec for the alluvial aquifer, the horizontal velocity of groundwater in the alluvial aquifer beneath the BAP varied between 130 and 140 feet per year under non-pumping conditions and was 200 feet per year in September under pumping conditions. These values are similar to but lower than the horizontal groundwater velocities calculated in 2022 (140 feet per year under non-pumping conditions, 290 feet per year under pumping conditions).



5.3 COMPARISON OF RESULTS TO PREDICTION LIMITS

Consistent with the CCR Rule and the *Statistical Analysis Plan* (ERM 2017) in the operating record, 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. The *2017 Annual Groundwater Monitoring and Corrective Action Report* (ERM 2018a) provides documentation of the development of the upper and lower prediction limits for the BAP.

5.3.1 2023 SAMPLING EVENT RESULTS

Table 5-4 identifies SSIs for the March (H1) and September/October (H2) 2023 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: SSIS FROM 2023 SAMPLING EVENTS

Analyte/Event	Monitoring Well							
	BAC-02		BAC-03		BAC-04		BAC-05	
	H1	H2	H1	H2	H1	H2	H1	H2
Boron	X	X	X	X	X	X	X	X
Calcium	X	X	φ	φ	φ	φ	φ	φ
Chloride	X	X	X	X	X	X	X	X
Fluoride	φ	X	φ	φ	φ	φ	φ	φ
pH	X	φ	X	X	X	X	X	X
Sulfate	X	X	X	X	X	X	X	X
TDS	X	X	φ	φ	φ	φ	X	X

Notes: φ = No SSI; X = SSI; SSI = statistically significant increase; TDS = total dissolved solids
Results are for the downgradient wells sampled in March (H1) and October/September (H2) 2023.

March 2023 SSIs were similar to those observed in 2017, 2018, 2019, 2020, 2021, and 2022. Alternate sources were identified consistent with the results of those previous analyses for each of the SSIs detected in the March 2023 data and were documented in the *Gavin BAP First Semiannual Sampling Event of 2023 ASD Report* which is included as Appendix C. The first half 2023 ASD report identified the regional discharge of groundwater as the source of calcium, chloride, and TDS, and the Kyger Creek NFAP as the source of boron, low pH, and sulfate.

September/October 2023 SSIs were also similar to those observed in 2017, 2018, 2019, 2020, 2021, and 2022. Alternate sources were identified for each of the SSIs associated with the September/October 2023 data and documented in the *Gavin BAP Second Semiannual Sampling Event of 2023 ASD Report*, which is included as Appendix D. The second half 2023 report identified the regional discharge of groundwater as the source of calcium, chloride, fluoride, and TDS, and the Kyger Creek NFAP as the source of boron, low pH, and sulfate.

Appendix E provides a summary of all historical and current analytical results obtained from the BAP groundwater monitoring program (including recent supplemental sampling). Appendix F contains laboratory analytical reports from both semi-annual sampling events.

6. KEY FUTURE ACTIVITIES

The following key future activities are planned for 2024:

- Groundwater Sampling
 - Two groundwater sampling events will be performed in 2024 at the BAP and the results will be compared to the prediction limits.
 - Monitoring wells that were installed in 2022 will be sampled and evaluated for addition to the certified monitoring network for use as background or compliance wells.
- Groundwater Hydraulic Monitoring
 - Up to four groundwater gauging events will be performed in 2024 at the BAP to establish hydraulic gradients under both pumping and non-pumping conditions.
 - Transducers will be downloaded, and the data processed and evaluated.
- Monitoring Network
 - The existing monitoring network will be evaluated for potential additional wells.

7. REFERENCES

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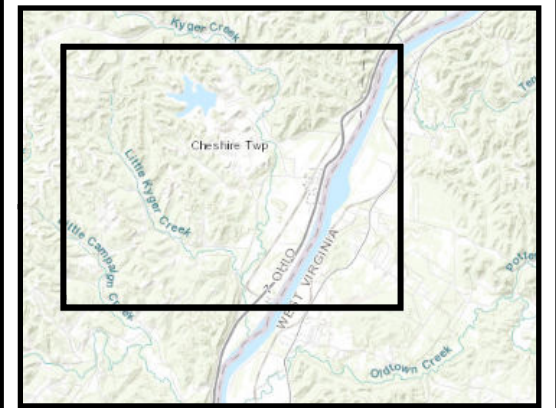
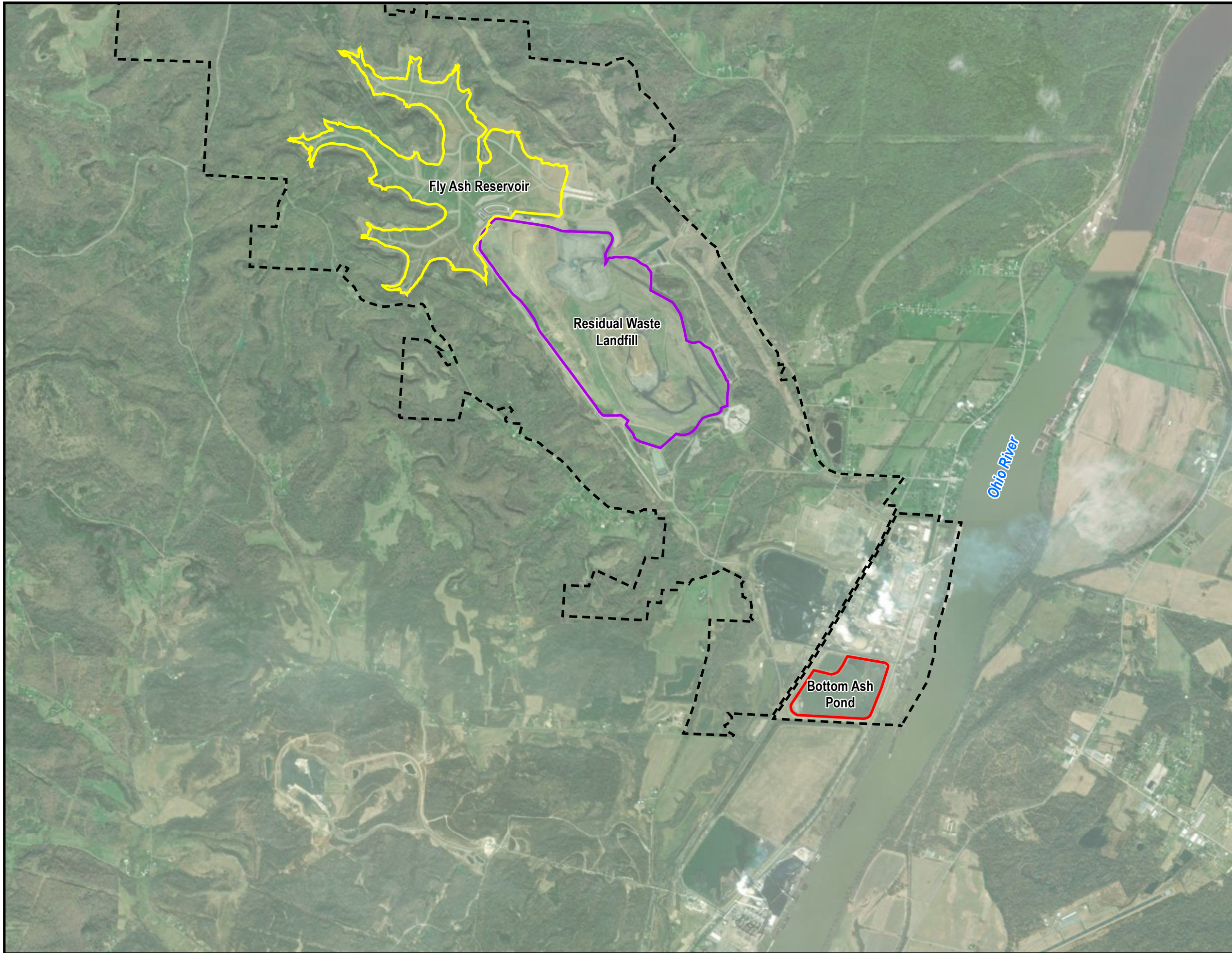
FIGURES



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



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Legend

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

NOTES:

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

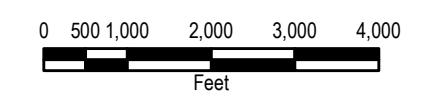
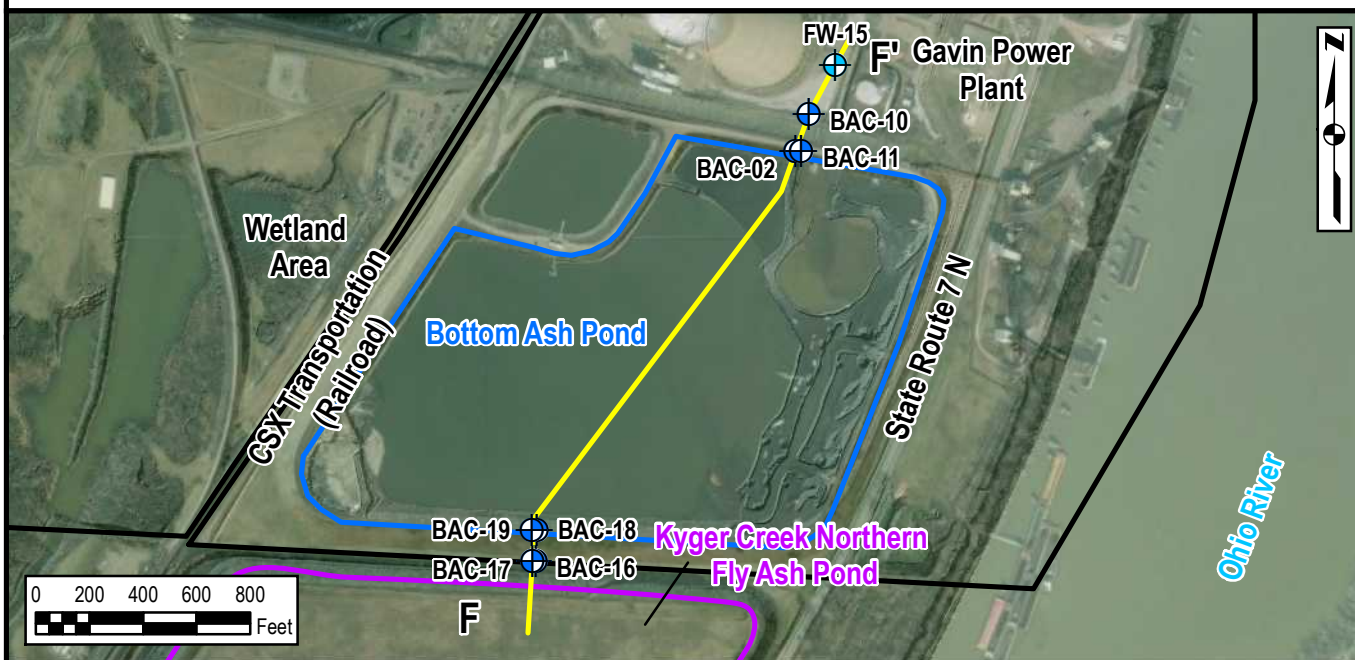
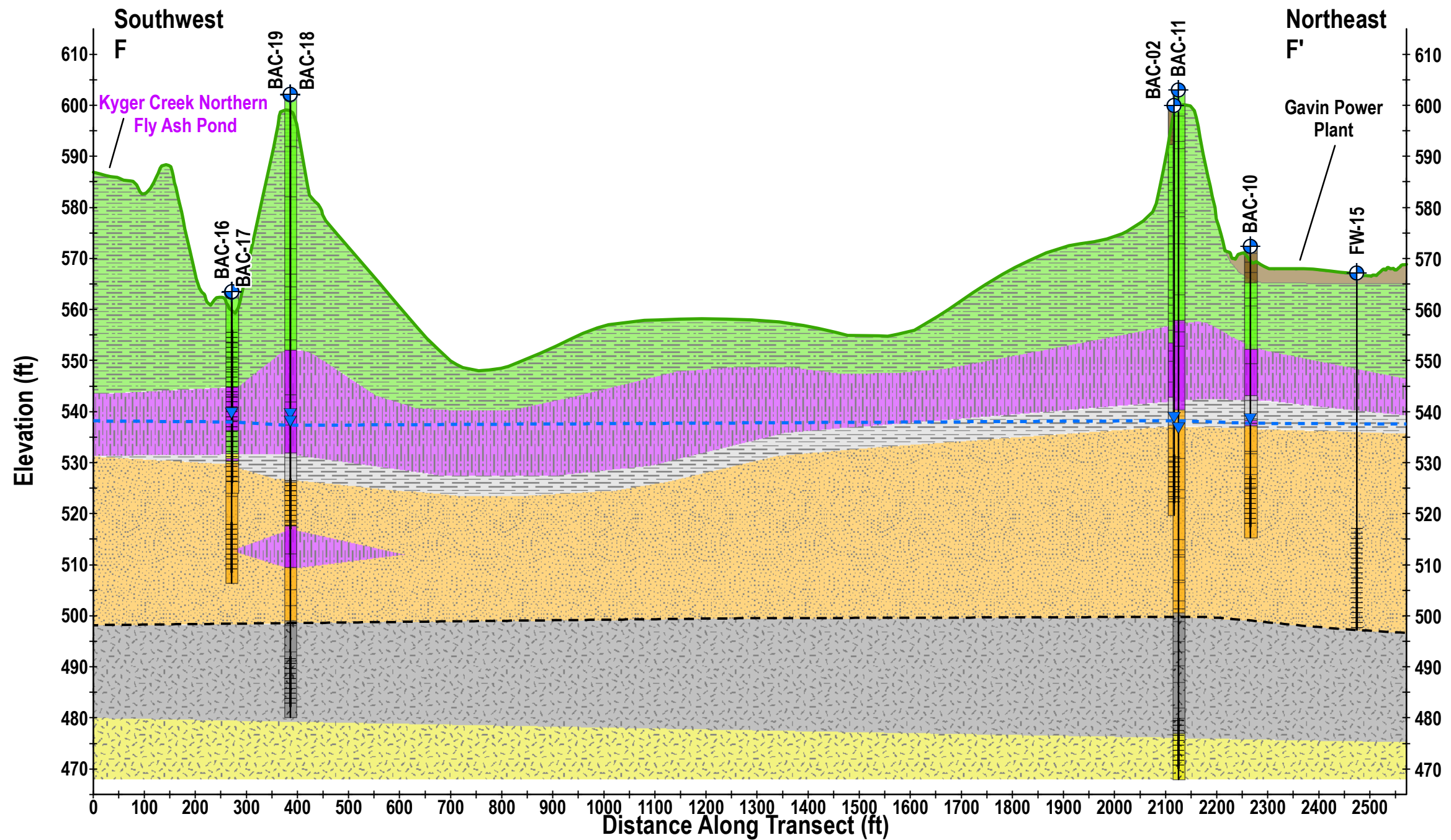


Figure 3-1: Bottom Ash Pond Location
Gavin Generating Station
Cheshire, Ohio





Legend

- Water Supply Well
- Monitoring Well
- Potentiometric Elevation (September 2023)
- Potentiometric Surface
- Surface Profile
- Approximate Bedrock Surface
- Total Depth
- Well Screen
- Transect
- Site Boundary

- Bottom Ash Pond Boundary
- Kyger Creek Northern Fly Ash Pond

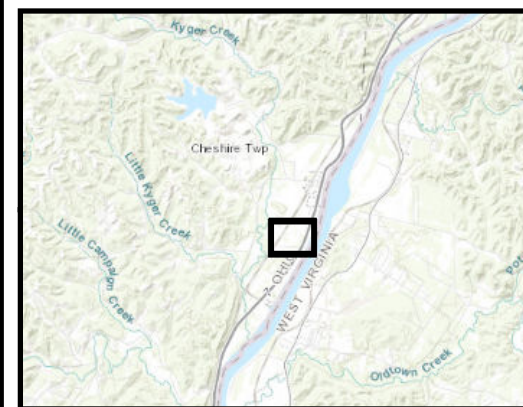
- Generalized Lithology**
- Road Material
 - Clay and Silt
 - Sandy Clay and Silt
 - Sand and Clay
 - Sand and Gravel
 - Sand
 - Claystone/Siltstone
 - Sandstone
- Separation Layer
- Alluvial Aquifer
- Bedrock Units

Figure 3-2: Bottom Ash Pond Cross Section
Gavin Power, LLC
Cheshire, Ohio

- NOTE:**
1. Potentiometric elevations from September 2023.
 2. Surface profile from OGRIP LiDAR 2020.
 3. Elevation is exaggerated 10X.
 4. Boring surface elevations, ground surface elevations and estimated bedrock surface are projected along transect line.
 5. The geology is generalized based on the lithology descriptions.
 6. The bottom elevation profile of the bottom ash pond is from Integrated Solutions, Inc CPT borings conducted between 3/18/2020 to 5/28/20.



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Legend

- 2022 Monitoring Well (Not in Federal Program)
- Federal Upgradient Monitoring Well
- Federal Downgradient Monitoring Well
- Water Supply Well
- Piezometer
- BAC** Alluvium Well
- BAC Silt and Clay/Alluvium Well
- BAC Silt and Clay Well
- BAC Bedrock Well
- Approximate location of Bottom Ash Pond boundary
- Gavin Property Boundary

NOTES:

1. Aerial Imagery: ESRI World Imagery
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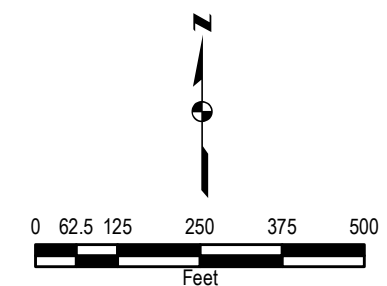
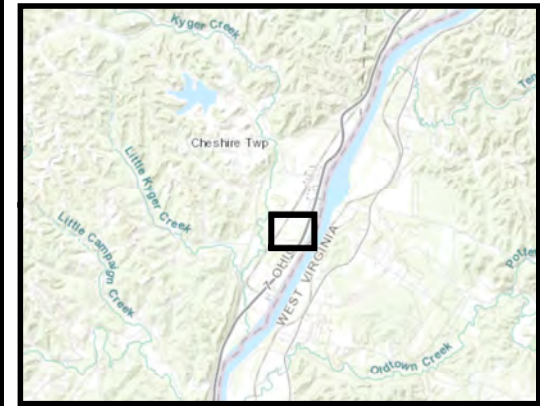
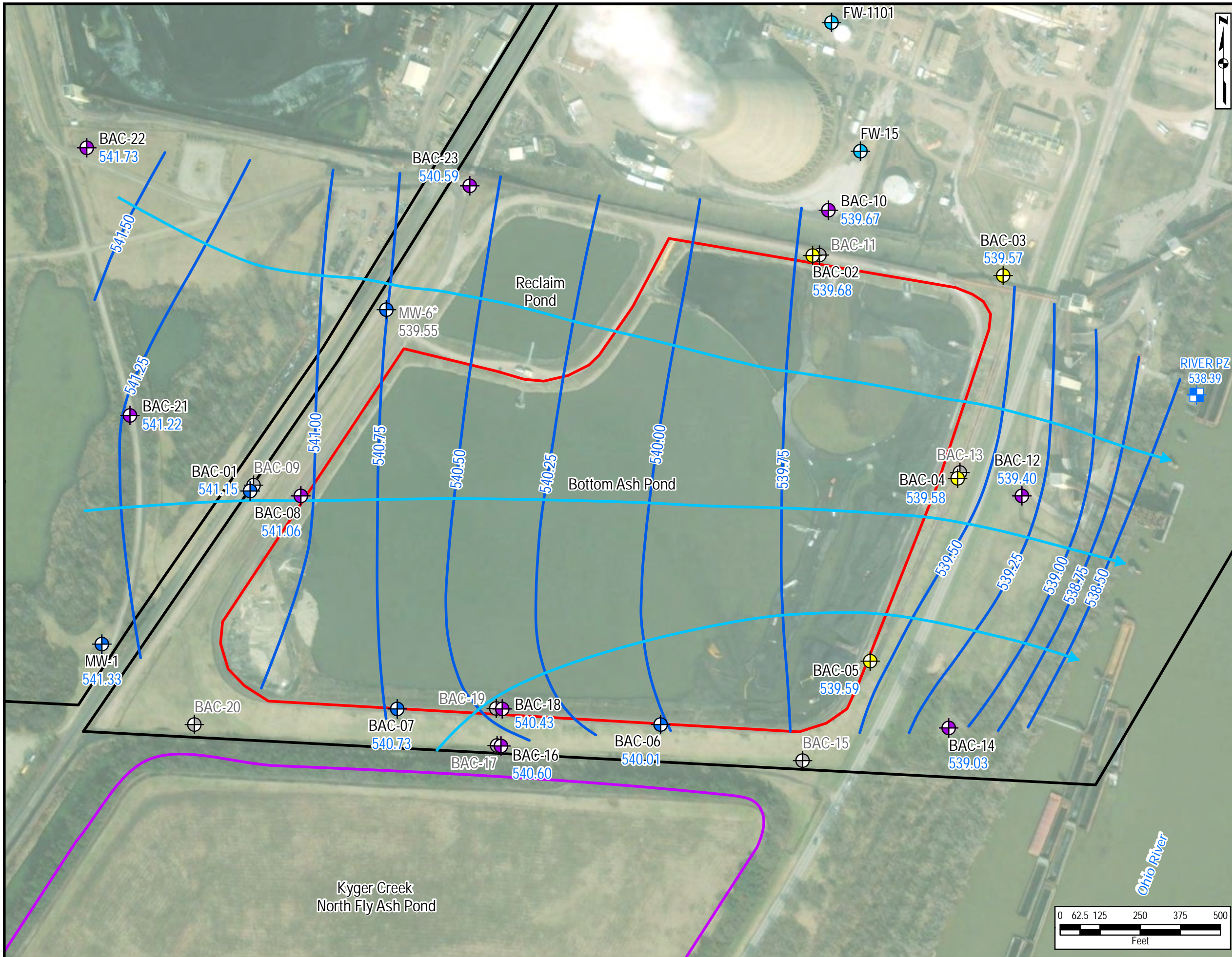


Figure 3-3: Bottom Ash Pond Monitoring Well Network
Gavin Generating Station
Cheshire, Ohio



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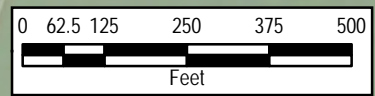


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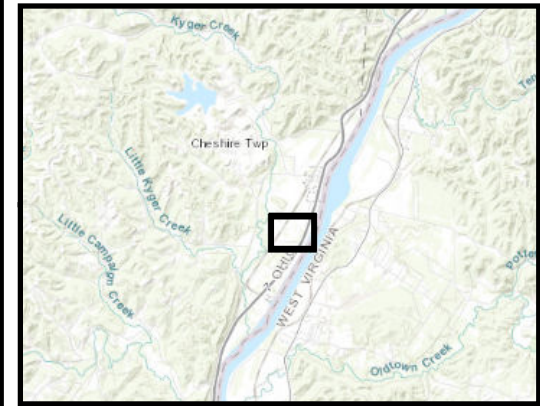
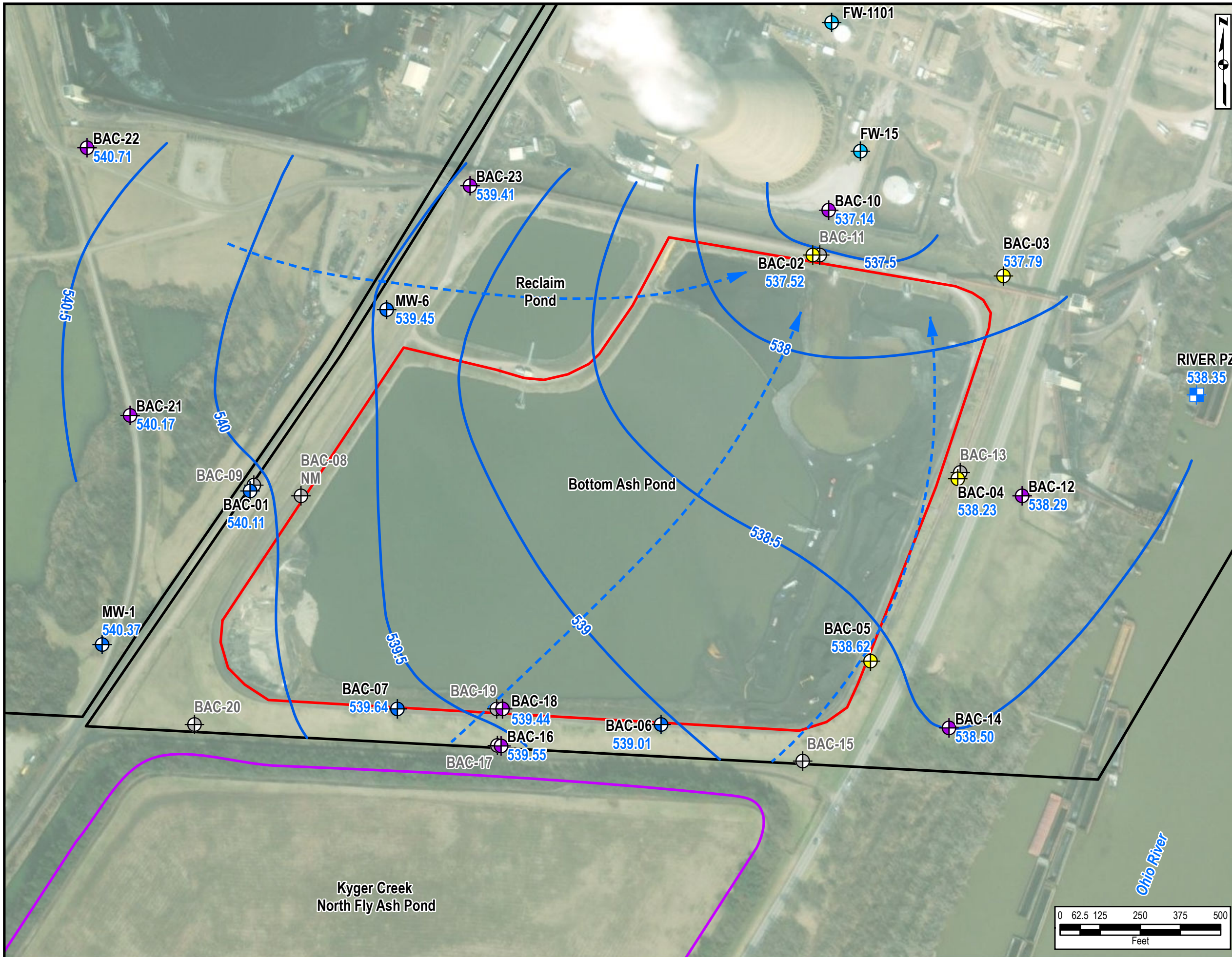
- New 2022 Monitoring Well
- Federal Upgradient Monitoring Well
- Federal Downgradient Monitoring Well
- River Stilling Well Location
- Bedrock or Silt/Clay Well (excluded from contouring)
- Water Supply Well
- 539.85 Potentiometric Elevation (ft)
- Spring 2023 Interpreted Groundwater Elevation Contours
- Spring 2023 Interpreted Groundwater Flow Direction
- Approximate Location of Bottom Ash Pond Boundary
- Gavin Property Boundary
- Approximate Location of Kyger Creek North Fly Ash Pond Boundary

- NOTES:**
1. Monitoring wells were gauged on 3/23/2023.
 2. Wells not used for contouring of the Alluvium include wells screened in silt/clay or bedrock.
 3. Flow lines indicate a general groundwater flow direction within alluvium beneath the Bottom Ash Pond. They do not represent all potential flow paths within the alluvium, nor do they represent preferential flow paths or convergence of flow.
 4. *MW-6 not included in contour interpretation.
 5. Aerial Imagery: ESRI World Imagery Reproduced under license in ArcGIS 10.8

Figure 5-1: Interpreted Groundwater Potentiometric Contour Map Spring 2023 - Non-Pumping Conditions
 Gavin Generating Station
 Cheshire, Ohio



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Legend

- New 2022 Monitoring Well
- Federal Upgradient Monitoring Well
- Federal Downgradient Monitoring Well
- River Stilling Well Location
- Bedrock or Silt/Clay Well (excluded from contouring)
- Water Supply Well
- 539.85** Potentiometric Elevation (ft)
- Interpreted Groundwater Elevation Contours
- Interpreted Groundwater Flow Direction
- Approximate Location of Bottom Ash Pond Boundary
- Gavin Property Boundary
- Approximate Location of Kyger Creek North Fly Ash Pond Boundary

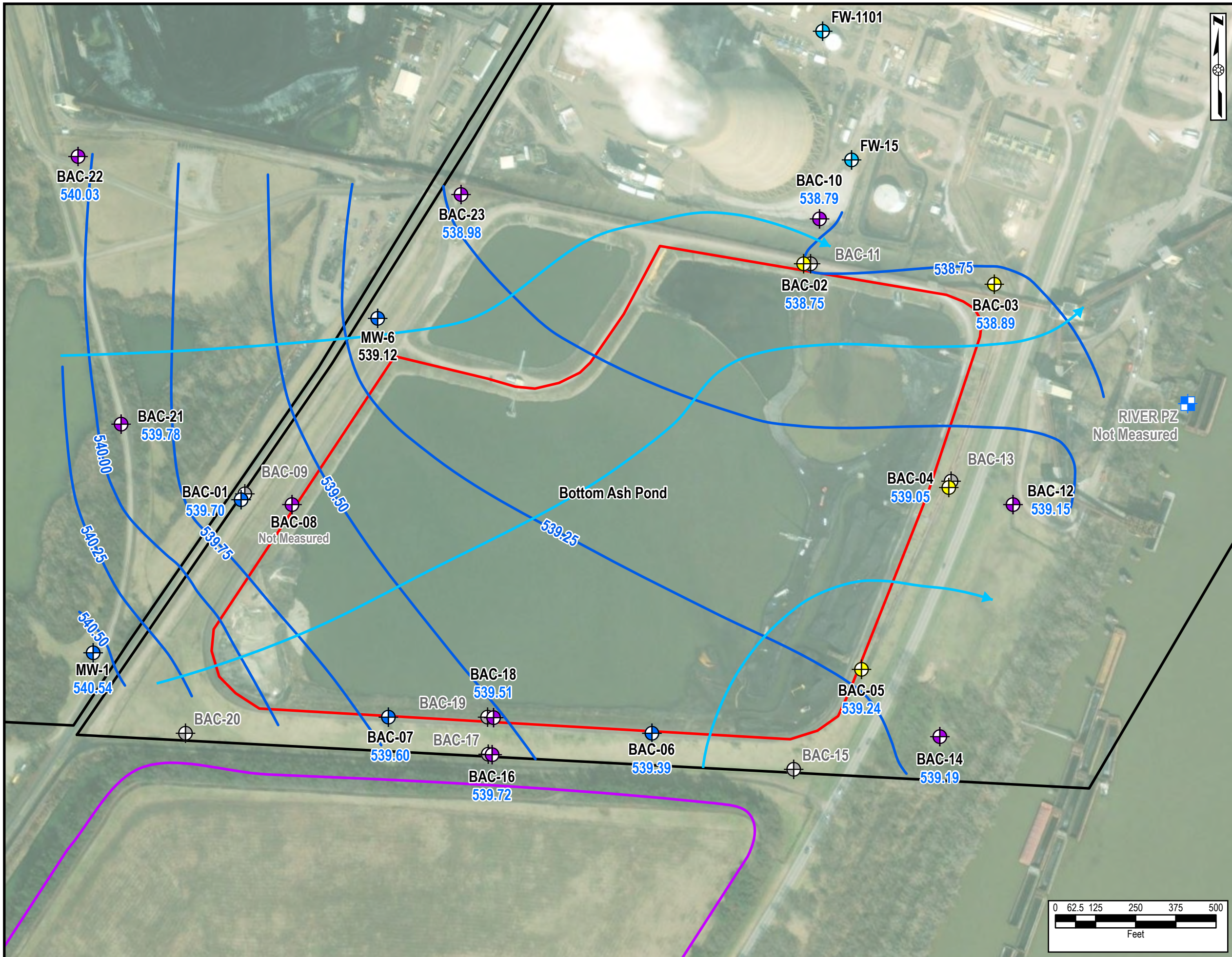
NOTES:

1. Monitoring wells were gauged on 11 September 2023.
2. Ohio River elevation obtained from pressure transducer that was collecting data at this time. Value is the average for the day.
3. Flow lines indicate a general groundwater flow direction within alluvium beneath the Bottom Ash Pond. They do not represent all potential flow paths within the alluvium, nor do they represent preferential flow paths or convergence of flow.
4. Water supply wells FW-15 and FW-1101 were operating during the gauging event. Average pumping rate for FW-15 was 650 gal/min and FW-1101 was 550 gal/min.
5. BAC-08 not able to be measured because water level in well is below the pump.
6. Aerial Imagery: ESRI World Imagery Reproduced under license in ArcGIS 10.8

Figure 5-2: Interpreted Groundwater Potentiometric Contour Map
 Fall 2023 - Pumping Conditions
 Gavin Generating Station
 Cheshire, Ohio



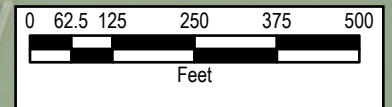
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- Legend**
- New 2022 Monitoring Well
 - Federal Upgradient Monitoring Well
 - Federal Downgradient Monitoring Well
 - River Stilling Well Location
 - Bedrock or Silt/Clay Well (excluded from contouring)
 - Water Supply Well
 - 539.85 Potentiometric Elevation (ft)
 - Approximate Location of Bottom Ash Pond Boundary
 - Gavin Property Boundary
 - Approximate Location of Kyger Creek North Fly Ash Pond Boundary
 - Fall 2023 Interpreted Groundwater Elevation Contours
 - Fall 2023 Interpreted Groundwater Flow Direction

- NOTES:**
1. Monitoring wells were gauged on 11/29/2023.
 2. Wells not used for contouring of the Alluvium include wells screened in silt/clay or bedrock.
 3. Flow lines indicate a general groundwater flow direction within alluvium beneath the Bottom Ash Pond. They do not represent all potential flow paths within the alluvium, nor do they represent preferential flow paths or convergence of flow.
 4. Not Measured: Transducer was frozen in place in River PZ during data retrieval on 1/17/2024.
 5. Aerial Imagery: ESRI World Imagery Reproduced under license in ArcGIS Pro 3.2

Figure 5-3: Interpreted Groundwater Potentiometric Contour Map Fall 2023 - Non-Pumping Conditions
 Gavin Generating Station
 Cheshire, Ohio



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APPENDIX A WELL CONSTRUCTION SUMMARY

Appendix A
Well Construction Details
Gavin Bottom Ash Pond
Cheshire, OH

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													
MW-1		Alluvial Sand and Gravel	BAP	2074809.110	338727.030	567.86	570.85	67.4	510.46	500.46	10	2	PVC SCH 40
MW-6		Alluvial Sand and Gravel	BAP	2075695.120	339769.040	569.82	572.56	72.7	507.12	497.12	10	2	PVC SCH 40
BAC-01	12/8/2015	Alluvial Sand and Gravel	BAP	2075270.110	339204.030	568.1	570.62	568.1	533.7	524.1	9.6	2	PVC SCH 40
BAC-02	12/17/2015	Alluvial Sand and Gravel	BAP	2077022.130	339939.050	599.98	602.5	599.98	531.58	521.98	9.6	2	PVC SCH 40
BAC-03	12/11/2015	Alluvial Sand and Gravel	BAP	2077616.140	339875.060	573.78	576.43	573.78	528.68	519.08	9.6	2	PVC SCH 40
BAC-04	12/16/2015	Alluvial Sand and Gravel	BAP	2077474.140	339243.050	582.46	584.72	582.46	526.66	517.06	9.6	2	PVC SCH 40
BAC-05	12/29/2015	Alluvial Sand and Gravel	BAP	2077202.140	338675.050	590.28	592.36	590.28	525.78	516.18	9.6	2	PVC SCH 40
BAC-06	6/11/2020	Alluvial Sand and Gravel	BAP	2076549.323	338477.383	599.64	602.54	90	520	510	10	2	PVC SCH 80
BAC-07	6/15/2020	Alluvial Sand and Gravel	BAP	2075728.652	338526.105	599.71	602.76	90	520	510	10	2	PVC SCH 40
2022 Supplemental Monitoring Wells													
BAC-08	6/30/2022	Alluvial Sand and Gravel	BAP	2075428.2150	339189.2539	594.65	597.64	70.00	537	527	10	2	PVC SCH 40
BAC-09	6/16/2022	Cow Run	BAP	2075281.6130	339222.7325	567.93	570.53	93.50	487	477	10	2	PVC SCH 40
BAC-10	6/29/2022	Alluvial Sand and Gravel	BAP	2077071.6330	340079.4216	570.11	572.22	56.50	525	515	10	2	PVC SCH 40
BAC-11	6/15/2022	Cow Run	BAP	2077043.8330	339940.1411	600.18	602.98	135.00	477	467	10	2	PVC SCH 40
BAC-12	7/8/2022	Alluvial Sand and Gravel	BAP	2077674.4450	339189.0757	564.21	566.95	53.50	522	512	10	2	PVC SCH 40
BAC-13	6/14/2022	Cow Run	BAP	2077481.3420	339262.3239	582.30	584.71	117.50	477	467	10	2	PVC SCH 40
BAC-14	7/8/2022	Alluvial Sand and Gravel	BAP	2077446.3440	338465.3120	573.74	576.07	63.50	522	512	10	2	PVC SCH 40
BAC-15	7/7/2022	Silt and Clay	BAP	2076990.9390	338363.7073	569.06	571.39	34.50	546	536	10	2	PVC SCH 40
BAC-16	7/7/2022	Alluvial Sand and Gravel	BAP	2076051.7260	338410.2283	560.78	563.35	56.50	516	506	10	2	PVC SCH 40
BAC-17	7/7/2022	Silt and Clay/Sand and Gravel	BAP	2076039.6260	338411.7582	560.72	563.49	39.00	553.5	523.5	30	2	PVC SCH 41
BAC-18	7/7/2022	Alluvial Sand and Gravel	BAP	2076056.1260	338525.7186	599.32	601.95	85.50	524	514	10	2	PVC SCH 42
BAC-19	6/14/2022	Cow Run	BAP	2076037.4260	338526.4384	599.28	602.11	121.50	489	479	10	2	PVC SCH 40
BAC-20	6/23/2022	Silt and Clay	BAP	2075096.6140	338477.1691	562.57	564.89	23.50	551	541	10	2	PVC SCH 40
BAC-21	7/5/2022	Alluvial Sand and Gravel	BAP	2074896.1070	339439.5292	569.30	572.41	50.00	529	519	10	2	PVC SCH 40
BAC-22	7/1/2022	Alluvial Sand and Gravel	BAP	2074761.8020	340273.5097	572.28	574.85	71.50	512	502	10	2	PVC SCH 40
BAC-23	6/30/2022	Alluvial Sand and Gravel	BAP	2075954.8180	340155.1610	574.79	577.39	66.50	520	510	10	2	PVC SCH 40

Notes: Datum is SP/NAD83/NGVD29.

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



APPENDIX B BORING AND WELL CONSTRUCTION LOGS

AMERICAN ELECTRIC POWER SERVICE CORPORATION
AEP CIVIL ENGINEERING LABORATORY
 LOG OF BORING



JOB NUMBER _____
 COMPANY _____
 PROJECT **GV BAC CCR Compliance**
 COORDINATES **N 339,167.7 E 2,106,734.9**
 GROUND ELEVATION **568.1** SYSTEM _____

BORING NO. **BAC-01** DATE **7/7/16** SHEET **1** OF **3**
 BORING START **12/8/15** BORING FINISH **12/9/15**
 PIEZOMETER TYPE _____ WELL TYPE **OW**
 HGT. RISER ABOVE GROUND **2.349** DIA **6**
 DEPTH TO TOP OF WELL SCREEN **34.4** BOTTOM **44.0**
 WELL DEVELOPMENT **YES** BACKFILL **GROUT**
 FIELD PARTY **MWJ / TAS** RIG **D-50**

Water Level, ft	▽	▼	▼
TIME			
DATE			

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET		STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
		FROM	TO									
1	SS	0.0	1.5	16-50/3	.5					BOTTOM ASH ROAD BED MATERIAL		
2	SS	1.5	3.0	33-50/2	1.2							
3	SS	3.0	4.5	15-36-50/4	1.0							
4	SS	4.5	6.0	14-16-33	1.3		5			HARD MEDIUM DARK GRAY N4 BOTTOM ASH w/some clay		
5	SS	6.0	7.5	13-14-7	1.1					VERY STIFF MEDIUM GRAY N5 CLAY w/some bottom ash		
6	SS	7.5	9.0	5-2-3	1.2					MEDIUM STIFF PALE YELLOWISH BROWN 10YR 6/2 CLAY w/some bottom ash fragments		
7	SS	9.0	10.5	3-4-6	.9		10					
8	SS	10.5	12.0	3-2-6	1.4							
9	SS	12.0	13.5	3-5-6	1.5					STIFF PALE YELLOWISH BROWN 10YR 6/2 CLAY w/some fine sand		
10	SS	13.5	15.0	3-5-7	1.5							
11	SS	15.0	16.5	2-5-5	1.5		15					
12	SS	16.5	18.0	3-5-6	1.5							
13	SS	18.0	19.5	2-3-5	1.5							
14	SS	19.5	21.0	2-3-4	1.5					STIFF PALE YELLOWISH BROWN 10YR 6/2		

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"

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 _____

AMERICAN ELECTRIC POWER SERVICE CORPORATION
AEP CIVIL ENGINEERING LABORATORY
 LOG OF BORING



JOB NUMBER _____

COMPANY _____

BORING NO. **BAC-01** DATE **7/7/16** SHEET **2** OF **3**

PROJECT **GV BAC CCR Compliance**

BORING START **12/8/15** BORING FINISH **12/9/15**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET		STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
		FROM	TO			%						
15	SS	21.0	22.5	2-2-3	1.5		25			CLAY w/silt and fine sand		
16	SS	22.5	24.0	WOR-2-2	1.2				MEDIUM STIFF PALE YELLOWISH BROWN 10YR 6/2 SILTY SANDY CLAY			
17	SS	24.0	25.5	2-2-2	1.5				SOFT STIFF PALE YELLOWISH BROWN 10YR 6/2 SILTY SANDY CLAY			
18	SS	25.5	27.0	WOR-2-1	1.5		30			SOFT PALE YELLOWISH BROWN 10YR 6/2 SILTY SANDY CLAY wet		
19	SS	27.0	28.5	WOR-WOR-2	1.5				VERY SOFT PALE YELLOWISH BROWN 10YR 6/2 SANDY SILTY CLAY wet			
20	SS	28.5	30.0	WOR-WOR-4	1.5				VERY SOFT PALE YELLOWISH BROWN 10YR 6/2 SANDY SILTY CLAY w/some sand and gravel, wet			
21	SS	30.0	31.5	6-11-10	.9				MEDIUM DENSE MODERATE YELLOWISH BROWN 10YR 5/4 SAND AND GRAVEL			
22	SS	31.5	33.0	3-6-6	1.3		35			MEDIUM DENSE MODERATE YELLOWISH BROWN 10YR 5/4 SAND AND GRAVEL		
23	SS	34.0	35.5	4-10-11	1.4				MEDIUM DENSE PALE BROWN 5YR 5/2 SAND AND GRAVEL			
24	SS	36.5	38.0	7-8-11	1.0				MEDIUM DENSE PALE BROWN 5YR 5/2 SAND AND GRAVEL 1.4 recovery and .4 heavage			
25	SS	39.0	40.5	8-12-17	1.2		40			MEDIUM DENSE PALE BROWN 5YR 5/2 SAND AND GRAVEL 1.5 recovery and .5 heavage		
26	SS	41.5	43.0	11-15-15	1.5				MEDIUM TO DENSE PALE BROWN 5YR 5/2 SAND AND GRAVEL			
27	SS	44.0	45.5	10-14-16	1.5							

AEP_GV_BAC_CCR_COMPLIANCE.GPJ_AEP.GDT_7/7/16

Continued Next Page

AMERICAN ELECTRIC POWER SERVICE CORPORATION
AEP CIVIL ENGINEERING LABORATORY
 LOG OF BORING



JOB NUMBER _____

COMPANY _____

BORING NO. **BAC-01** DATE **7/7/16** SHEET **3** OF **3**

PROJECT **GV BAC CCR Compliance**

BORING START **12/8/15** BORING FINISH **12/9/15**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET		STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
		FROM	TO			%						
28	SS	46.5	48.0	9-12-18	1.5							

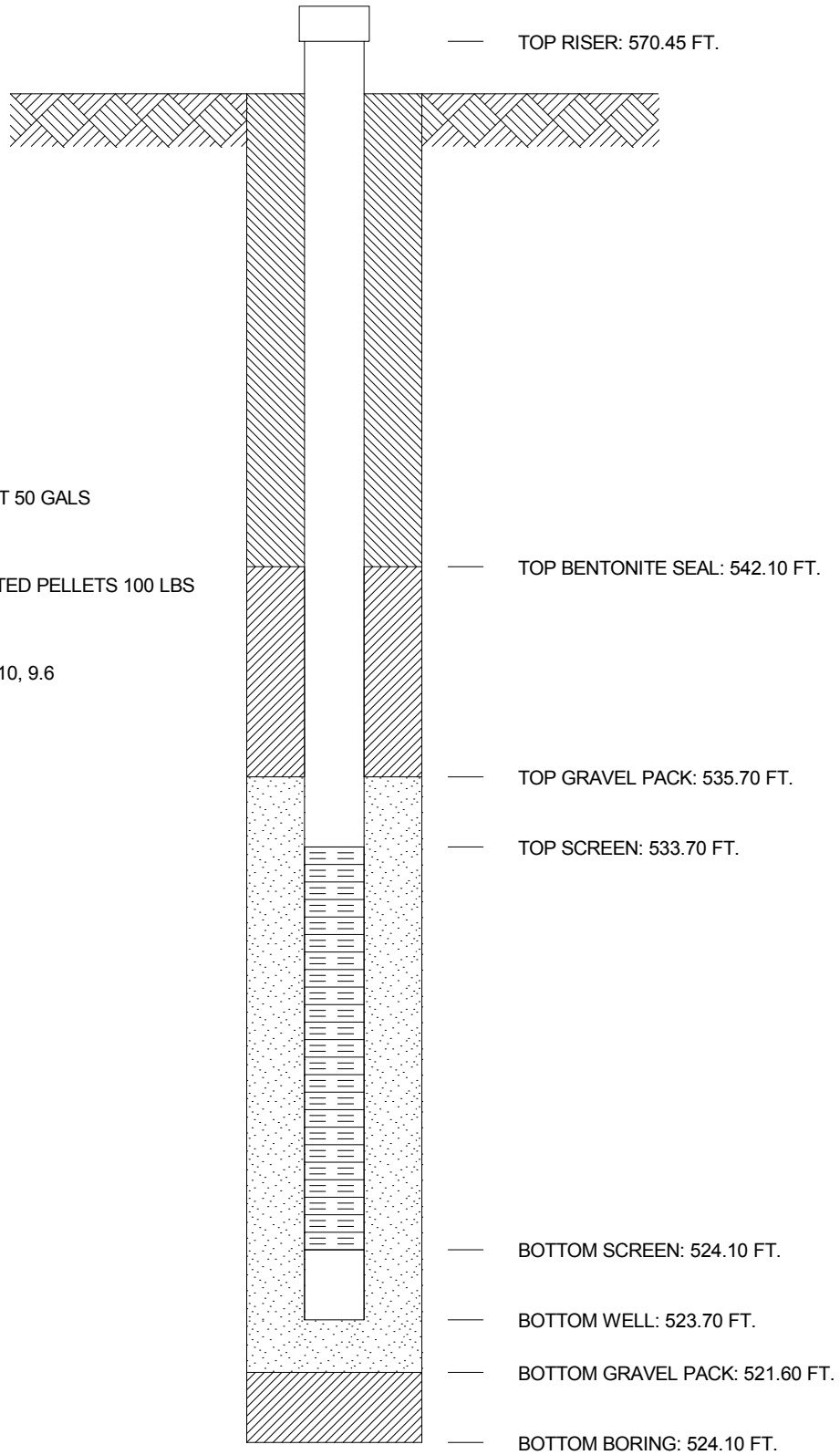
AMERICAN ELECTRIC POWER SERVICE CORPORATION
 AEP CIVIL ENGINEERING LABORATORY
 MONITORING WELL CONSTRUCTION









JOB NUMBER _____
 COMPANY _____
 PROJECT **GV BAC CCR Compliance**
 COORDINATES **N 339,167.7 E 2,106,734.9**
 SYSTEM _____

WELL No. **BAC-01** BORING No. **BAC-01** INSTALLED **12/9/15**

GROUND ELEVATION 568.10 FT.



-  GROUT SEAL: QUICK GROUT 50 GALS
-  BENTONITE SEAL: 3/8" COATED PELLETS 100 LBS
-  SCREEN: 2 dia., SLOTTED .010, 9.6
-  GRAVEL PACK: #5 100 LBS
-  RISER PIPE: 2.0, dia., PVC
-  SPACERS, DEPTH:

AMERICAN ELECTRIC POWER SERVICE CORPORATION
AEP CIVIL ENGINEERING LABORATORY
 LOG OF BORING



JOB NUMBER _____
 COMPANY _____
 PROJECT **GV BAC CCR Compliance**
 COORDINATES **N 339,902.8 E 2,108,487.2**
 GROUND ELEVATION **600.0** SYSTEM _____

BORING NO. **BAC-02** DATE **7/7/16** SHEET **1** OF **4**
 BORING START **12/17/15** BORING FINISH **12/17/15**
 PIEZOMETER TYPE _____ WELL TYPE **OW**
 HGT. RISER ABOVE GROUND **2.258** DIA **6**
 DEPTH TO TOP OF WELL SCREEN **68.4** BOTTOM **78.0**
 WELL DEVELOPMENT **YES** BACKFILL **GROUT**
 FIELD PARTY **MWJ / TAS** RIG **D-50**

Water Level, ft	<input type="text"/>	<input type="text"/>	<input type="text"/>
TIME			
DATE			

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET		STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
		FROM	TO									
1	SPT	0.0	1.5	10-11-12	1.1		5 10 15			VERY STIFF LIGHT BROWN 5YR 5/6 GRAVEL AND CLAY 4.0 tsf		
2	SPT	1.5	3.0	12-12-13	1.3							
3	SPT	3.0	4.5	5-7-9	1.4							
4	SPT	4.5	6.0	5-7-9	1.4							
5	SPT	6.0	7.5	4-7-9	1.3							
6	SPT	7.5	9.0	3-4-6	1.5							
7	SPT	9.0	10.5	3-4-5	1.4							
8	SPT	10.5	12.0	3-3-6	1.5							
9	SPT	12.0	13.5	5-5-6	1.5							
10	SPT	13.5	15.0	3-4-6	1.5							
11	SPT	15.0	16.5	3-4-7	1.5							
12	SPT	16.5	18.0	3-4-5	1.5							
13	SPT	18.0	19.5	3-4-5	1.4							
14	SPT	19.5	21.0	3-5-7	1.3							

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"

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 _____

AMERICAN ELECTRIC POWER SERVICE CORPORATION
AEP CIVIL ENGINEERING LABORATORY
 LOG OF BORING



JOB NUMBER _____

COMPANY _____

BORING NO. **BAC-02** DATE **7/7/16** SHEET **2** OF **4**

PROJECT **GV BAC CCR Compliance**

BORING START **12/17/15** BORING FINISH **12/17/15**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET		STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
		FROM	TO			%						
15	SPT	21.0	22.5	4-4-6	1.4				CLAY 2.0 tsf			
16	SPT	22.5	24.0	3-4-6	1.3			STIFF LIGHT BROWN 5YR 5/6 SILT AND CLAY 2.5 tsf				
17	SPT	24.0	25.5	3-4-7	1.4							
18	SPT	25.5	27.0	3-6-8	1.5			25	STIFF LIGHT BROWN 5YR 5/6 SILT AND CLAY 3.0 tsf			
19	SPT	27.0	28.5	3-6-8	1.5				STIFF LIGHT BROWN 5YR 5/6 SILT AND CLAY 3.5 tsf			
20	SPT	28.5	30.0	6-8-10	1.5				VERY STIFF LIGHT BROWN 5YR 5/6 SILT AND CLAY 4.0 tsf			
21	SPT	30.0	31.5	4-5-9	1.3			30	STIFF MODERATE BROWN 5YR 4/4 SILT AND CLAY 3.5 tsf			
22	SPT	31.5	33.0	6-8-12	1.5							
23	SPT	33.0	34.5	6-10-15	1.4				VERY STIFF MODERATE BROWN 5YR 4/4 SILT AND CLAY 4.0 tsf			
24	SPT	34.5	36.0	8-12-16	1.4			35				
25	SPT	36.0	37.5	4-5-9	1.5				STIFF MODERATE BROWN 5YR 4/4 SILT AND CLAY 3.0 tsf			
26	SPT	37.5	39.0	5-8-11	1.5				VERY STIFF DARK YELLOWISH ORANGE 10YR 6/6 SILT AND CLAY 4.0 tsf			
27	SPT	39.0	40.5	4-5-7	1.4			40	STIFF MODERATE BROWN 5YR 4/4 CLAY 4.0 tsf			
28	SPT	40.5	42.0	5-5-9	1.5				STIFF MODERATE BROWN 5YR 4/4 CLAY 3.5 tsf			
29	ST	42.0	44.0						STIFF MODERATE BROWN 5YR 4/4 CLAY			
30	SPT	45.0	46.5	4-7-10				45	VERY STIFF MODERATE BROWN 5YR 4/4 CLAY			

AEP_GV_BAC_CCR_COMPLIANCE.GPJ_AEP.GDT_7/7/16

Continued Next Page

AMERICAN ELECTRIC POWER SERVICE CORPORATION
AEP CIVIL ENGINEERING LABORATORY
 LOG OF BORING



JOB NUMBER _____

COMPANY _____

BORING NO. **BAC-02** DATE **7/7/16** SHEET **3** OF **4**

PROJECT **GV BAC CCR Compliance**

BORING START **12/17/15** BORING FINISH **12/17/15**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET		STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
		FROM	TO			%						
31	SPT	46.5	48.0	4-6-10						2.5 tsf		
32	ST	48.0	50.0							VERY STIFF LIGHT BROWN 5YR 6/4 CLAY AND SAND 1.5 tsf		
							50			STIFF LIGHT BROWN 5YR 6/4 CLAY LITTLE SAND PSI 500 / SEC 9 / PUSH 2.0 GRAVEL 0% SAND 14.9% FINES 85.1% TESTED SAMPLE #32		
33	SPT	51.0	52.5	4-4-6	1.4					STIFF LIGHT BROWN 5YR 6/4 CLAY AND SAND MC 25.5% LL 35.3% PI 13.5% TESTED SAMPLES #33 AND #34		
34	SPT	52.5	54.0	3-5-7	1.4							
35	SPT	54.0	55.5	3-6-6	1.5							
							55			MEDIUM DENSE LIGHT BROWN 5YR 6/4 SANDY SILTY CLAY MC 26.4% LL 24.6% PI 3.6% SAND 45.9% FINES 54.1% TESTED SAMPLES #36 AND #37		
36	SPT	55.5	57.0	4-6-8	1.5							
37	SPT	57.0	58.5	2-2-4	1.4					LOOSE LIGHT BROWN 5YR 6/4 SAND AND CLAY		
38	SPT	58.5	60.0	2-2-3	1.3							
							60			LOOSE MEDIUM LIGHT GRAY N6 SAND AND CLAY		
39	SPT	60.0	61.5	3-3-5	1.5							
40	SPT	61.5	63.0	4-12-18	1.5							
41	SPT	63.0	64.5	6-12-14	1.5					MEDIUM DENSE BROWN 5YR 5/6 SAND AND GRAVEL MEDIUM DENSE BROWN COARSE SAND AND GRAVEL wet		
							65					
42	SPT	65.5	67.0	8-11-11	1.4							
43	SPT	68.0	69.5	8-20-27	1.4					DENSE DARK YELLOWISH ORANGE 10YR 6/6 COARSE SAND AND GRAVEL		
							70					
44	SPT	70.5	72.0	13-26-27	1.5					DENSE BROWN 5YR 5/6 COARSE SAND AND GRAVEL wet		

AEP_GV_BAC_CCR_COMPLIANCE.GPJ_AEP.GDT_7/7/16

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AMERICAN ELECTRIC POWER SERVICE CORPORATION
AEP CIVIL ENGINEERING LABORATORY
 LOG OF BORING



JOB NUMBER _____

COMPANY _____

BORING NO. **BAC-02** DATE **7/7/16** SHEET **4** OF **4**

PROJECT **GV BAC CCR Compliance**

BORING START **12/17/15** BORING FINISH **12/17/15**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET		STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
		FROM	TO			%						
45	SPT	73.0	74.5	10-11-6	1.3		75			MEDIUM DENSE BROWN 5YR 5/6 COARSE SAND AND GRAVEL wet		
46	SPT	75.5	77.0	8-5-9	1.4					MEDIUM DENSE BROWN 5YR 5/6 FINE SAND AND GRAVEL wet		
47	SPT	78.0	79.5	13-12-10	1.4					MEDIUM DENSE BROWN 5YR 5/6 COARSE TO FINE GRAIN SAND AND GRAVEL wet		

AMERICAN ELECTRIC POWER SERVICE CORPORATION
 AEP CIVIL ENGINEERING LABORATORY
 MONITORING WELL CONSTRUCTION



JOB NUMBER _____

COMPANY _____

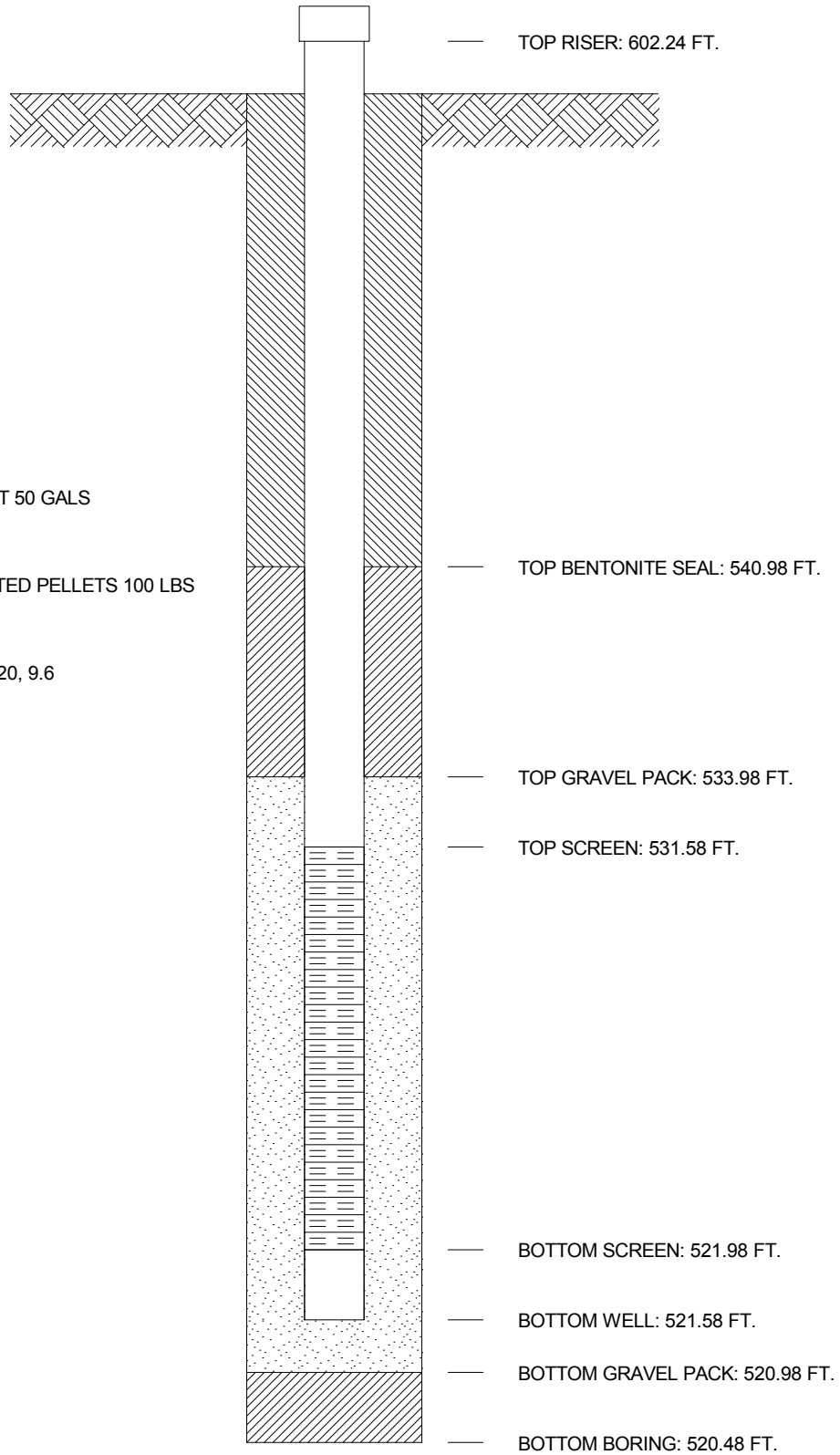
WELL No. **BAC-02** BORING No. **BAC-02** INSTALLED **12/17/15**







PROJECT **GV BAC CCR Compliance**

COORDINATES **N 339,902.8 E 2,108,487.2**

SYSTEM _____

GROUND ELEVATION 599.98 FT.



-  GROUT SEAL: QUICK GROUT 50 GALS
-  BENTONITE SEAL: 3/8" COATED PELLETS 100 LBS
-  SCREEN: 2 dia., SLOTTED .020, 9.6
-  GRAVEL PACK: #5 250 LBS
-  RISER PIPE: 2.0, dia., PVC
-  SPACERS, DEPTH:

AMERICAN ELECTRIC POWER SERVICE CORPORATION
AEP CIVIL ENGINEERING LABORATORY
 LOG OF BORING



JOB NUMBER _____
 COMPANY _____
 PROJECT **GV BAC CCR Compliance**
 COORDINATES **N 339,839.3 E 2,109,080.6**
 GROUND ELEVATION **573.8** SYSTEM _____

BORING NO. **BAC-03** DATE **7/7/16** SHEET **1** OF **3**
 BORING START **12/11/15** BORING FINISH **12/15/15**
 PIEZOMETER TYPE _____ WELL TYPE **OW**
 HGT. RISER ABOVE GROUND **2.433** DIA **6**
 DEPTH TO TOP OF WELL SCREEN **45.1** BOTTOM **54.7**
 WELL DEVELOPMENT **YES** BACKFILL **GROUT**
 FIELD PARTY **MWJ / TAS** RIG **D-50**

Water Level, ft	▽	▼	▼
TIME			
DATE			

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET		STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
		FROM	TO									
1	SS	0.0	1.5	4-6-4	1.5					LOOSE GRAYISH BROWN 5YR 3/2 SAND AND GRAVEL		
2	SS	1.5	3.0	2-4-7	1.5					STIFF MEDIUM BROWN 5YR 3/4 CLAY 2.0 tsf, w/gravels		
3	SS	3.0	4.5	5-6-4	1.5					STIFF GRAYISH BROWN 5YR 3/2 CLAY AND ASH w/gravels		
4	SS	4.5	6.0	3-3-4	1.5		5			MEDIUM STIFF PALE BROWN 5YR 5/2 CLAY AND SAND 2.5 tsf		
5	SS	6.0	7.5	3-8-20	1.5					MEDIUM DENSE LIGHT GRAY N7 SAND/GRAVELS/LIMESTONE		
6	SS	7.5	9.0	9-8-8	.8					VERY STIFF MODERATE BROWN 5YR 3/4 CLAY SILT SAND AND LIMESTONE 3.5 tsf		
7	SS	9.0	10.5	4-3-4	.7		10			LOOSE LIGHT BROWN 5YR 5/6 SILTY GRAVEL LITTLE SAND 1.0 tsf, dry		
8	SS	10.5	12.0	2-2-3	1.5					MC 19.9% GRAVEL 29.3% SAND 21.7% FINES 49.0% TESTED SAMPLE #7		
9	SS	12.0	13.5	3-1-2	1.5					MEDIUM STIFF LIGHT BROWN 5YR 5/6 CLAY SAND SILT 0.5 tsf, moist		
10	SS	13.5	15.0	2-1-2	1.5					SOFT LIGHT BROWN 5YR 5/6 CLAY SOME SAND 0.5 tsf, wet		
11	SS	15.0	16.5	3-1-2	.9		15			MC 24.5% LL 29.5% PI 10.4% SAND 33.5% FINES 66.5% TESTED SAMPLE #9		
12	ST	16.5	18.0							SOFT LIGHT BROWN 5YR 5/6 CLAY 2.0 tsf, moist		
13	ST	18.0	19.5							SOFT LIGHT BROWN 5YR 5/6 CLAY 1.0 tsf, moist		
14	SS	19.5	21.0	1-1-2	.9					SOFT LIGHT BROWN 5YR 5/6 CLAY moist PSI 250 / SEC 10 / REC / DEPTH 17 - 19		

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"

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_GV_BAC_CCR_COMPLIANCE.GPJ_AEP.GDT_7/7/16

AMERICAN ELECTRIC POWER SERVICE CORPORATION
AEP CIVIL ENGINEERING LABORATORY
 LOG OF BORING



JOB NUMBER _____

COMPANY _____

BORING NO. **BAC-03** DATE **7/7/16** SHEET **2** OF **3**

PROJECT **GV BAC CCR Compliance**

BORING START **12/11/15** BORING FINISH **12/15/15**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET		STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
		FROM	TO			%						
15	SS	21.0	22.5	4-5-4	.3		25			1.5 tsf, moist		
16	SS	22.5	24.0	4-5-3	1.5					MEDIUM STIFF LIGHT BROWN 5YR 5/6 CLAY 0.5 tsf, moist		
17	SS	24.0	25.5	3-4-4	1.5					MEDIUM STIFF LIGHT BROWN 5YR 5/6 CLAY 1.5 tsf, moist MC 24.1% LL 39.8% PI 19.9% SAND 3.4% FINES 96.6% TESTED SAMPLE #16		
18	SS	25.5	27.0	2-3-4	1.5					MEDIUM STIFF LIGHT BROWN 5YR 5/6 CLAY 1.0 tsf, moist		
19	SS	27.0	28.5	2-2-3	1.5					MEDIUM STIFF LIGHT BROWN 5YR 5/6 CLAY 1.0 tsf, moist		
20	SS	28.5	30.0	2-2-2	1.5							
21	SS	30.0	31.5	WOR-2-2	1.5					30	SOFT LIGHT BROWN 5YR 5/6 SILT CLAY w/sand fine, moist	
22	SS	31.5	33.0	WOR-2-2	1.5							
23	SS	33.0	34.5	WOR-2-2	1.5						SOFT MODERATE BROWN 5YR 4/4 SAND FINE moist	
24	SS	34.5	36.0	2-2-2	1.5					35	SOFT MODERATE BROWN 5YR 4/4 SILT CLAY w/sand fine, moist	
25	SS	36.0	37.5	WOR-2-3	1.5							
26	SS	37.5	39.0	1-3-4	1.5						MEDIUM STIFF MODERATE BROWN 5YR 4/4 SILT CLAY 0.5 tsf, w/sand fine, moist	
27	SS	39.0	40.5	7-14-9	1.5					40	MEDIUM DENSE LIGHT BROWN 5YR 5/6 SAND COARSE wet	
28	SS	40.5	42.0	7-10-12	1.5							
29	SS	41.5	43.0	5-7-11	1.3							
30	SS	44.0	45.5	9-11-16	1.5		45					

AEP_GV BAC CCR COMPLIANCE.GPJ_AEP.GDT_7/7/16

Continued Next Page

AMERICAN ELECTRIC POWER SERVICE CORPORATION
AEP CIVIL ENGINEERING LABORATORY
 LOG OF BORING



JOB NUMBER _____

COMPANY _____

BORING NO. **BAC-03** DATE **7/7/16** SHEET **3** OF **3**

PROJECT **GV BAC CCR Compliance**

BORING START **12/11/15** BORING FINISH **12/15/15**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET		STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
		FROM	TO			%						
31	SS	46.5	48.0	10-8-10	1.5		50	[Dotted Pattern]				
32	SS	49.0	50.5	11-11-14	1.5							
33	SS	51.1	52.6	6-12-14	1.5							
34	SS	54.0	55.5	9-15-14	1.5							
35	SS	56.5	58.0	10-12-16	1.5							

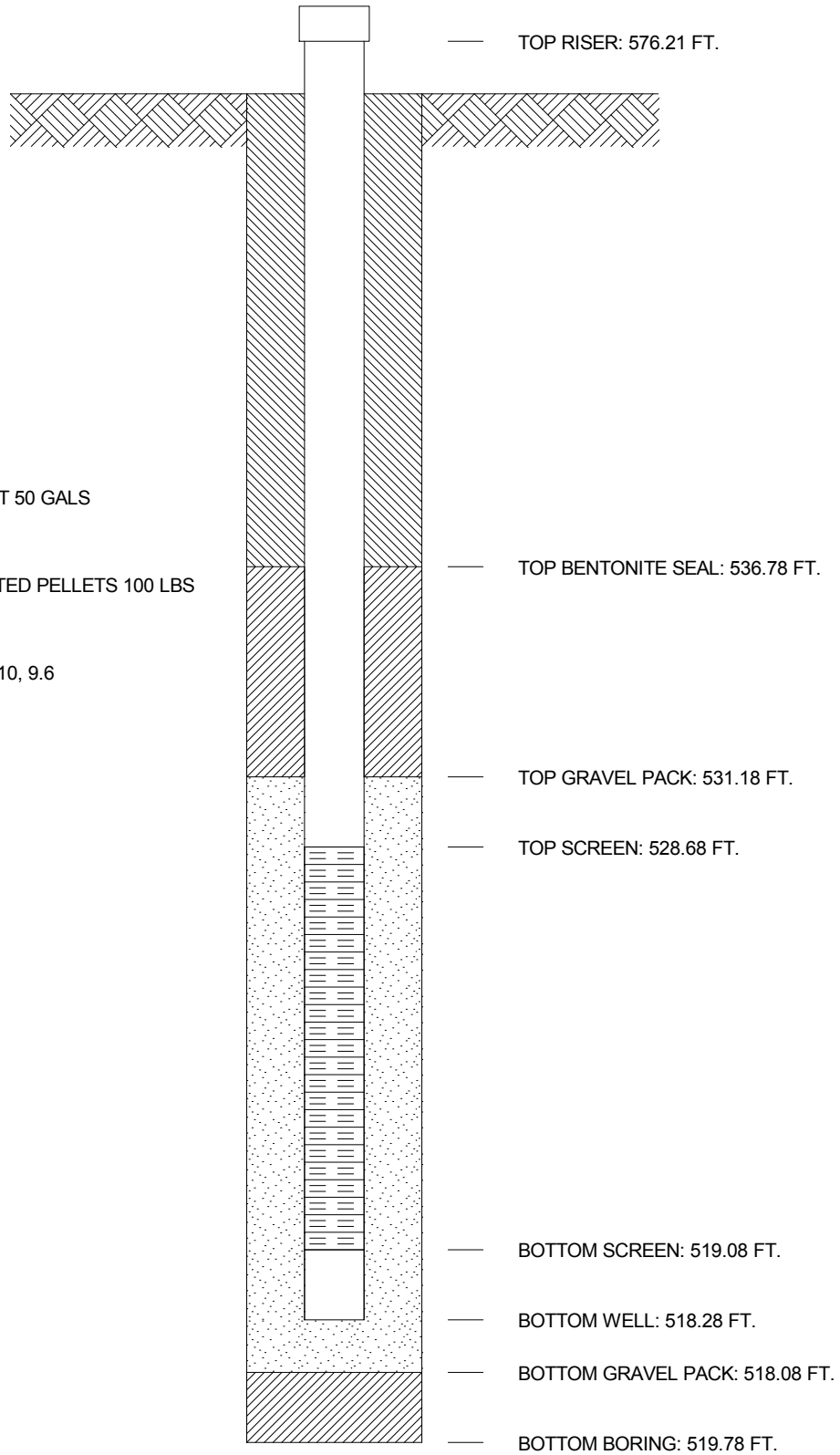
AMERICAN ELECTRIC POWER SERVICE CORPORATION
 AEP CIVIL ENGINEERING LABORATORY
 MONITORING WELL CONSTRUCTION









JOB NUMBER _____
 COMPANY _____
 PROJECT **GV BAC CCR Compliance**
 COORDINATES **N 339,839.3 E 2,109,080.6**
 SYSTEM _____

WELL No. **BAC-03** BORING No. **BAC-03** INSTALLED **12/15/15**

GROUND ELEVATION 573.78 FT.



-  GROUT SEAL: QUICK GROUT 50 GALS
-  BENTONITE SEAL: 3/8" COATED PELLETS 100 LBS
-  SCREEN: 2 dia., SLOTTED .010, 9.6
-  GRAVEL PACK: #5 150 LBS
-  RISER PIPE: 2.0, dia., PVC
-  SPACERS, DEPTH:

AMERICAN ELECTRIC POWER SERVICE CORPORATION
AEP CIVIL ENGINEERING LABORATORY
 LOG OF BORING



JOB NUMBER _____
 COMPANY _____
 PROJECT **GV BAC CCR Compliance**
 COORDINATES **N 339,206.5 E 2,108,938.6**
 GROUND ELEVATION **582.5** SYSTEM _____

BORING NO. **BAC-04** DATE **7/7/16** SHEET **1** OF **3**
 BORING START **12/16/15** BORING FINISH **12/22/15**
 PIEZOMETER TYPE _____ WELL TYPE **OW**
 HGT. RISER ABOVE GROUND **2.188** DIA **6**
 DEPTH TO TOP OF WELL SCREEN **55.8** BOTTOM **65.4**
 WELL DEVELOPMENT **YES** BACKFILL **GROUT**
 FIELD PARTY **MWJ / TAS** RIG **D-50**

Water Level, ft	▽	▼	▼
TIME			
DATE			

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET		STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
		FROM	TO									
1	SS	0.0	1.5	6-5-6	.1					MEDIUM DENSE LIMESTONE ROAD BED		
2	SS	1.5	3.0	2-5-6	1.0					STIFF GRAYISH BROWN 5YR 3/2 CLAY		
3	SS	3.0	4.5	4-5-9	1.3					STIFF MODERATE YELLOWISH BROWN 10YR 5/4 CLAY w/trace of bottom ash		
4	SS	4.5	6.0	6-4-6	1.2		5			STIFF MODERATE YELLOWISH BROWN 10YR 5/4 CLAY trace of bottom ash and river gravel		
5	SS	6.0	7.5	4-6-5	1.5					STIFF MODERATE YELLOWISH BROWN 10YR 5/4 CLAY w/trace of river gravel		
6	SS	7.5	9.0	3-6-6	1.5					STIFF MODERATE YELLOWISH BROWN 10YR 5/4 CLAY w/trace of bottom ash		
7	SS	9.0	10.5	3-5-7	1.5		10			STIFF MODERATE YELLOWISH BROWN 10YR 5/4 CLAY w/trace bottom and river gravel		
8	SS	10.5	12.0	3-4-7	1.5					VERY STIFF DUSKY BROWN 5YR 2/2 CLAY w/trace of sand fine		
9	SS	12.0	13.5	4-7-11	1.5					NO RECOVERY limestone cobble stuck in end of spoon		
10	SS	13.5	15.0	4-7-9	0		15			STIFF MODERATE YELLOWISH BROWN 10YR 5/4 CLAY SILT SAND MC 15.7% LL 23.9% PI 5.1% TESTED SAMPLES #11 AND #13 COMBINED NO RECOVERY limestone cobble stuck in end of spoon		
11	SS	15.0	16.5	6-5-6	1.1					MEDIUM STIFF MODERATE YELLOWISH BROWN 10YR 5/4 FINE CLAY SILT SAND SAND 52.9% FINES 47.1%		
12	SS	16.5	18.0	3-6-9	0					MEDIUM STIFF MODERATE YELLOWISH		
13	SS	18.0	19.5	2-3-3	1.4							
14	SS	19.5	21.0	2-3-3	1.4							

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"

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_GV_BAC_CCR_COMPLIANCE.GPJ_AEP.GDT_7/7/16

AMERICAN ELECTRIC POWER SERVICE CORPORATION
AEP CIVIL ENGINEERING LABORATORY
 LOG OF BORING



JOB NUMBER _____

COMPANY _____

BORING NO. **BAC-04** DATE **7/7/16** SHEET **2** OF **3**

PROJECT **GV BAC CCR Compliance**

BORING START **12/16/15** BORING FINISH **12/22/15**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET		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
		FROM	TO			%						
15	SS	21.0	22.5	2-3-4	1.5		25			BROWN 10YR 5/4 CLAY AND SILT w/little sand		
16	SS	22.5	24.0	2-4-5	1.5	MEDIUM STIFF MODERATE YELLOWISH BROWN 10YR 5/4 CLAY w/some silt						
17	SS	24.0	25.5	3-2-4	.8	MEDIUM STIFF MODERATE YELLOWISH BROWN 10YR 5/4 CLAY AND SILT w/little sand fine						
18	SS	25.5	27.0	2-2-3	1.5		30			MEDIUM STIFF MODERATE YELLOWISH BROWN 10YR 5/4 SILT AND CLAY		
19	SS	27.0	28.5	2-3-3	1.5							
20	SS	28.5	30.0	2-2-2	1.5							
1	ST	30.5	33.0									
21	SS	33.0	34.5	2-1-2	.9		35			SOFT MODERATE YELLOWISH BROWN 10YR 5/4 SILT AND CLAY PSI 700 / SEC 10 / REC 1.5		
22	SS	34.5	36.0	1-2-2	1.5							
23	SS	36.0	37.5	2-2-3	1.5	SOFT MODERATE YELLOWISH BROWN 10YR 5/4 SANDY SILTY CLAY MC 22.5% LL 24.4% PI 5.8% GRAVEL 1.0% SAND 37.6% FINES 61.4% TESTED SAMPLES #21, #22, AND #23						
24	SS	37.5	39.0	1-1-1	1.5		40			VERY SOFT MODERATE YELLOWISH BROWN 10YR 5/4 SANDY CLAYEY SILT w/some silt, wet		
25	SS	39.0	40.5	WOR-2-2	1.5							
26	SS	40.5	42.0	1-1-1	1.5							
27	SS	42.0	43.5	1-1-1	1.5		45			MEDIUM STIFF MODERATE YELLOWISH BROWN 10YR 5/4 SILT AND CLAY w/some sand fine		
28	SS	43.5	45.0	3-2-3	1.5							
29	SS	45.0	46.5	1-3-2	1.5							

AEP_GV_BAC_CCR_COMPLIANCE.GPJ_AEP.GDT_7/7/16

Continued Next Page

AMERICAN ELECTRIC POWER SERVICE CORPORATION
AEP CIVIL ENGINEERING LABORATORY
 LOG OF BORING



JOB NUMBER _____

COMPANY _____

BORING NO. **BAC-04** DATE **7/7/16** SHEET **3** OF **3**

PROJECT **GV BAC CCR Compliance**

BORING START **12/16/15** BORING FINISH **12/22/15**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET		STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
		FROM	TO			%						
30	SS	46.5	48.0	2-2-2	1.5		50			MEDIUM STIFF MODERATE YELLOWISH BROWN 10YR 5/4 SILT AND CLAY w/some sand fine		
31	SS	48.0	49.5	2-2-4	1.5				MEDIUM STIFF MEDIUM LIGHT GRAY N6 SILT AND CLAY w/some sand fine			
32	SS	49.5	51.0	3-5-7	1.5				MEDIUM STIFF MEDIUM LIGHT GRAY N6 SILT AND CLAY w/some sand fine			
33	SS	51.0	52.5	4-6-10	1.5				MEDIUM DENSE LIGHT BROWN 5YR 5/6 SAND FINE w/little silt			
34	SS	52.5	54.0	5-8-13	1.5				MEDIUM DENSE LIGHT BROWN 5YR 5/6 SAND FINE AND GRAVEL			
35	SS	54.0	55.5	9-8-10	1.5				MEDIUM DENSE MODERATE YELLOWISH BROWN 10YR 5/4 SAND AND GRAVEL			
36	SS	55.5	57.0	7-13-15	1.0				55			
37	SS	58.0	59.5	6--7-13	1.0							
38	SS	60.5	62.0	9-11-13	.9				60			
39	SS	63.0	64.5	22-20-29	1.2						DENSE MODERATE YELLOWISH BROWN 10YR 5/4 SAND AND GRAVEL	
40	SS	65.5	67.0	11-12-12	1.0		MEDIUM DENSE MODERATE YELLOWISH BROWN 10YR 5/4 SAND AND GRAVEL					
41	SS	68.0	69.5	12-18-20	1.2		65					

AMERICAN ELECTRIC POWER SERVICE CORPORATION
 AEP CIVIL ENGINEERING LABORATORY
 MONITORING WELL CONSTRUCTION



JOB NUMBER _____

COMPANY _____

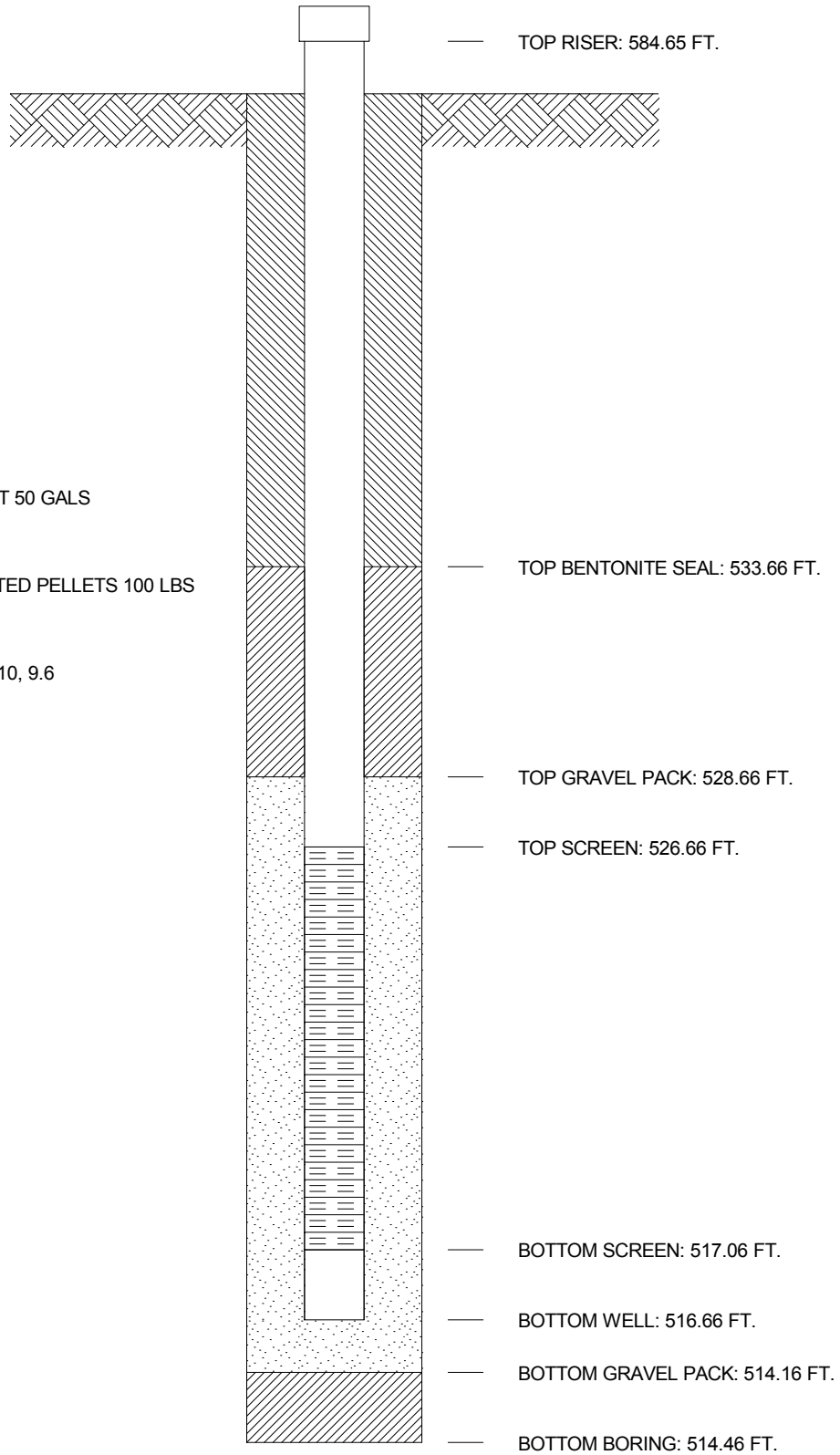
WELL No. **BAC-04** BORING No. **BAC-04** INSTALLED **12/22/15**







PROJECT **GV BAC CCR Compliance**

COORDINATES **N 339,206.5 E 2,108,938.6**

SYSTEM _____

GROUND ELEVATION 582.46 FT.



-  GROUT SEAL: QUICK GROUT 50 GALS
-  BENTONITE SEAL: 3/8" COATED PELLETS 100 LBS
-  SCREEN: 2 dia., SLOTTED .010, 9.6
-  GRAVEL PACK: #5 400 LBS
-  RISER PIPE: 2.0, dia., PVC
-  SPACERS, DEPTH:

AMERICAN ELECTRIC POWER SERVICE CORPORATION
AEP CIVIL ENGINEERING LABORATORY
 LOG OF BORING



JOB NUMBER _____
 COMPANY _____
 PROJECT **GV BAC CCR Compliance**
 COORDINATES **N 338,638.9 E 2,108,667.3**
 GROUND ELEVATION **590.3** SYSTEM _____

BORING NO. **BAC-05** DATE **7/7/16** SHEET **1** OF **4**
 BORING START **12/29/15** BORING FINISH **12/30/15**
 PIEZOMETER TYPE _____ WELL TYPE **OW**
 HGT. RISER ABOVE GROUND **1.73** DIA **6**
 DEPTH TO TOP OF WELL SCREEN **64.5** BOTTOM **74.1**
 WELL DEVELOPMENT **YES** BACKFILL **GROUT**
 FIELD PARTY **MWJ / TAS** RIG **D-50**

Water Level, ft	▽	▼	▼
TIME			
DATE			

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET		STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
		FROM	TO									
1	SS	0.0	1.5	1-2-3	.9					STIFF BROWNISH GRAY 5YR 4/1 BOTTOM ASH 1.5 tsf, w/some soil, dry		
2	SS	1.5	3.0	14-10-15	.6					MEDIUM DENSE LIGHT BROWNISH GRAY 5YR 6/1 GRAVELS w/bottom ash, dry		
3	SS	3.0	4.5	5-5-4	1.3					STIFF MODERATE BROWN 5YR 4/4 CLAY 2.5 tsf, w/gravels, dry		
4	SS	4.5	6.0				5			NO RECOVERY limestone cobble in end of spoon		
5	SS	6.0	7.5	4-3-5	1.5					STIFF LIGHT BROWN 5YR 5/6 CLAY dry		
6	SS	7.5	9.0	3-3-4	1.5					MEDIUM STIFF PALE BROWN 5YR 5/2 CLAY dry		
7	SS	9.0	10.5	4-3-4			10			MEDIUM STIFF MODERATE BROWN 5YR 4/4 CLAY dry		
8	SS	10.5	12.0	3-4-7	1.5					STIFF MODERATE BROWN 5YR 4/4 CLAY dry		
9	SS	12.0	13.5	3-3-7	1.5					STIFF PALE YELLOWISH BROWN 10YR 6/2 CLAY dry		
10	SS	13.5	15.0	3-4-7	1.5					STIFF MODERATE BROWN 5YR 4/4 CLAY dry		
11	SS	15.0	16.5	3-4-5	1.5		15					
12	SS	16.5	18.0	3-3-5	1.5					STIFF MODERATE BROWN 5YR 4/4 CLAY w/sand fine		
13	SS	18.0	19.5	3-3-5	1.5					STIFF MODERATE BROWN 5YR 4/4 CLAY dry		
14	SS	19.5	21.0	4-4-6	1.3							

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"

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 _____

AMERICAN ELECTRIC POWER SERVICE CORPORATION
AEP CIVIL ENGINEERING LABORATORY
 LOG OF BORING



JOB NUMBER _____

COMPANY _____

BORING NO. **BAC-05** DATE **7/7/16** SHEET **2** OF **4**

PROJECT **GV BAC CCR Compliance**

BORING START **12/29/15** BORING FINISH **12/30/15**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET		STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
		FROM	TO			%						
15	SS	21.0	22.5	5-4-5	1.5							
16	SS	22.5	24.0	3-4-7	1.3					STIFF MODERATE BROWN 5YR 4/4 CLAY w/sand fine		
17	SS	24.0	25.5	4-5-6	1.5		25			STIFF MODERATE BROWN 5YR 4/4 CLAY dry		
18	SS	25.5	27.0	3-4-5	1.5					STIFF MODERATE BROWN 5YR 4/4 SAND FINE w/silty clay		
19	SS	27.0	28.5	3-3-4	1.5					MEDIUM STIFF MODERATE BROWN 5YR 4/4 CLAY		
20	SS	28.5	30.0	3-4-6	1.5					STIFF MODERATE BROWN 5YR 4/4 CLAY dry		
21	SS	30.0	31.5	3-4-6	1.5		30					
22	SS	31.5	33.0	2-4-5	1.5							
23	ST	33.5	35.5							STIFF MODERATE BROWN 5YR 4/4 CLAY dry PSI 400 / SEC 10 / REC		
24	SS	36.0	37.5	2-3-4	1.5		35					
25	SS	37.5	39.0	2-3-4	1.5					MEDIUM STIFF MODERATE BROWN 5YR 4/4 CLAY dry		
26	SS	39.0	40.5	WOH-WOH-3	1.5					SOFT MODERATE BROWN 5YR 4/4 CLAY 0.5 tsf, w/sands fine, moist		
27	SS	40.5	42.5	WOH-2-2	1.5		40					
28	SS	42.5	44.0	WOH-WOH-2	1.5					SOFT MODERATE BROWN 5YR 4/4 CLAY AND SILT 1.0 tsf, w/sands fine, moist		
29	SS	44.0	45.5	WOH-2-1	1.5					VERY SOFT MODERATE BROWN 5YR 4/4 CLAY AND SILT w/sands fine, moist		
30	SS	45.5	47.0	WOH-1-2	1.5		45					
										SOFT MODERATE BROWN 5YR 4/4 CLAY		

AEP_GV_BAC_CCR_COMPLIANCE.GPJ_AEP.GDT_7/7/16

Continued Next Page

AMERICAN ELECTRIC POWER SERVICE CORPORATION
AEP CIVIL ENGINEERING LABORATORY
 LOG OF BORING



JOB NUMBER _____

COMPANY _____

BORING NO. **BAC-05** DATE **7/7/16** SHEET **3** OF **4**

PROJECT **GV BAC CCR Compliance**

BORING START **12/29/15** BORING FINISH **12/30/15**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET		STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
		FROM	TO			%						
31	SS	47.0	48.5	WOH-1-2	1.5		50			AND SILT w/sands fine, wet		
32	SS	48.5	50.0	1-1-3	1.5							
33	SS	50.0	51.5	1-2-3	1.5							
34	SS	51.5	53.0	1-3-5	1.5		55			MEDIUM STIFF MODERATE BROWN 5YR 4/4 CLAY AND SILT w/sands fine, moist		
35	SS	53.0	54.5	6-3-3	1.5							
36	SS	54.5	56.0	5-5-4	1.5							
37	SS	56.0	57.5	1-3-4	1.5		60			LOOSE MODERATE BROWN 5YR 4/4 SAND FINE wet		
38	SS	57.5	59.0	3-3-5	1.5							
39	SS	59.0	60.5	4-3-7	1.4							
40	SS	60.5	62.0	7-24-20	1.5		65			LOOSE MEDIUM LIGHT GRAY N5 SAND FINE wet		
41	SS	62.0	63.5	12-21-28	1.5							
42	SS	64.5	66.0	13-23-38	1.3							
43	SS	67.0	68.5	12-25-40	1.2		70			STIFF MEDIUM LIGHT GRAY N5 CLAY AND SILT 1.0 tsf, moist		
44	SS	69.5	71.0	14-22-38	1.2							
										STIFF MEDIUM LIGHT GRAY N5 CLAY AND SILT moist		
										DENSE MODERATE BROWN 5YR 3/4 SAND COARSE wet		
										VERY DENSE MODERATE BROWN 5YR 3/4 SAND COARSE wet		

AEP_GV_BAC_CCR_COMPLIANCE.GPJ_AEP.GDT_7/7/16

Continued Next Page

AMERICAN ELECTRIC POWER SERVICE CORPORATION
AEP CIVIL ENGINEERING LABORATORY
 LOG OF BORING



JOB NUMBER _____

COMPANY _____

BORING NO. **BAC-05** DATE **7/7/16** SHEET **4** OF **4**

PROJECT **GV BAC CCR Compliance**

BORING START **12/29/15** BORING FINISH **12/30/15**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET		STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
		FROM	TO			%						
45	SS	73.0	74.5	14-19-35	1.3		75					
46	SS	75.5	77.0	17-14-30	1.0							
47	SS	78.0	79.5	13-23-19	.9							

AMERICAN ELECTRIC POWER SERVICE CORPORATION
 AEP CIVIL ENGINEERING LABORATORY
 MONITORING WELL CONSTRUCTION



JOB NUMBER _____

COMPANY _____

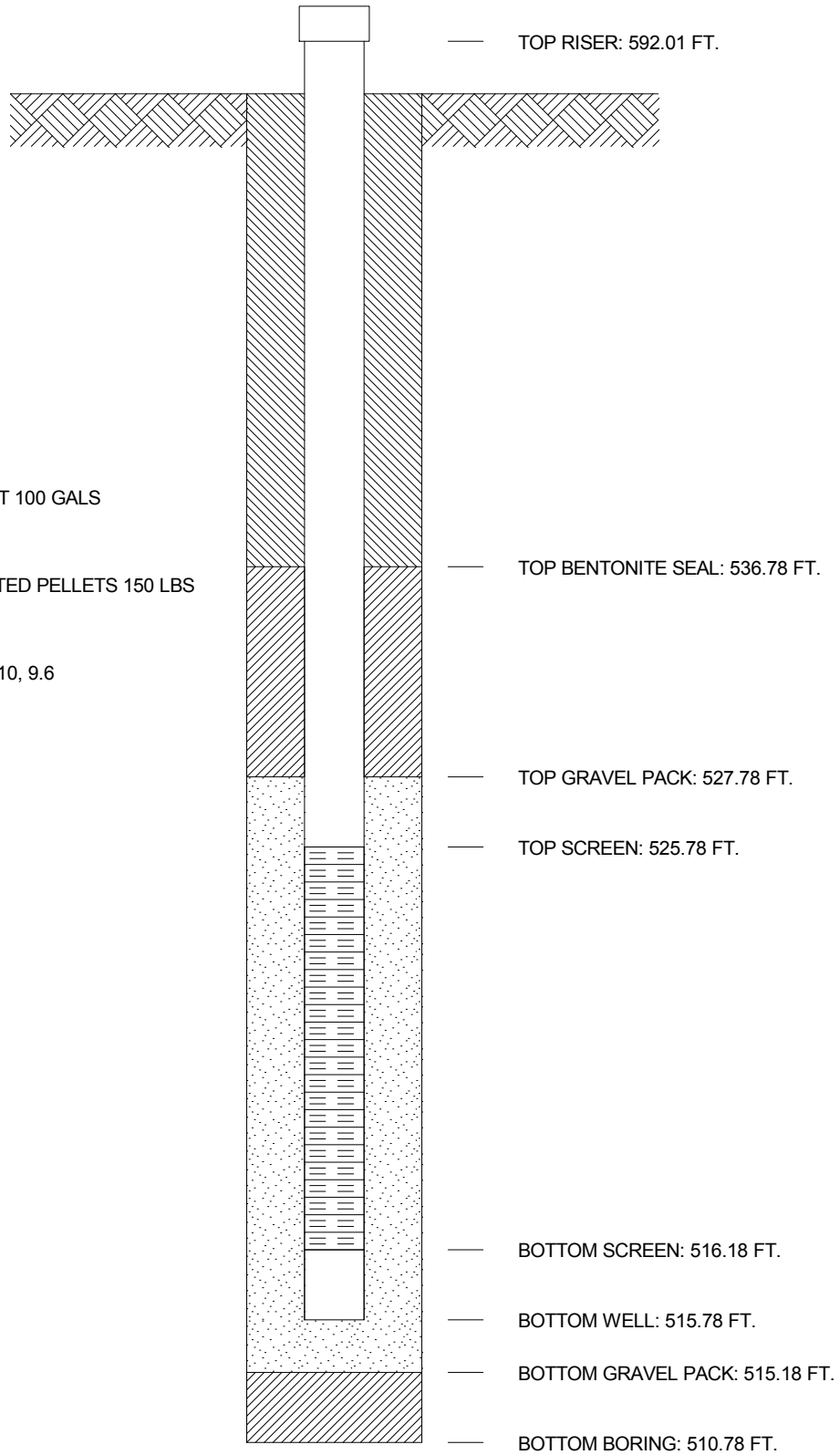
WELL No. **BAC-05** BORING No. **BAC-05** INSTALLED **12/30/15**







PROJECT **GV BAC CCR Compliance**

COORDINATES **N 338,638.9 E 2,108,667.3**

SYSTEM _____

GROUND ELEVATION 590.28 FT.



-  GROUT SEAL: QUICK GROUT 100 GALS
-  BENTONITE SEAL: 3/8" COATED PELLETS 150 LBS
-  SCREEN: 2 dia., SLOTTED .010, 9.6
-  GRAVEL PACK: #5 200 LBS
-  RISER PIPE: 2.0, dia., PVC
-  SPACERS, DEPTH:



ERM
1 Beacon Street; 5th Floor
Boston, Massachusetts 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

DATE STARTED: <u>6/10/2020</u>	TOTAL DEPTH: <u>90 ft bgs</u>	WELL DEVELOPMENT
DATE COMPLETED: <u>6/11/2020</u>	DIAMETER: <u>5-6 inches</u>	METHOD(S): <u>Air Lift</u>
DRILLING CONTRACTOR: <u>Enviroprobe Service, Inc.</u>	GROUND ELEVATION: <u>599.64 ft amsl (approx.)</u>	DATE STARTED: <u>8/5/2020</u>
DRILLING METHODS: <u>Sonic Drilling</u>	PVC ELEVATION: <u>602.54 ft amsl</u>	DATE ENDED: <u>8/5/2020</u>
LOGGED BY: <u>P. Gebhard</u>	NORTHING: <u>338477.383</u>	DTW AT START: <u>62.1 ft bgs</u>
CHECKED BY: <u>H. Usle</u>	EASTING: <u>2076549.323</u>	DTW AT END: <u>62.2 ft bgs</u>
NOTES: <u>6-inch steel casing advanced to 80 ft bgs; 5-inch casing to termination depth.</u>		VOLUME PURGED: <u>17.5 gallons</u>

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
					GP	1.0	GRAVEL, road base material.	<p>Concrete Pad and 6" Aluminum Stickup Protective Casing</p> <p>Well Riser (to 80 feet bgs) (2" SCH 40 PVC)</p> <p>Bentonite Seal (0.3 to 78 ft bgs)</p>
						2.0	Black, ASH, loose, dry.	
5	595	SC	74		SC-SM		Dark Brown, SILTY CLAY, very stiff, dry.	
						6.0	NO RECOVERY.	
10	590					10.0		
					CL	11.0	Dark Brown, CLAY, very stiff, dry.	
					GP	12.0	Gray, FINE TO COARSE GRAVEL, loose, wet.	
15	585	SC	76		CL		Dark Brown, CLAY, very stiff, dry.	
						17.5	NO RECOVERY.	
20	580					20.0		
					CL		Dark Brown, CLAY, 1-5% carboniferous material, dark gray mottling, very stiff, dry to moist, mottling.	
25	575					25.0		

SAMPLE TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling	GP Poorly-graded Gravel ASH Ash CL Low Plasticity Clay ML Silt SC-SM Clayey and Silty Sand SM Silty Sand	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



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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	WELL DIAGRAM
30	570	SC	80				NO RECOVERY. (continued)	<p>Well Riser (to 80 feet bgs) (2" SCH 40 PVC)</p> <p>Bentonite Seal (0.3 to 78 ft bgs)</p>
35	565	SC	120		CL		Dark Brown, CLAY, 1-5% carboniferous material, dark gray mottling, medium stiff, dry to moist.	
40	560							
45	555	SC	120		ML		Dark Brown, SILT, minor carboniferous material, dark gray mottling, medium stiff, moist, mottling.	
50	550							
							NO RECOVERY.	
					SC-SM		Medium Brown, SILTY FINE SAND, and clay, soft, moist to very moist.	

SAMPLE TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling	GP Poorly-graded Gravel ASH Ash CL Low Plasticity Clay ML Silt	SC-SM Clayey and Silty Sand SM Silty Sand 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



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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	WELL DIAGRAM
55	545	SC	108		SC-SM		Medium Brown, SILTY FINE SAND, and clay, soft, moist to very moist. <i>(continued)</i>	<p>Well Riser (to 80 feet bgs) (2" SCH 40 PVC)</p> <p>Bentonite Seal (0.3 to 78 ft bgs)</p> <p>Filter Sand (#0 and #1)</p> <p>Well Screen (80 to 90 feet bgs) (2" SCH 40 PVC/ 0.01" slot)</p>
60	540				SC-SM		Dark Brown, FINE TO MEDIUM SILTY TO CLAYEY SAND, soft to medium stiff, moist.	
65	535	SC	120		SC-SM		Dark Gray, FINE SILTY TO CLAYEY SAND, loose to medium dense, moist.	
70	530							
75	525	SC	NR				NO RECOVERY, Drilling refusal at 75 feet bgs; no soil logging from 70 to 75 feet bgs. Redrilled to 80 feet bgs.	
80	520						NO RECOVERY.	

SAMPLE TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling	GP Poorly-graded Gravel ASH Ash CL Low Plasticity Clay ML Silt SC-SM Clayey and Silty Sand SM Silty Sand	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



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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	515	SC	48				NO RECOVERY. (continued)	<p>Well Screen (80 to 90 feet bgs) (2" SCH 40 PVC/ 0.01" slot)</p> <p>Filter Sand (#0 and #1)</p> <p>End Cap</p>
					SM	86.0	Dark Brown, MEDIUM SILTY SAND, well sorted, loose, wet.	
					SM	87.0	Dark Brown, COARSE SILTY SAND, trace well rounded gravel, (0.5" diameter), poorly sorted, loose, wet.	
90	510				SM	89.0	Dark Brown, COARSE SILTY SAND, and well rounded gravel, (0.5" diameter), possible close proximity to bedrock, poorly sorted.	
							Bottom of Boring @ 90.00 feet bgs	
95	505							
100	500							
105	495							
110	490							

SAMPLE TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling	GP Poorly-graded Gravel ASH Ash CL Low Plasticity Clay ML Silt SC-SM Clayey and Silty Sand SM Silty Sand	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



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

DATE STARTED: <u>6/12/2020</u>	TOTAL DEPTH: <u>90 ft bgs</u>	WELL DEVELOPMENT
DATE COMPLETED: <u>6/15/2020</u>	DIAMETER: <u>5-6 inches</u>	METHOD(S): <u>Air Lift</u>
DRILLING CONTRACTOR: <u>Enviroprobe Service, Inc.</u>	GROUND ELEVATION: <u>599.71 ft amsl (approx.)</u>	DATE STARTED: <u>8/5/2020</u>
DRILLING METHODS: <u>Sonic Drilling</u>	PVC ELEVATION: <u>602.76 ft amsl</u>	DATE ENDED: <u>8/5/2020</u>
LOGGED BY: <u>P. Gebhard</u>	NORTHING: <u>338526.105</u>	DTW AT START: <u>61.4 ft bgs</u>
CHECKED BY: <u>H. Usle</u>	EASTING: <u>2075728.652</u>	DTW AT END: <u>61.4 ft bgs</u>
NOTES: <u>6-inch steel casing advanced to 80 ft bgs; 5-inch casing to termination depth.</u>		VOLUME PURGED: <u>20 gallons</u>

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
					GP		GRAVEL, road base material.	<p>Concrete Pad and 6" Aluminum Stickup Protective Casing</p> <p>Well Riser (to 80 feet bgs) (2" SCH 40 PVC)</p> <p>Bentonite Seal (0.3 to 76 ft bgs)</p>
							Black, ASH, loose, dry.	
5	595	SC	76		CL-ML		Dark Brown, SILTY CLAY, very stiff, dry.	
10	590						NO RECOVERY.	
15	585	SC	84		GP		COARSE GRAVEL, "fill-like" material.	
20	580				CL-ML		Dark Brown, SILTY CLAY, dark gray mottling, very stiff, dry.	
25	575						NO RECOVERY.	
					CL-ML		Dark Brown, SILTY CLAY, dark gray mottling, minor mica, soft, very moist.	

SAMPLE TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling	GP Poorly-graded Gravel ASH Ash CL-ML Silty Clay ML Silt CL Low Plasticity Clay SC-SM Clayey and Silty Sand	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



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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	WELL DIAGRAM
30	570	SC	96		CL-ML		Dark Brown, SILTY CLAY, dark gray mottling, minor carboniferous material, minor mica, very stiff, slightly moist. (continued)	<p>Well Riser (to 80 feet bgs) (2" SCH 40 PVC)</p> <p>Bentonite Seal (0.3 to 76 ft bgs)</p>
					ML		Dark Gray, SILT, minor dark brown mottling, very soft to soft, very moist to wet.	
35	565	SC	NM		CL-ML		Dark Brown, SILTY CLAY, dark gray mottling, minor carboniferous material, minor mica, very stiff, slightly moist.	
40	560						NO RECOVERY.	
45	555	SC	78		CL-ML		Dark Brown, SILTY CLAY, soft, wet.	
					CL-ML		Dark Gray, SILTY CLAY, thin laminations of dark brown clay, plant material on bedding plane, stiff to very stiff, dry to moist.	
50	550				CL		Dark Brown, CLAY, dark gray mottling, minor mica, very stiff, moist.	
					CL-ML		Dark Brown, SILTY CLAY, soft, wet.	
					CL		Dark Brown, CLAY, dark gray mottling, minor mica, minor roots, very stiff, moist.	

SAMPLE TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling	GP Poorly-graded Gravel ML Silt CL Low Plasticity Clay	ASH Ash CL-ML Silty Clay SC-SM Clayey and Silty Sand
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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	545	SC	120		CL		Dark Brown, CLAY, dark gray mottling, minor mica, minor roots, very stiff, moist. <i>(continued)</i>	
60	540						60.0 NO RECOVERY. 61.0	
65	535	SC	108		CL-ML		Dark Brown, SILTY CLAY, very soft, wet.	
							63.0	
70	530	SC	108		CL-ML		Dark Gray, SILTY CLAY, dark brown mottling, soft to medium stiff, moist.	
							65.0	
75	525	SC	48		CL-ML		Dark Gray, SILTY CLAY, dark brown mottling, stiff, moist.	
							66.0	
70	530	SC	108		SC-SM		Dark Brown, FINE TO MEDIUM SILTY TO CLAYEY SAND, dense, moist.	
							70.0	
75	525	SC	48		SC-SM		NO RECOVERY.	
							76.0	
80	520	SC	48		SC-SM		Light Brown, FINE TO MEDIUM SILTY TO CLAYEY SAND, poorly sorted, medium dense, wet.	
							78.0	
80	520	SC	48		SP		Light Brown, FINE SAND AND COBBLES, well rounded silty, poorly sorted, loose, dry.	
							80.0	
80	520	SC	48		SM		Light Brown, MEDIUM TO COARSE SILTY SAND, very loose, very moist.	
							80.0	

SAMPLE TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling	GP Poorly-graded Gravel ML Silt CL Low Plasticity Clay CL-ML Silty Clay SC-SM Clayey and Silty Sand	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



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Client: Gavin Power, LLC

Project Name: Residual Waste Landfill Monitoring Well Installation

Project Number: 0488799

Project Location: Cheshire, OH

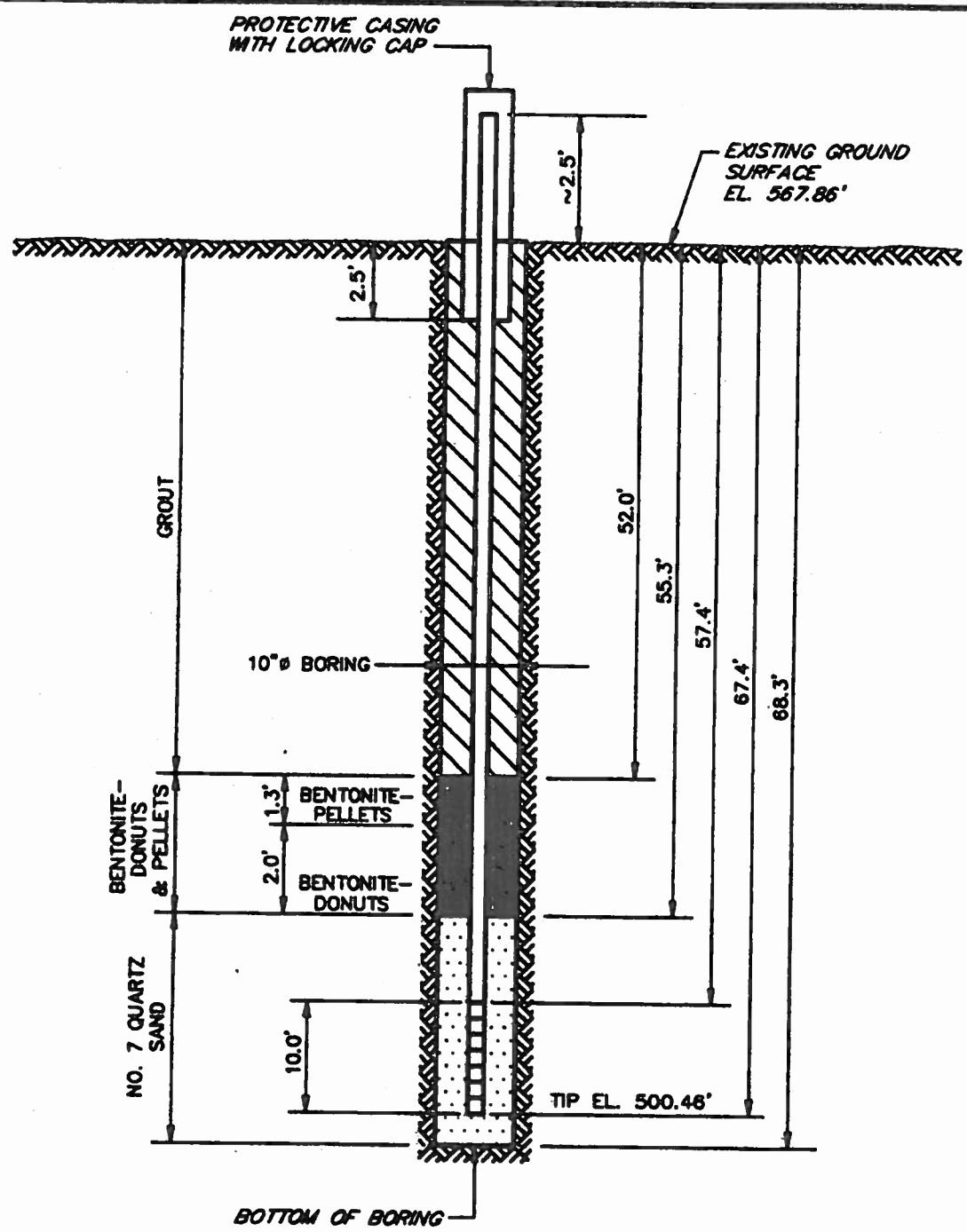
DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
85	515	SC	120		SM		Light Brown, MEDIUM TO COARSE SILTY SAND, very loose, very moist. <i>(continued)</i>	<p>Well Screen (80 to 90 feet bgs) (2" SCH 40 PVC/ 0.01" slot)</p> <p>Filter Sand (#0 and #1)</p> <p>End Cap</p>
90	510				SM		Dark Brown, MEDIUM TO COARSE SILTY SAND, very loose, wet.	
95	505							
100	500							
105	495							
110	490							
Bottom of Boring @ 90.00 feet bgs								

SAMPLE TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling	GP Poorly-graded Gravel ML Silt ASH Ash CL Low Plasticity Clay CL-ML Silty Clay SC-SM Clayey and Silty Sand	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

PROJECT NO: 313579 BORING NO: M1-1 PAGE 1 OF 2
 DATE BEGAN: 7-15-93 DATE FINISHED: 7-19-93 PROJECT NAME: AEP GAVIN PLANT
 DRILLER: C. ROUSH/R. YATES N: 6900.00' FIELD ENGINEER: M. HARDNER
 GROUND SURFACE ELEV.: 567.86' GWL DATE/TIME: NA E: 8950.00'
 DRILLING METHOD: 3.25" ID HOLLOW STEM AUGER EQUIPMENT: B-K 81 RIG
 CONTRACTOR: AEP ENVIRONMENTAL CHECKED BY: S. HANNAH

ELEV (FT)	DEPTH (FT)	SAMPLE TYPE AND NO.	SPT BLOWS PER (0.5')	REC (FT)	DEPTH (FT)	DESCRIPTION	SOIL CLASS.	REMARKS
567.86	0.00	S 1	12-12 11-13	1.17	0.00	Loose, dark brown, topsoil, over hard, medium to dark brown, silty CLAY, trace pebbles, 10% coal (small pieces), dry	cl	PID READINGS 1095 hrs. HNU - 0 ppm LEL - 0%
565.0	-5.00	S 2	5-5- 7-12	1.33	5.00	Hard, medium brown, mottled gray silty CLAY, trace coal pieces, slightly to non-plastic, dry	cl	1100 hrs. HNU - 0 ppm LEL - 0%
555.0	-10.00	S 3	5-5- 7-8	1.58	10.00	Hard, medium brown, silty CLAY, slight-medium plasticity, dry	cl	1115 hrs. HNU - 0 ppm LEL - 0%
550.0	-15.00	S 4	2-3- 5-8	1.25	15.00	Hard, medium brown, silty CLAY, slightly plastic, dry	cl	1120 hrs. HNU - 0 ppm LEL - 0%
56.0	-20.00	S 5	2-3- 4-4	1.67	20.00	Hard, medium brown, silty CLAY, medium plasticity, moist	cl	1128 hrs. HNU - 0 ppm LEL - 0%
540.0	-25.00	S 6	2-3- 5-9	1.75	25.00	Soft, gray brown clayey SILT, medium plasticity, moist	ml	1132 hrs. HNU - 0 ppm LEL - 0%
55.0	-30.00	S 7	2-3- 7-8	1.25	30.00	Loose GRAVEL, pebble size, 2" thick, over brown fine to coarse grained SAND with gravel, pebble size, wet	gp/ sw	1140 hrs. HNU - 0 ppm LEL - 0%
530.0	-35.00	S 8	8-8- 9-12	1.0	35.00	Medium dense, medium brown, some orange and dark brown SAND, medium to coarse grained, with 10% pebble gravel, wet	sw	END 07/15/93 BEGIN 07/16/93 0805 hrs. HNU - 0 ppm LEL - 0%

DRAWING NUMBER 313579-A1
 DATE 12/27/93
 CHECKED BY SJA
 APPROVED BY CLP
 NAME 26 SEPT 93
 BY



NOTES:

1. RISER PIPE IS 2 IN. I.D. SCHEDULE 40 PVC PIPE, THREADED, FLUSH-JOINTED.
2. SCREEN IS 2 IN. I.D. SCHEDULE 40 PVC PIPE, CONTINUOUS SLOT SCREEN (0.010 IN. SLOT SIZE).
3. LOWER END OF SCREEN IS CAPPED.
4. DATE OF COMPLETION 08/10/93.

**INSTALLATION DIAGRAM
MONITORING WELL MW-1**

PREPARED FOR
**AEP GAVIN PLANT
 CHESHIRE, OHIO**



63390
 11/27/93

PROJECT NO: 313579
 DATE BEGAN: 7-20-93
 DRILLER: C. ROUSH/R. YATES

BORING NO: M-6
 DATE FINISHED: 7-20-93
 N: 8277.67'

PAGE 1 OF 2
 PROJECT NAME: AEP GAVIN PLANT
 FIELD ENGINEER: M. HARDNER
 E: 9491.54'
 GWH DEPTH: NA
 EQUIPMENT: B-K 81 RIG
 CHECKED BY: S. HANNAH

GROUND SURFACE ELEV.: 569.82'
 DRILLING METHOD: 3.25" ID HOLLOW STEM AUGER
 CONTRACTOR: AEP ENVIRONMENTAL

ELEV (FT)	DEPTH (FT)	SAMPLE TYPE AND NO.	SPT BLOWS PER (0.5')	REC (FT)	PROF. TYPE	DESCRIPTION	SOIL CLASS.	PTO READINGS	REMARKS
569.82	0.00	S 1*	NA	NA	Diagonal Hatching	FILL, (loose, dark brown, black, silty clay, trace pebbles, dry)	NA	1300 HNU	LEL - 0%
						2.0'			
565.0	-5.00				Diagonal Hatching	Hard, yellow brown, mottled tan, silty CLAY, low plasticity, dry			
		S 2	27-12-12-14	1.17			4.0	1345 HNU	LEL - 0%
560.0	-10.00				Diagonal Hatching	Hard, yellow brown, mottled tan, silty CLAY, low plasticity, dry			
		S 3*	7-9-10-12	1.83			3.5	1350 HNU	LEL - 0%
555.0	-15.00				Diagonal Hatching	Firm, light brown, silty CLAY, medium plasticity, moist, light brown, silty sand, wet (at 18.0'-18.5')	cl		
		S 4	2-3-6-5	1.5			1.0	1400 HNU	LEL - 0%
550.0	-20.00				Diagonal Hatching	Medium dense, light brown fine grained SAND, moist, light brown, silty CLAY, medium plasticity, moist to wet			
		S 5*	3-6-6-7	1.5			22.0'	1405 HNU	LEL - 0%
545.0	-25.00				Diagonal Hatching	Medium dense, light brown SAND and GRAVEL, sand medium to coarse grained with 30% pebble gravel, moist	sp/cl		
		S 6	9-10-11-14	1.33			27.0'	1410 HNU	LEL - 0%
540.0	-30.00				Diagonal Hatching	Medium dense, medium brown SAND and GRAVEL, (sand 40%) sand fine to coarse grained, pebble gravel wet	sw		
		S 7*	6-7-7-9	1.42			32.0'	1410 HNU	LEL - 0%
535.0	-35.00				Diagonal Hatching	Dense, light brown SAND and pebble GRAVEL, sand fine to	gp		
		S 8	16-17-18-19	1.33			37.0'	1455 HNU	LEL - 0%
530.0	-40.00				Diagonal Hatching		sw		

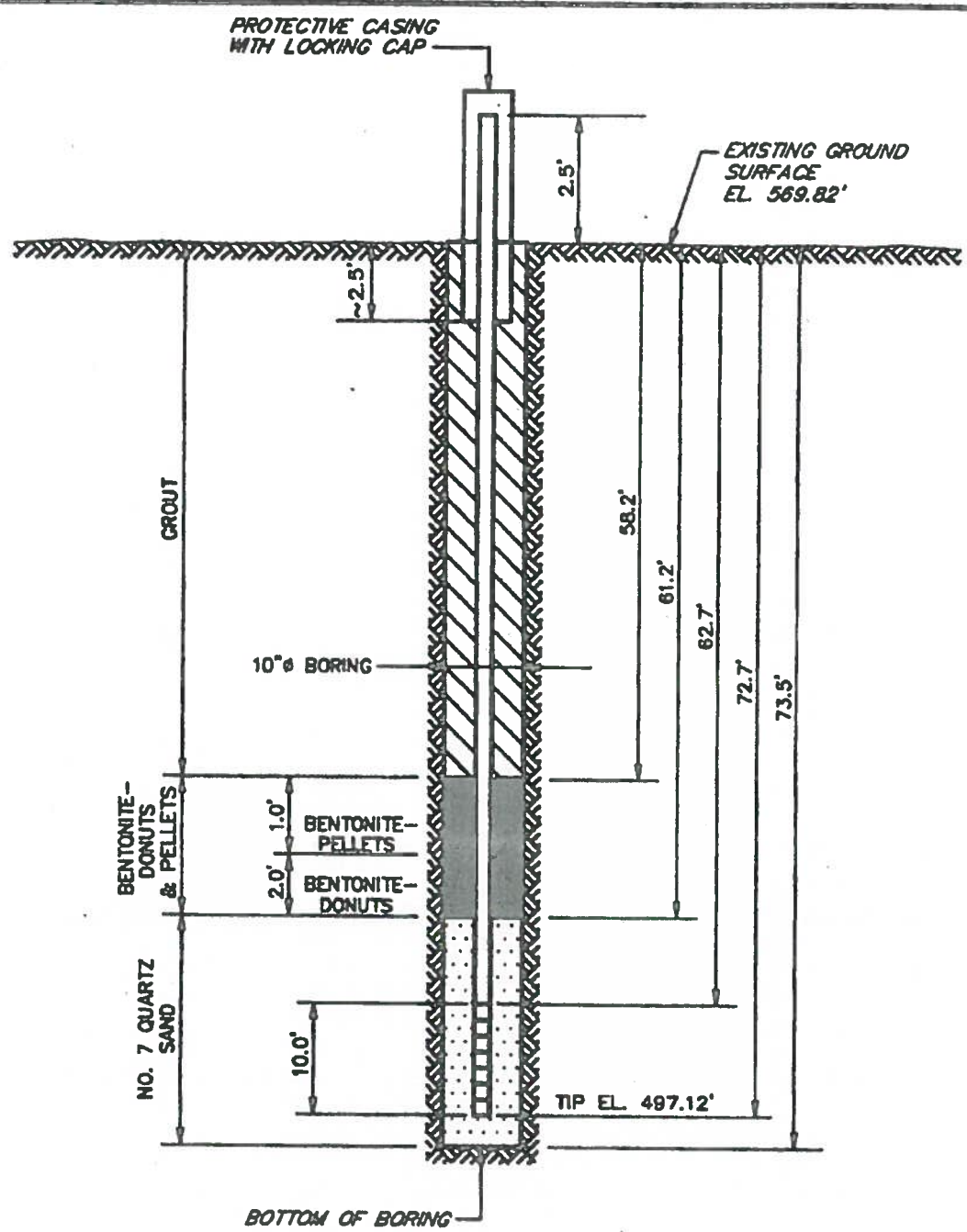
PROJECT NO: 313579
 DATE BEGAN: 7-20-93
 DRILLER: C. ROUSH/R. YATES
 GROUND SURFACE ELEV.: 569.82'
 DRILLING METHOD: 3.25" ID HOLLOW STEM AUGER
 CONTRACTOR: AEP ENVIRONMENTAL

BORING NO: M-6
 DATE FINISHED: 7-20-93
 N: 8277.67'
 GWL DATE/TIME: NA

PROJECT NAME: AEP GAVIN PLANT
 FIELD ENGINEER: M. HARDNER
 E: 9491.54'
 GWL DEPTH: NA
 EQUIPMENT: B-K 81 RIG
 CHECKED BY: S. HANNAH

ELEV (FT)	DEPTH (FT)	SAMPLE TYPE AND NO.	SPT BLOWS PER (0.5')	REC (FT)	PROFIL	DESCRIPTION	CODE	REMARKS
569.82	0.00						SW	
						42.0'		
		S 9	5-26-29-42	1.33		Very dense, light brown, medium grained SAND, over dark brown gravel, medium to coarse grained sand and pebble (gravel 40%)	NA	1510 HNU - 0 ppm LEL - 0%
565.0	5.00						sp	
		S 10	26-15-15-19	1.75		Medium dense, light brown, medium grained SAND, over dark brown SAND and pebble gravel (30%), wet Gravel at 48.0'	NA	1525 HNU - 0 ppm LEL - 0%
560.0	10.00							
		S 11	5-6-7-9	1.0		Medium dense, light brown medium grained SAND with a little pebble gravel over light greenish-gray, coarse grained sand and pebble gravel (40%) at 53.5', wet	SW	1535 HNU - 0 ppm LEL - 0%
555.0	15.00							
		S 12	10-12-15-16	1.58		Medium dense, medium to coarse grained SAND and GRAVEL (60%), over light brown, medium grained sand, wet	NA	1625 HNU - 0 ppm LEL - 0%
550.0	20.00						gw/sp	
		S 13	8-12-15-19	1.67		Medium dense, light brown, fine to medium grained SAND, trace pebbles/cobbles, wet	NA	1642 HNU - 0 ppm LEL - 0%
545.0	25.00							
		S 14	24-28-27-26	1.67		Very dense, medium brown, GRAVEL, pebble to cobble size, trace coarse sand, wet	sp	1700 HNU - 0 ppm LEL - 0%
540.0	30.00						gw	
		S 15	50/2"	0.3		NO SAMPLE, AUGER REFUSAL AT 73.1' BOTTOM OF BORING AT 73.1'	NA	NOTE: (1) HNU READINGS ABOVE BACKGROUND OF 0.6 ppm (2) * = LAB SAMPLE (3) LOCATED 10.0' SE OF MW6 (BORING FOR SPLIT SPOON SAMPLES)
490.0	80.00							

D. BY: []
 NAME: []
 CHECKED BY: []
 APPROVED BY: []
 DATE: 12/27/93
 DRAWING NUMBER: 313579-A6
 PROJECT NUMBER: 13-2-43



NOTES:

1. RISER PIPE IS 2 IN. I.D. SCHEDULE 40 PVC PIPE, THREADED, FLUSH-JOINTED.
2. SCREEN IS 2 IN. I.D. SCHEDULE 40 PVC PIPE, CONTINUOUS SLOT SCREEN (0.010 IN. SLOT SIZE).
3. LOWER END OF SCREEN IS CAPPED.
4. DATE OF COMPLETION 08/24/93.

**INSTALLATION DIAGRAM
 MONITORING WELL MW-6**

PREPARED FOR
 AEP GAVIN PLANT
 CHESHIRE, OHIO





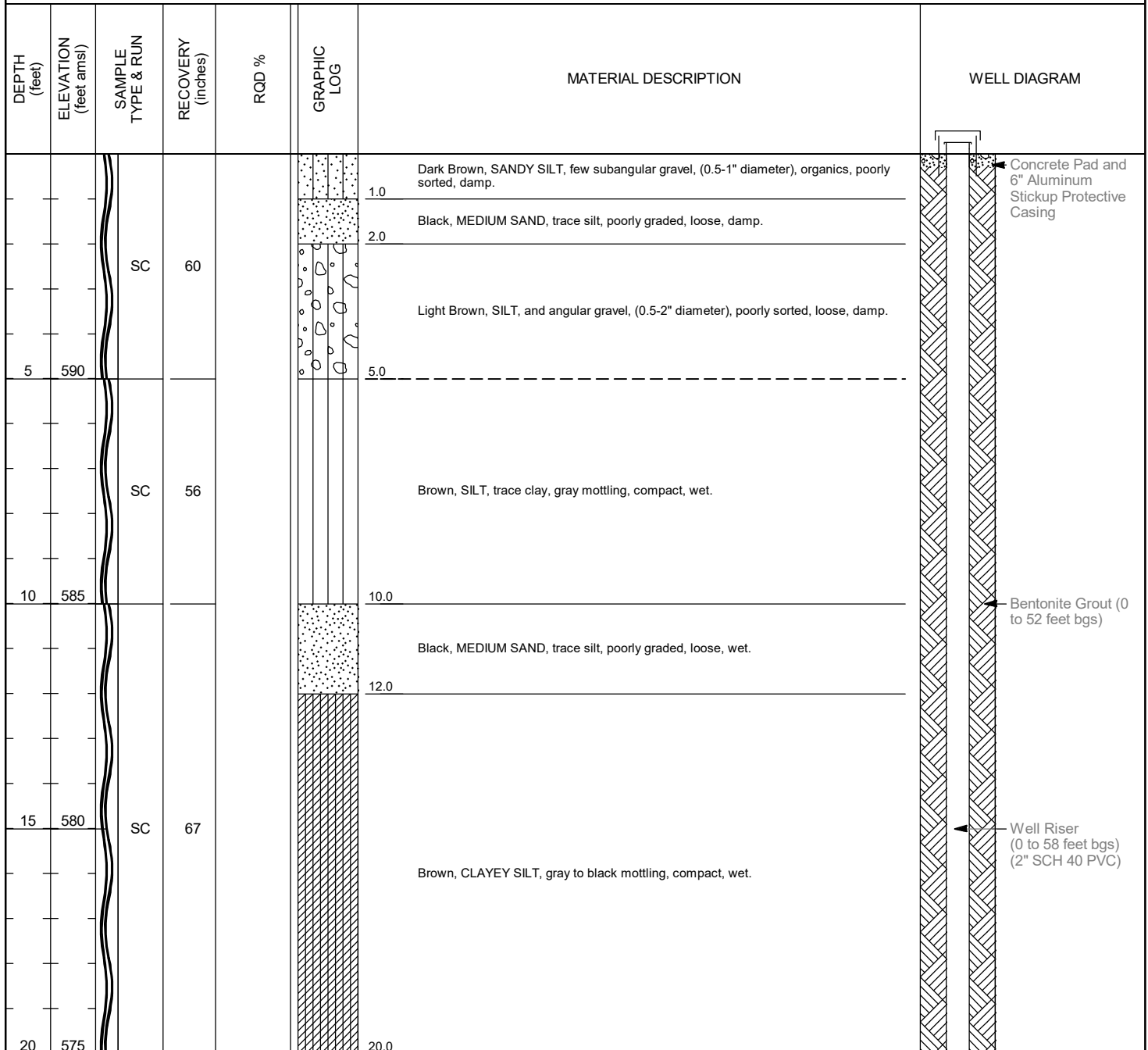
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BORING BAC-08

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Client: Gavin Power, LLC Project Name: Bottom Ash Pond Monitoring Well Installation
Project Number: 0643653 Project Location: Cheshire, OH

DATE STARTED: <u>6/30/2022</u>	TOTAL DEPTH: <u>70 feet bgs</u>	WELL DEVELOPMENT
DATE COMPLETED: <u>6/30/2022</u>	DIAMETER: <u>6 inches</u>	METHOD(S): <u>Grundfos & Buffalo Pump</u>
DRILLING CONTRACTOR: <u>Cascade Drilling</u>	GROUND ELEVATION: <u>594.650</u>	DATE STARTED: <u>7/7/2022</u>
DRILLING METHODS: <u>Sonic Drilling</u>	PVC ELEVATION: <u>597.64</u>	DATE ENDED: <u>7/7/2022</u>
LOGGED BY: <u>K. Popyack</u>	NORTHING: <u>339189.254</u>	DTW AT START: <u>55.9 feet bgs</u>
CHECKED BY: <u>A. Harford</u>	EASTING: <u>2075428.215</u>	DTW AT END: <u>NM</u>
NOTES: <u>Well ran dry during development, RQD only applicable for bedrock wells</u>		VOLUME PURGED: <u>42 gallons</u>



CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Sandy Silt Poorly-graded Sand Gravelly Silt Silt Silty Clay Low Plasticity Clay	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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Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
						21.0 Brown, CLAYEY SILT, gray mottling, compact, wet. (continued)	
						23.0 Gray Brown, CLAYEY SILT, little brown mottling, increasing clay with depth, compact, wet.	
25	570	SC	120			Brown, SILT, trace clay, gray mottling decreasing with depth, compact, wet.	Bentonite Grout (0 to 52 feet bgs)
30	565					30.0 Gray Brown, SILT, little clay, compact, wet.	Well Riser (0 to 58 feet bgs) (2" SCH 40 PVC)
35	560	SC	120			32.0 Brown, CLAYEY SILT, lots of gray and red-brown mottling, compact, wet.	
40	555					36.0 Brown, CLAY, some silt, little fine sand, low plasticity, wet.	
						40.0 Brown, SANDY CLAY, medium plasticity, saturated.	
						41.0 Brown, SANDY CLAY, and silt, low plasticity, saturated.	

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Sandy Silt Silt Poorly-graded Sand Gravelly Silt Silty Clay Low Plasticity Clay	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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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	550	SC	96			Brown, SANDY CLAY, and silt, low plasticity, saturated. <i>(continued)</i>	<p>Bentonite Grout (0 to 52 feet bgs)</p> <p>Bentonite Seal (52 to 56 feet bgs)</p> <p>Filter Sand (56 to 70 feet bgs) (Global #5)</p> <p>Well Screen (58 to 68 feet bgs) (2" SCH 40 PVC/ 0.01" slot)</p>
						46.0 Brown, CLAYEY SILT, trace fine sand, compact, saturated.	
50	545					49.5 50.0 Brown, FINE SAND, some clay, cohesive, saturated.	
						54.0 Brown, CLAYEY SAND, finer sand at 65 feet bgs, medium plasticity, saturated.	
55	540	SC	84			60.0 Brown, MEDIUM SAND, and subrounded gravel, (0.5-2" diameter), poorly sorted, loose, saturated.	
60	535					60.4 Gray, GRAVEL, subrounded (0.5-1.5" diameter), poorly sorted, loose, saturated.	
65	530	SC	95			Brown, MEDIUM SAND, and subrounded gravel, (0.5-1" diameter), dark gray sand at 63 feet bgs, poorly sorted, loose, saturated.	

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Sandy Silt Silt Poorly-graded Sand Gravelly Silt Silty Clay Low Plasticity Clay	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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BORING BAC-08

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
70	525					Brown, MEDIUM SAND, and subrounded gravel, (0.5-1" diameter), dark gray sand at 63 feet bgs, poorly sorted, loose, saturated. <i>(continued)</i>	
75	520					Bottom of Boring @ 70.00 feet bgs	
80	515						
85	510						
90	505						

CORING TYPE

Sonic Drilling (SC)

GRAPHIC LOG LEGEND

- Sandy Silt
- Poorly-graded Sand
- Gravelly Silt
- Silt
- Silty Clay
- Low Plasticity Clay

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

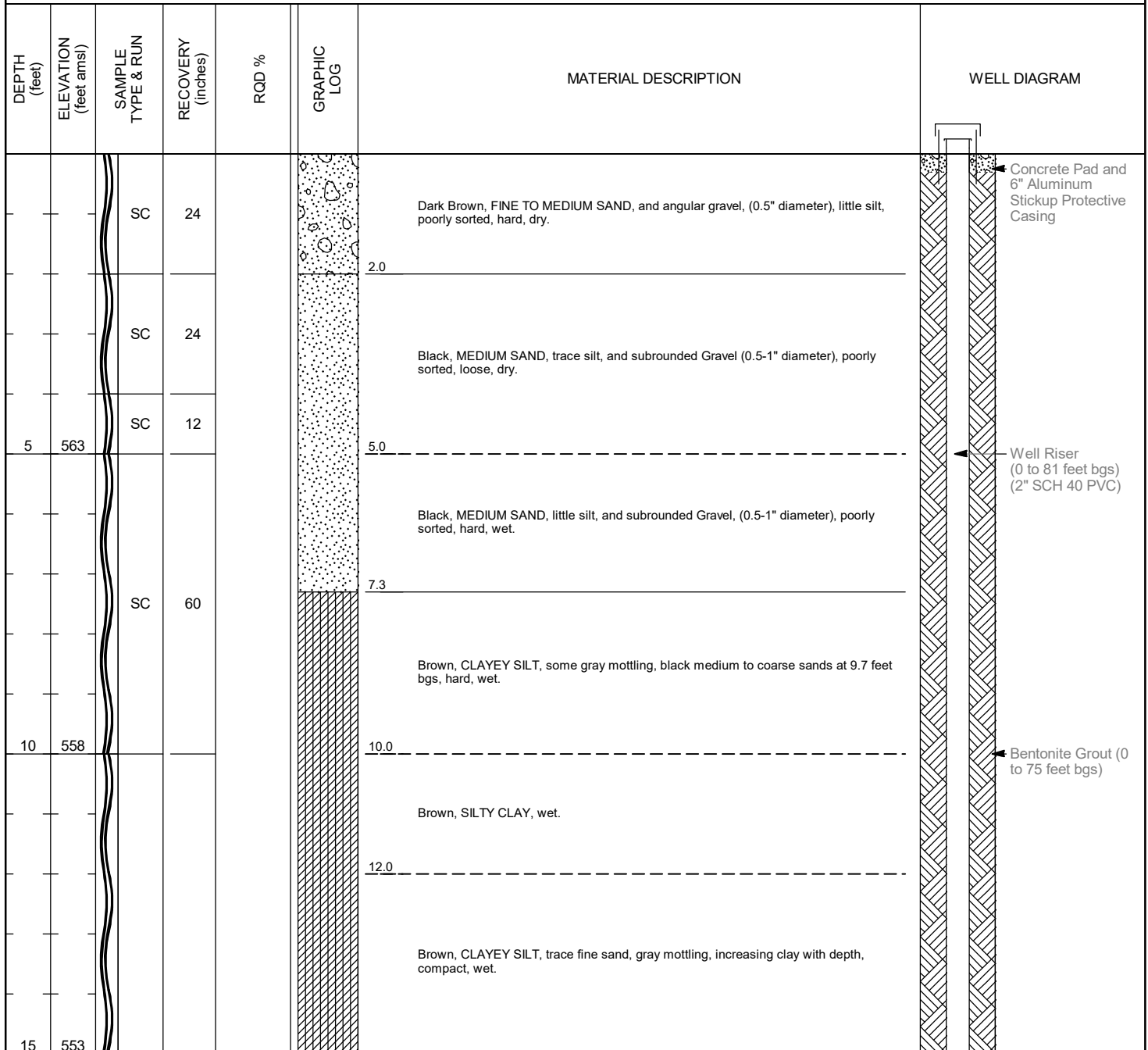


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BORING BAC-09

Client: Gavin Power, LLC Project Name: Bottom Ash Pond Monitoring Well Installation
Project Number: 0643653 Project Location: Cheshire, OH

DATE STARTED: <u>6/16/2022</u>	TOTAL DEPTH: <u>94 feet bgs</u>	WELL DEVELOPMENT
DATE COMPLETED: <u>6/16/2022</u>	DIAMETER: <u>6 inches</u>	METHOD(S): <u>Grundfos & Buffalo Pump</u>
DRILLING CONTRACTOR: <u>Cascade Drilling</u>	GROUND ELEVATION: <u>567.930</u>	DATE STARTED: <u>7/7/2022</u>
DRILLING METHODS: <u>Sonic Drilling & Wireline Rock Coring</u>	PVC ELEVATION: <u>570.53</u>	DATE ENDED: <u>7/7/2022</u>
LOGGED BY: <u>K. Popyack</u>	NORTHING: <u>339222.733</u>	DTW AT START: <u>34.51 feet bgs</u>
CHECKED BY: <u>A. Harford</u>	EASTING: <u>2075281.613</u>	DTW AT END: <u>NM</u>
NOTES: <u>RQD only applicable for bedrock wells</u>		VOLUME PURGED: <u>25 gallons</u>



CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC) Wireline Rock Coring (RC)	Poorly-graded Gravelly Sand Poorly-graded Sand Silty Clay Low Plasticity Clay Poorly-graded Gravel Clayey Sand	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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BORING BAC-09

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
20	548	SC	98			Brown, CLAYEY SILT, trace fine sand, gray mottling, increasing clay with depth, compact, wet. (continued)	
						Brown, CLAY, trace fine sand, low plasticity, saturated.	
25	543	SC	98			Brown, SILTY CLAY, and fine sand, more sand with depth, trace medium sand towards 38 feet bgs, medium plasticity, saturated.	
30	538					Brown To Dark Brown, MEDIUM SAND, and rounded gravel, (0.5" diameter), poorly sorted, loose, saturated.	
						Dark Brown, MEDIUM SAND, and subrounded gravel, (0.5-1" diameter), poorly sorted, loose, saturated.	

CORING TYPE	
	Sonic Drilling (SC)
	Wireline Rock Coring (RC)

GRAPHIC LOG LEGEND			
	Poorly-graded Gravelly Sand		Poorly-graded Sand
	Low Plasticity Clay		Silty Clay
	Poorly-graded Gravel		Clayey Sand

ACRONYM LEGEND	
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bgs = below ground surface	
DTW = depth to water	
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Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
35	533	SC	113			33.0 Dark Brown, COARSE SAND, and subrounded gravel, (0.5-1" diameter), poorly sorted, loose, saturated.	
						35.8 Dark Brown, MEDIUM SAND, and subrounded gravel, (0.5-1" diameter), some fine sand at 37 feet bgs, poorly sorted, loose, saturated.	
40	528	SC				40.0 Gray, GRAVEL, rounded (0.5-1" diameter), poorly sorted, loose, saturated.	
						40.7 Brown, COARSE SAND, some rounded gravel, (0.5" diameter), poorly sorted, loose, saturated.	
						41.3 Brown, FINE TO MEDIUM SAND, few subrounded gravel, (0.5-1" diameter), poorly sorted, loose, saturated.	
						42.0	
45	523	SC	95			47.0 Brown, MEDIUM SAND, some subrounded gravel, (0.5-1" diameter), poorly sorted, loose, saturated.	
						47.0 Brown, FINE TO MEDIUM SAND, few subrounded gravel, (0.5" diameter), poorly sorted, loose, saturated.	
50	518						

CORING TYPE

- Sonic Drilling (SC)
- Wireline Rock Coring (RC)

GRAPHIC LOG LEGEND

- Poorly-graded Gravelly Sand
- Poorly-graded Sand
- Silty Clay
- Low Plasticity Clay
- Poorly-graded Gravel
- Clayey Sand

ACRONYM LEGEND

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Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
55	513	SC	112			Brown, FINE TO MEDIUM SAND, few subrounded gravel, (0.5" diameter), poorly sorted, loose, saturated. <i>(continued)</i>	
					Brown, CLAYEY SAND, well sorted, loose, saturated.		
60	508				Brown, FINE SAND, trace subrounded gravel, (0.5" diameter), trace clay, medium sand at 58 feet bgs, poorly sorted, loose, saturated.		
65	503	SC	156			Brown, FINE SAND, little coarse sand at 65 feet bgs, well sorted, loose, saturated.	Bentonite Grout (0 to 75 feet bgs) Well Riser (0 to 81 feet bgs) (2" SCH 40 PVC)
					Black, FINE TO MEDIUM SAND, and subrounded gravel, (0.5-1.5" diameter), trace silt, poorly sorted, loose, saturated.		

CORING TYPE

- Sonic Drilling (SC)
- Wireline Rock Coring (RC)

GRAPHIC LOG LEGEND

- Poorly-graded Gravelly Sand
- Poorly-graded Sand
- Silty Clay
- Low Plasticity Clay
- Poorly-graded Gravel
- Clayey Sand

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
70	498					Blue Gray, CLAYSTONE, less competent with depth, brittle, damp.	<p>Bentonite Grout (0 to 75 feet bgs)</p> <p>Well Riser (0 to 81 feet bgs) (2" SCH 40 PVC)</p> <p>Bentonite Seal (75 to 79 feet bgs)</p> <p>Well Screen (81 to 91 feet bgs) (2" SCH 40 PVC/ 0.01" slot)</p> <p>Filter Sand (79 to 93 feet bgs) (Global #5)</p>
72.0						Brown To Orange-Brown, CLAYSTONE, dry.	
73.0		RC	14.4	0		SILTSTONE, some gravel, brittle.	
75	493					Gray To Brown, SILTSTONE, natural fractures at 76, 77.4, and 78.9 feet bgs. Slicken lines seen at 78.9 feet bgs. Rubble zone at 77.7 to 78.6 feet bgs. Fossil seen at 76 feet bgs.	
76.0							
80	488						
81.0							
85	483						
		RC	46.8	0		Gray, SANDSTONE, lithified, micaceous. Natural fractures at 81.8, 83, 84.2 feet bgs. Rubble zone at 81-81.4 feet bgs. Shale layers at 82.6, 83.2, and 84.2-85 feet bgs. (Cow Run).	
		RC	57.6	5			

CORING TYPE

- Sonic Drilling (SC)
- Wireline Rock Coring (RC)

GRAPHIC LOG LEGEND

- Poorly-graded Gravelly Sand
- Poorly-graded Sand
- Silty Clay
- Low Plasticity Clay
- Poorly-graded Gravel
- Clayey Sand

ACRONYM LEGEND

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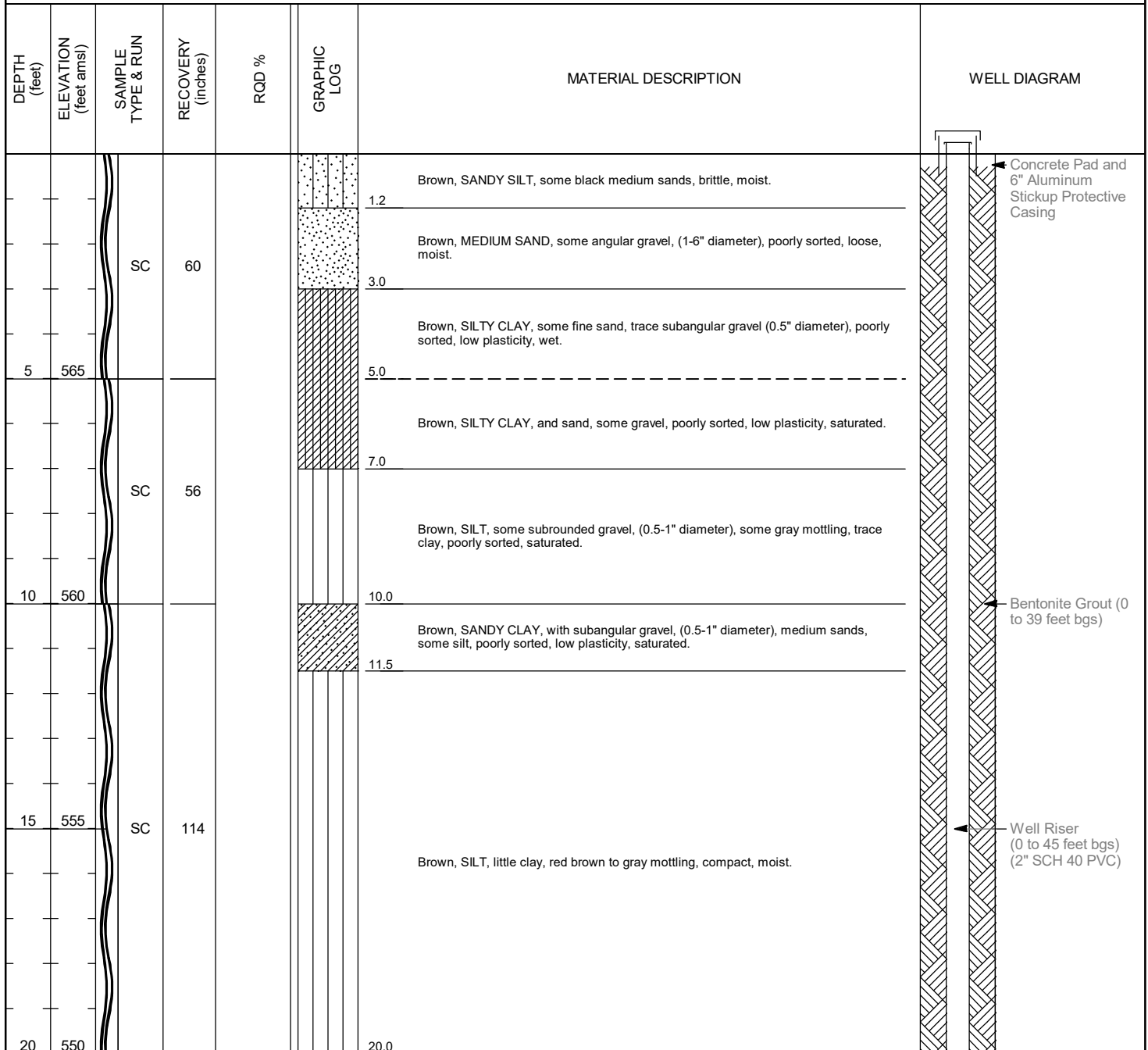
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BORING BAC-10

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Client: Gavin Power, LLC Project Name: Bottom Ash Pond Monitoring Well Installation
Project Number: 0643653 Project Location: Cheshire, OH

DATE STARTED: <u>6/29/2022</u>	TOTAL DEPTH: <u>57 feet bgs</u>	WELL DEVELOPMENT
DATE COMPLETED: <u>6/29/2022</u>	DIAMETER: <u>6 inches</u>	METHOD(S): <u>Grundfos & Buffalo Pump</u>
DRILLING CONTRACTOR: <u>Cascade Drilling</u>	GROUND ELEVATION: <u>570.110</u>	DATE STARTED: <u>7/7/2022</u>
DRILLING METHODS: <u>Sonic Drilling</u>	PVC ELEVATION: <u>572.35</u>	DATE ENDED: <u>7/7/2022</u>
LOGGED BY: <u>K. Popyack</u>	NORTHING: <u>340079.422</u>	DTW AT START: <u>32.2 feet bgs</u>
CHECKED BY: <u>A. Harford</u>	EASTING: <u>2077071.633</u>	DTW AT END: <u>NM</u>
NOTES: <u>Well ran dry during development, RQD only applicable for bedrock wells</u>		VOLUME PURGED: <u>20 gallons</u>



CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Sandy Silt Silt Poorly-graded Sand Low Plasticity Sandy Clay Silty Clay Clayey Sand	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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Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
						Brown, CLAYEY SILT, with fine sand, medium plasticity, saturated. <i>(continued)</i>	
25	545	SC	106			22.8	
						Brown, CLAYEY SAND, some silt, medium plasticity, saturated.	Well Riser (0 to 45 feet bgs) (2" SCH 40 PVC)
30	540					29.0	
						Brown, FINE SAND, with clay, some varving, well sorted, cohesive, saturated.	
						30.0	Bentonite Grout (0 to 39 feet bgs)
						Brown, FINE SAND, with clayey silt, black organics at 32 and 33 feet bgs, brown to orange brown mottling at 33.5 feet bgs, well sorted, low plasticity, saturated.	
						33.5	
						33.9	
						Orange, MEDIUM SAND, some clay, wet.	
						34.5	
						Gray, CLAY, with fine sand, trace subangular gravel (0.5" diameter), cohesive, wet.	
35	535	SC	120			35.0	
						Gray Brown, CLAYEY SILT, with fine sand, low plasticity, wet.	
						Brown, MEDIUM SAND, and rounded gravel, (0.5-1" diameter), little clay at 35 feet bgs, poorly sorted, saturated.	
						40.0	
						40.4	
						GRAVEL, subrounded (0.5-1.5" diameter), poorly sorted, loose, saturated.	
						Orange Brown, COARSE TO MEDIUM SAND, and gravel, (0.5-2" diameter), larger gravel at 43 feet bgs (4" diameter), poorly sorted, saturated.	Bentonite Seal (39 to 43 feet bgs)
						43.0	
						Orange Brown, FINE TO MEDIUM SAND, and rounded gravel, (0.5" diameter), some	

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Sandy Silt Silt Poorly-graded Sand Silty Clay Low Plasticity Sandy Clay Clayey Sand	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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BORING BAC-10

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
45	525	SC	106			larger subangular gravel (6" diameter) at 44 feet bgs, poorly sorted, saturated. Orange Brown, FINE TO MEDIUM SAND, and rounded gravel, (0.5" diameter), some larger subangular gravel (6" diameter) at 44 feet bgs, poorly sorted, saturated. (continued)	<p>Filter Sand (43 to 57 feet bgs) (Global #5)</p> <p>Well Screen (45 to 55 feet bgs) (2" SCH 40 PVC/ 0.01" slot)</p> <p>Sump (2" SCH 40 PVC/2' long)</p>
						Gray Brown, GRAVEL, with subrounded coarse sand, poorly sorted, saturated.	
50	520					Gray Brown, FINE TO MEDIUM SAND, some subrounded gravel, (0.5-1" diameter), poorly sorted, saturated.	
55	515	SC	84			Bottom of Boring @ 57.00 feet bgs	
60	510						
65	505						

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Sandy Silt Silt Poorly-graded Sand Silty Clay Low Plasticity Sandy Clay Clayey Sand	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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BORING BAC-11

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Client: Gavin Power, LLC Project Name: Bottom Ash Pond Monitoring Well Installation
Project Number: 0643653 Project Location: Cheshire, OH

DATE STARTED: 6/15/2022 TOTAL DEPTH: 135 feet bgs WELL DEVELOPMENT
DATE COMPLETED: 6/15/2022 DIAMETER: 6 inches METHOD(S): Grundfos & Buffalo Pump
DRILLING CONTRACTOR: Cascade Drilling GROUND ELEVATION: 600.180 DATE STARTED: 7/7/2022
DRILLING METHODS: Sonic Drilling & Wireline Rock Coring PVC ELEVATION: 602.99 DATE ENDED: 7/7/2022
LOGGED BY: K. Popyack NORTHING: 339940.141 DTW AT START: 62.04 feet bgs
CHECKED BY: A. Harford EASTING: 2077043.833 DTW AT END: NM
NOTES: Well ran dry during development, RQD only applicable for bedrock wells VOLUME PURGED: 48 gallons

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
5	595	SC	47			Dark Brown, SILT, orange and black mottling, hard, moist.	<p>Concrete Pad and 6" Aluminum Stickup Protective Casing</p> <p>Well Riser (0 to 123 feet bgs) (2" SCH 40 PVC)</p> <p>Bentonite Grout (0 to 117 feet bgs)</p>
10	590	SC	57			Dark Brown, SILT, some subrounded gravel, (0.5" diameter), poorly sorted, hard, wet.	
15	585	SC	90			Brown, CLAYEY GRAVEL, little silt, subangular, (0.5-1" diameter), poorly sorted, loose, wet.	
20	580	SC	90			Brown, SILT, some red brown mottling, black medium sands at 19.5 feet bgs, hard, wet.	

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC) Wireline Rock Coring (RC)	Silt Sandy Silt Poorly-graded Gravel with Clay Silty Clay Poorly-graded Sand with Clay Poorly-graded Gravelly Sand	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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Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
25	575	SC	103			Brown, SILT, some red brown mottling, black medium sands at 19.5 feet bgs, hard, wet. (continued) 24.0 24.7 Dark Gray, SILT, organics (root and plant material), wet. Brown, SILT, little clay, some gray mottling, wet. 30.0	<p>Well Riser (0 to 123 feet bgs) (2" SCH 40 PVC)</p> <p>Bentonite Grout (0 to 117 feet bgs)</p>
30	570						
35	565	SC	94			Brown, SILT, little clay, no mottling after 37 feet bgs, root material at 36.8 feet bgs, wet. 40.0 Brown, SILT, little clay, more clay with depth, wet.	
40	560						

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC) Wireline Rock Coring (RC)	Silt Sandy Silt Poorly-graded Gravel with Clay Silty Clay Poorly-graded Sand with Clay Poorly-graded Gravelly Sand	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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Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
45	555	SC	120			Brown, SILT, little clay, more clay with depth, wet. (continued)	 Well Riser (0 to 123 feet bgs) (2" SCH 40 PVC)
						Brown, SILTY CLAY, some fine sand, low plasticity, wet.	
						Brown, SANDY SILT, and clay, loose, wet.	
50	550						
55	545	SC	111			Brown, SANDY CLAY, trace silt, medium plasticity, saturated.	 Bentonite Grout (0 to 117 feet bgs)
60	540						
65	535	SC	94			Brown, MEDIUM SAND, and subrounded gravel, (0.5-1" diameter), some gravel (4" diameter), poorly sorted, loose, saturated.	 Water level at 62.5 feet

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC) Wireline Rock Coring (RC)	Silt Silty Clay Sandy Silt Poorly-graded Gravel with Clay Poorly-graded Sand with Clay Poorly-graded Gravelly Sand	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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Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
70	530					Brown, MEDIUM SAND, and subrounded gravel, (0.5-1" diameter), some gravel (4" diameter), poorly sorted, loose, saturated. (continued)	<p>Bentonite Grout (0 to 117 feet bgs)</p> <p>Well Riser (0 to 123 feet bgs) (2" SCH 40 PVC)</p>
75	525	SC	80			Brown, COARSE SAND, and subrounded gravel, (0.5-1" diameter), poorly sorted, loose, saturated.	
78.0						Brown, MEDIUM TO COARSE SAND, little subrounded gravel, (0.5" diameter), poorly sorted, loose, saturated.	
78.5						Brown, FINE SAND, well sorted, loose, saturated.	
80	520					Brown, FINE TO MEDIUM SAND, little subrounded gravel, (0.5-1" diameter), poorly sorted, loose, saturated.	
85	515	SC	106			Brown, GRAVEL, and medium sand, subrounded, (0.5-1.5" diameter), poorly sorted, loose, saturated.	
90	510					Brown, GRAVEL, little medium sand, poorly sorted, loose, saturated.	

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC) Wireline Rock Coring (RC)	Silt Sandy Silt Poorly-graded Gravel with Clay Silty Clay Poorly-graded Sand with Clay Poorly-graded Gravelly Sand	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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Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
95	505	SC	101			91.0 Brown, GRAVEL, little medium sand, poorly sorted, loose, saturated. (continued) 91.5 GRAVEL, (0.5-2" diameter), cobble at 91.5 feet bgs (5" diameter), loose, saturated. Brown, MEDIUM SAND, and gravel, (0.5-1" diameter), poorly sorted, loose, saturated. 96.0 96.4 GRAVEL, rounded (0.5" diameter), poorly sorted, loose, saturated. Brown, MEDIUM SAND, some gravel, (0.5-1" diameter), poorly sorted, loose, saturated. 100.0 Brown, FINE TO MEDIUM SAND, trace subrounded gravel, (0.5-1" diameter), poorly sorted, loose, saturated. 101.5 102.3 Brown, GRAVEL, and medium sand, subrounded, (0.5-1.5" diameter), poorly sorted, loose, wet. Grayish Blue, CLAYSTONE, trace brown mottling, soft, moist. 104.0 Gray, CLAYSTONE, brittle, dry. 108.0 Gray, CLAYSTONE, pulverized, dry. 110.0 Blue Gray, SILTSTONE, highly fractured and weathered, rubble zone at 111-112.7 feet bgs. 112.7 Red Brown, SILTSTONE, brittle, natural fracture at 112.9 feet bgs, rubble zone at 113-116 feet bgs.	 Well Riser (0 to 123 feet bgs) (2" SCH 40 PVC) Bentonite Grout (0 to 117 feet bgs)
100	500						
105	495	SC	107				
110	490	RC	6	0			
		RC	40.8	1.5			

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC) Wireline Rock Coring (RC)	Silt Sandy Silt Poorly-graded Gravel with Clay Silty Clay Poorly-graded Sand with Clay Poorly-graded Gravelly Sand	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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Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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	485					Red Brown, SILTSTONE, brittle, natural fracture at 112.9 feet bgs, rubble zone at 113-116 feet bgs. <i>(continued)</i>	
					116.0		Bentonite Grout (0 to 117 feet bgs)
		RC	60	32		Red Brown, SILTSTONE, brittle, purple, orange and gray coloration within the red brown matrix, natural fractures at 117.3, 117.5, 117.7, 117.9 feet bgs.	Bentonite Seal (117 to 121 feet bgs)
120	480						
					121.0		
		RC	60	24		Gray, LIMESTONE, competent.	Filter Sand (121 to 135 feet bgs) (Global #5)
					123.0		
125	475					Red Brown, SILTSTONE, brittle, purple, orange and gray coloration within the red brown matrix, natural fractures at 121.5, 122.7-123, 123-124.4, 124.4-124.6, 124.9-125.2 feet bgs.	Well Screen (123 to 133 feet bgs) (2" SCH 40 PVC/ 0.01" slot)
					126.0		
		RC	52.8	0			
130	470					Gray, SANDSTONE, with shale, medium to coarse grained sandstone, natural fractures at 126.7, 126.8, 127, 127.7, 127.9, 130.4, rubble zone with shaley layers at 128.6-129.4 feet bgs (Cow Run).	
		RC	40	0			Sump (2" SCH 40 PVC/2' long)
135	465						
					135.0		
						Bottom of Boring @ 135.00 feet bgs	

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC) Wireline Rock Coring (RC)	Silt Sandy Silt Poorly-graded Gravel with Clay Silty Clay Poorly-graded Sand with Clay Poorly-graded Gravelly Sand	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

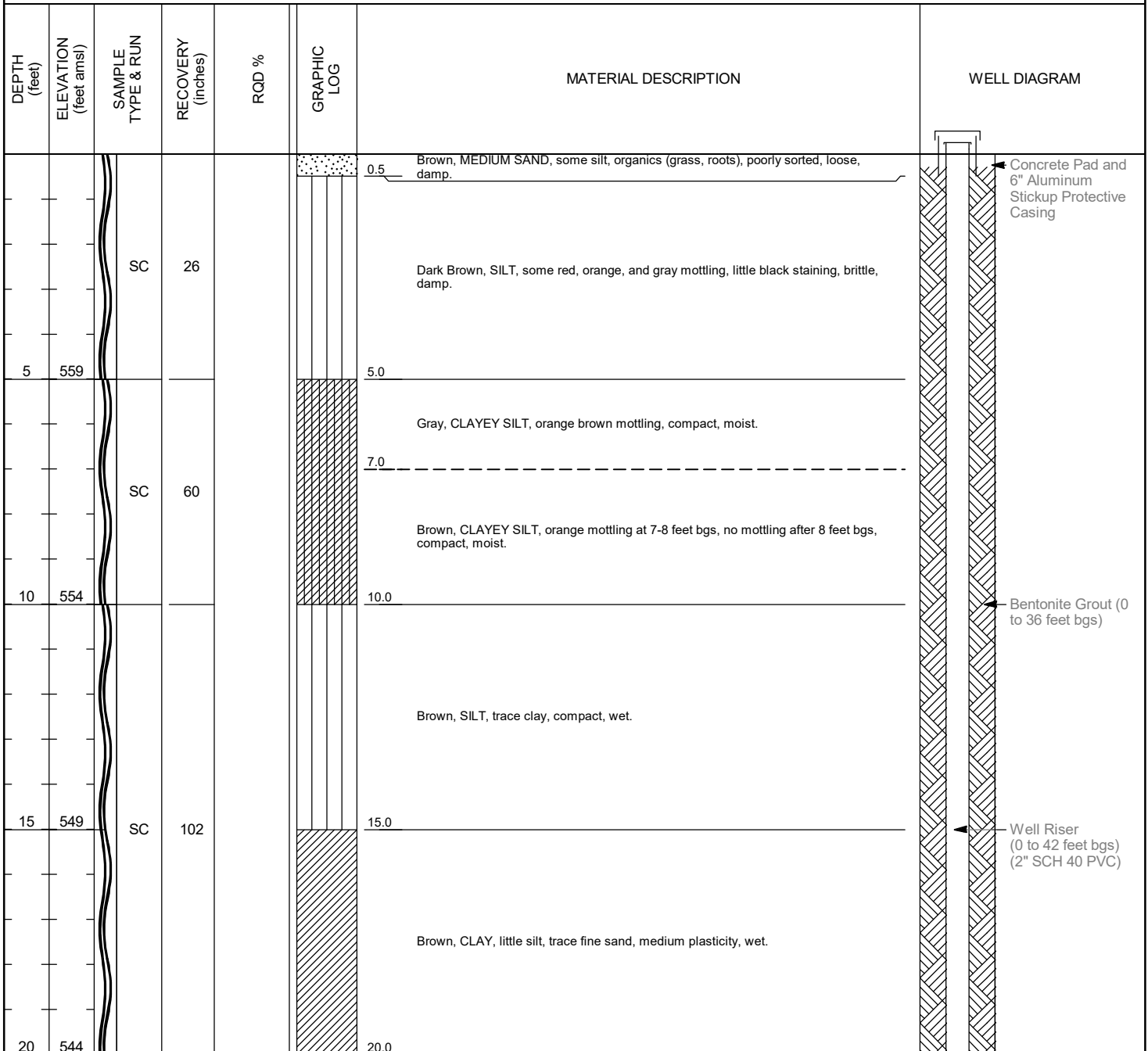


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BORING BAC-12

Client: Gavin Power, LLC Project Name: Bottom Ash Pond Monitoring Well Installation
Project Number: 0643653 Project Location: Cheshire, OH

DATE STARTED: <u>7/8/2022</u>	TOTAL DEPTH: <u>54 feet bgs</u>	WELL DEVELOPMENT
DATE COMPLETED: <u>7/8/2022</u>	DIAMETER: <u>6 inches</u>	METHOD(S): <u>Grundfos & Buffalo Pump</u>
DRILLING CONTRACTOR: <u>Cascade Drilling</u>	GROUND ELEVATION: <u>564.210</u>	DATE STARTED: <u>8/12/2022</u>
DRILLING METHODS: <u>Sonic Drilling</u>	PVC ELEVATION: <u>567.01</u>	DATE ENDED: <u>8/12/2022</u>
LOGGED BY: <u>K. Popyack</u>	NORTHING: <u>339189.076</u>	DTW AT START: <u>27.44 feet bgs</u>
CHECKED BY: <u>A. Harford</u>	EASTING: <u>2077674.445</u>	DTW AT END: <u>NM</u>
NOTES: <u>RQD only applicable for bedrock wells</u>		VOLUME PURGED: <u>17 gallons</u>



CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Poorly-graded Sand Silt Silty Clay Low Plasticity Clay High Plasticity Clay Low Plasticity Sandy Clay	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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BORING BAC-12

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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	539	SC	120			Brown, CLAY, little silt, trace fine sand, high plasticity, wet. (continued)	<p>Well Riser (0 to 42 feet bgs) (2" SCH 40 PVC)</p> <p>Bentonite Grout (0 to 36 feet bgs)</p> <p>Bentonite Seal (36 to 40 feet bgs)</p> <p>Filter Sand (40 to 54 feet bgs) (Global #5)</p>
30	534					Gray, CLAY, trace silt, medium plasticity, wet.	
30	534					Gray, CLAY, trace silt, trace fine sand, low plasticity, wet.	
35	529	SC	120			Gray, SILTY CLAY, increasing silt with depth, less plasticity with depth, medium plasticity, saturated.	
40	524					39.5 40.0 SILT, some subrounded gravel, (0.5" diameter), dry tan silt layer then a wet silt and gravel layer, poorly sorted, compact, saturated.	
40	524					41.0 42.0 Gray, CLAY, and sand, low plasticity, saturated.	
40	524					42.0 43.5 Light Brown, FINE SAND, with subrounded gravel, (0.5-1.5" diameter), poorly sorted, loose, saturated.	
40	524					43.5 Brown To Orange-Brown, MEDIUM TO COARSE SAND, and subrounded gravel, (0.5-1" diameter), poorly sorted, loose, saturated.	

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Poorly-graded Sand Silt Low Plasticity Clay High Plasticity Clay Low Plasticity Sandy Clay	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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BORING BAC-12

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Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
45	519	SC	100			44.0 Brown, FINE SAND, and subrounded gravel, (0.5-1" diameter), poorly sorted, loose, saturated. <i>(continued)</i> 44.5 GRAVEL, subrounded (0.5-1" diameter), poorly sorted, loose, saturated.	<p>Filter Sand (40 to 54 feet bgs) (Global #5)</p> <p>Well Screen (42 to 52 feet bgs) (2" SCH 40 PVC/ 0.01" slot)</p> <p>Sump (2" SCH 40 PVC/2' long)</p>
50	514					Brown, MEDIUM SAND, and subrounded gravel, (0.5-2" diameter), some fine sand at 50 feet bgs, poorly sorted, loose, saturated.	
55	509					Bottom of Boring @ 54.00 feet bgs	
60	504						
65	499						

CORING TYPE

Sonic Drilling (SC)

GRAPHIC LOG LEGEND

- Poorly-graded Sand
- Silt
- Silty Clay
- Low Plasticity Clay
- High Plasticity Clay
- Low Plasticity Sandy Clay

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



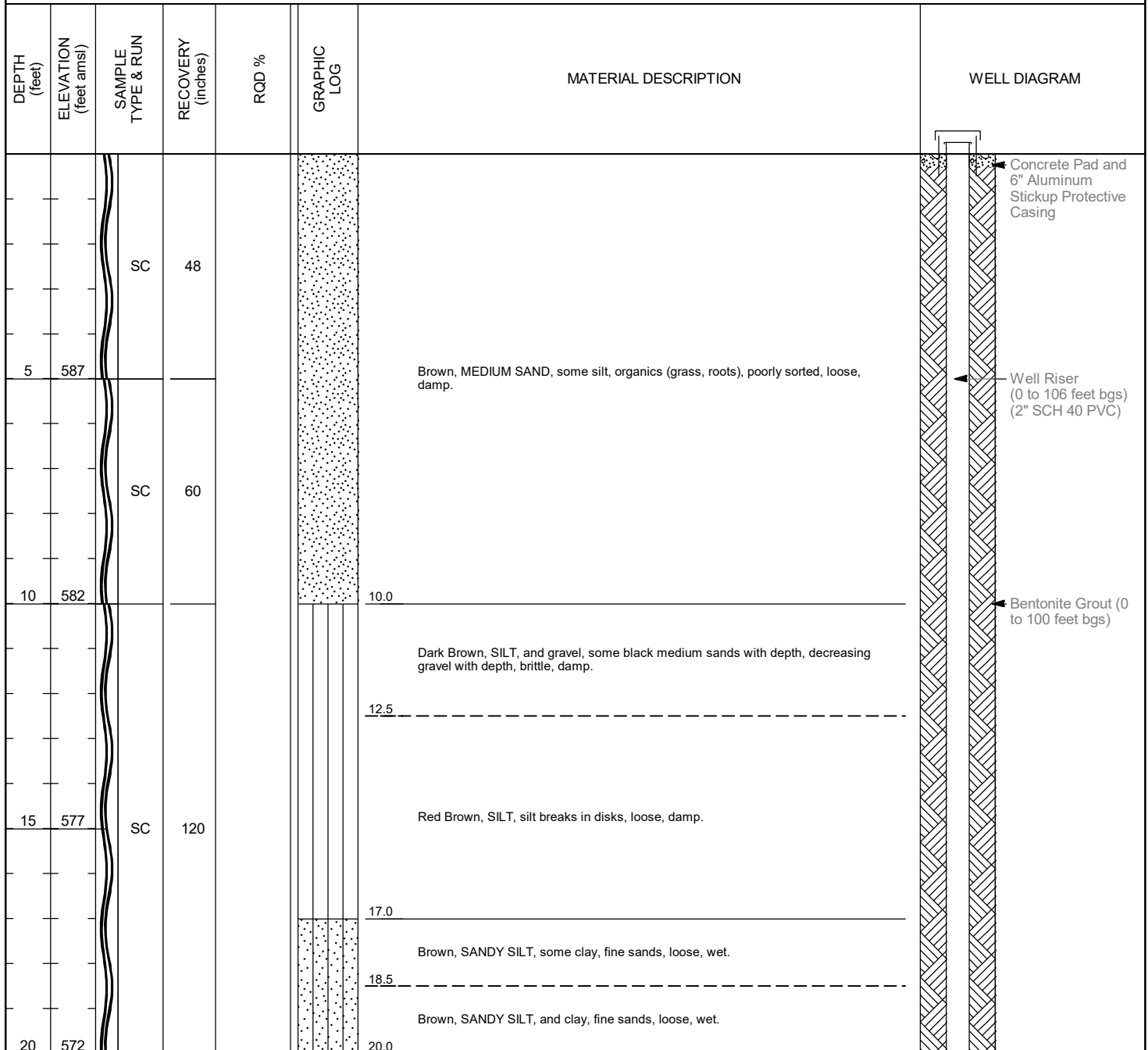
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BORING BAC-13

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Client: Gavin Power, LLC Project Name: Bottom Ash Pond Monitoring Well Installation
Project Number: 0643653 Project Location: Cheshire, OH

DATE STARTED: <u>6/14/2022</u>	TOTAL DEPTH: <u>118 feet bgs</u>	WELL DEVELOPMENT
DATE COMPLETED: <u>6/14/2022</u>	DIAMETER: <u>6 inches</u>	METHOD(S): <u>Grundfos & Buffalo Pump</u>
DRILLING CONTRACTOR: <u>Cascade Drilling</u>	GROUND ELEVATION: <u>592.300</u>	DATE STARTED: <u>7/6/2022</u>
DRILLING METHODS: <u>Sonic Drilling & Wireline Rock Coring</u>	PVC ELEVATION: <u>584.71</u>	DATE ENDED: <u>7/7/2022</u>
LOGGED BY: <u>K. Popyack</u>	NORTHING: <u>339262.324</u>	DTW AT START: <u>34.4 feet bgs</u>
CHECKED BY: <u>A. Harford</u>	EASTING: <u>2077481.342</u>	DTW AT END: <u>NM</u>
NOTES: <u>RQD only applicable for bedrock wells</u>		VOLUME PURGED: <u>40.92 gallons</u>



CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC) Wireline Rock Coring (RC)	Poorly-graded Sand Silt Sandy Silt Silty Clay Low Plasticity Clay Poorly-graded Sand with Clay	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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Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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	567	SC	120			Brown, CLAYEY SILT, increasing clay with depth, compact, wet. <i>(continued)</i>	<p>Well Riser (0 to 106 feet bgs) (2" SCH 40 PVC)</p> <p>Bentonite Grout (0 to 100 feet bgs)</p>
30	562					30.0 30.5 Brown, CLAY, little silt, low plasticity, wet.	
35	557	SC	120			35.0 Brown, SANDY CLAY, medium plasticity, saturated.	
40	552					40.0 Brown, FINE SAND, interbedded clayey silt, some organic matter, soft, saturated.	
						Brown, FINE SAND, interbedded clayey silt, orange sands, more clay, increasing organics, soft, saturated.	

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC) Wireline Rock Coring (RC)	Poorly-graded Sand Silt Sandy Silt Silty Clay Low Plasticity Clay Poorly-graded Sand with Clay	amsl = above mean sea level PVC = polyvinyl chloride bgs = below ground surface DTW = depth to water NA = not applicable NM = not measured NR = no recovery



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
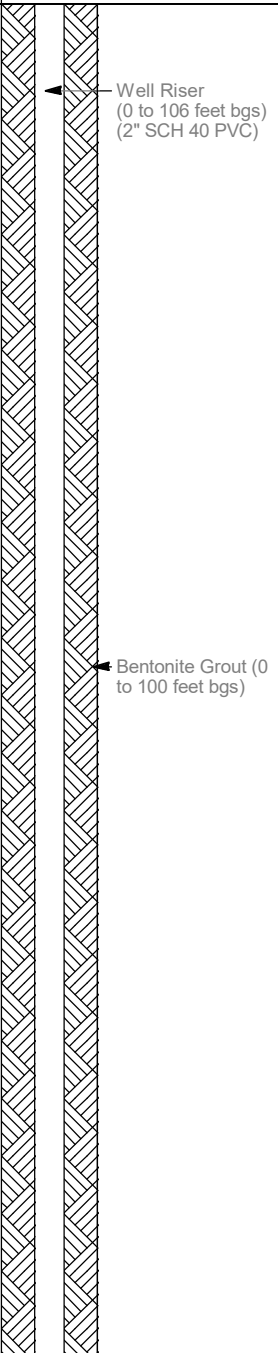

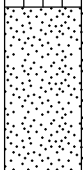
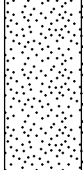


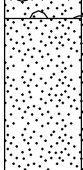

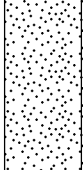

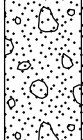
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Client: Gavin Power, LLC



Project Name: Bottom Ash Pond 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
45	547	SC	120			44.0	
						Gray, SILT, some clay, organic matter, wet.	
						47.0	
50	542					Orange Brown, MEDIUM SAND, trace rounded gravel, (0.5-1" diameter), poorly sorted, loose, wet.	
						53.0	
						54.0	
55	537	SC	97			MEDIUM TO COARSE SAND, and rounded gravel, (0.5-1.5" diameter), color variation (about 4 inches each) from red brown, light brown, medium brown red, dark gray, poorly sorted, loose, wet.	
						56.0	
60	532					Light Brown To Brown, MEDIUM SAND, some rounded gravel, (0.5" diameter), trace clay, less gravel with depth, poorly sorted, loose, wet.	
						64.0	
65	527	SC	98			Brown, MEDIUM TO COARSE SAND, and rounded gravel, (0.5" diameter), few gravel (3" diameter), poorly sorted, loose, wet.	

CORING TYPE

-  Sonic Drilling (SC)
-  Wireline Rock Coring (RC)

GRAPHIC LOG LEGEND

-  Poorly-graded Sand
-  Silt
-  Sandy Silt
-  Silty Clay
-  Low Plasticity Clay
-  Poorly-graded Sand with Clay

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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BORING BAC-13

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
68.0						Brown, MEDIUM TO COARSE SAND, and rounded gravel, (0.5" diameter), few gravel (3" diameter), poorly sorted, loose, wet. (continued)	<p>Bentonite Grout (0 to 100 feet bgs)</p> <p>Well Riser (0 to 106 feet bgs) (2" SCH 40 PVC)</p>
70.0	522					Brown, MEDIUM SAND, some subrounded gravel, (2-2.5" diameter), poorly sorted, loose, wet.	
74.0						Brown, GRAVELLY SAND, subrounded to subangular (0.5-2" diameter), medium to fine sands, finer with depth, poorly sorted, loose, wet.	
74.7	517	SC	92			Black, SILTY GRAVEL, trace medium sand, organic-like odor, angular gravel, poorly sorted, loose, wet.	
76.5						Brown, MEDIUM TO COARSE SAND, and subrounded gravel, (0.5-2" diameter), some larger gravel (5" diameter), poorly sorted, loose, wet.	
78.0						Brown, GRAVEL, rounded (0.5-2" diameter), poorly sorted, loose, wet.	
80.0	512					Brown, MEDIUM SAND, some subrounded gravel, (0.5-1" diameter), trace silt, poorly sorted, loose, wet.	
80.5						Brown, GRAVEL, rounded (0.5-2" diameter), poorly sorted, loose, wet.	
81.5						Brown, COARSE SAND, and rounded gravel, (0.5-1" diameter), poorly sorted, loose, wet.	
82.0						Brown, FINE TO MEDIUM SAND, trace rounded gravel, (0.5-1" diameter), poorly sorted, loose, wet.	
82.5						Gray, CLAYSTONE, weathered, dry.	
83.5						Red Brown, CLAYSTONE, weathered, dry.	
85.0	507					Gray, CLAYSTONE, pulverized, dry.	
86.0		RC	6	0		Gray, GRAVEL, gravel stuck in drill bit.	
90.0	502	RC	26.4	0		Blue Gray, SILTSTONE, thinly layered, brittle, numerous mechanical fractures, pyrite at 86.2 feet bgs.	

CORING TYPE

	Sonic Drilling (SC)
	Wireline Rock Coring (RC)

GRAPHIC LOG LEGEND

	Poorly-graded Sand		Silt		Sandy Silt
	Silty Clay		Low Plasticity Clay		Poorly-graded Sand with Clay

ACRONYM LEGEND

amsl = above mean sea level	PVC = polyvinyl chloride
bgs = below ground surface	
DTW = depth to water	
NA = not applicable	
NM = not measured	
NR = no recovery	



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Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
95	497	RC	0	0		NO RECOVERY.	
100	492	RC	42	1.5		Red Brown, SILTSTONE, orange brown, and olive green coloration throughout, natural fractures at 98.3, 98.5, 99.0 feet bgs.	Well Riser (0 to 106 feet bgs) (2" SCH 40 PVC)
105	487	RC	60	0		Gray To Blue Gray, SANDSTONE, trace mica, natural fracture with healing at 103.4 and 103.5 feet bgs, rubble zone at 103.5-105.5 feet bgs (Cow Run).	Bentonite Seal (100 to 104 feet bgs)
110	482	RC	52.8	0		Gray To Blue Gray, SANDSTONE, brachiopod at 106 feet bgs, rubble zone at 106.3 feet bgs, natural fractures at 107, 110.2, 110.5 feet bgs (Cow Run).	Filter Sand (104 to 118 feet bgs) (Global #5)
						Gray To Blue Gray, SANDSTONE, natural weathered fracture at 111.2, 113.6 feet bgs, natural fracture with slicken lines at 112.9, 113 feet bgs, sincline shale layering at 114 feet bgs, shale layer at 114.5 feet bgs (Cow Run).	Well Screen (106 to 116 feet bgs) (2" SCH 40 PVC/ 0.01" slot)

CORING TYPE

- Sonic Drilling (SC)
- Wireline Rock Coring (RC)

GRAPHIC LOG LEGEND

- Poorly-graded Sand
- Silt
- Sandy Silt
- Silty Clay
- Low Plasticity Clay
- Poorly-graded Sand with Clay

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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BORING BAC-13

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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	477	RC	54	0		Gray To Blue Gray, SANDSTONE, natural weathered fracture at 111.2, 113.6 feet bgs, natural fracture with slicken lines at 112.9, 113 feet bgs, sincline shale layering at 114 feet bgs, shale layer at 114.5 feet bgs (Cow Run). <i>(continued)</i>	<p>Well Screen (106 to 116 feet bgs) (2" SCH 40 PVC/ 0.01" slot)</p> <p>Sump (2" SCH 40 PVC/2' long)</p>
						118.0	
120	472						
125	467						
130	462						
135	457						
						Bottom of Boring @ 118.00 feet bgs	

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC) Wireline Rock Coring (RC)	Poorly-graded Sand Silt Sandy Silt Silty Clay Low Plasticity Clay Poorly-graded Sand with Clay	amsl = above mean sea level PVC = polyvinyl chloride bgs = below ground surface DTW = depth to water NA = not applicable NM = not measured NR = no recovery

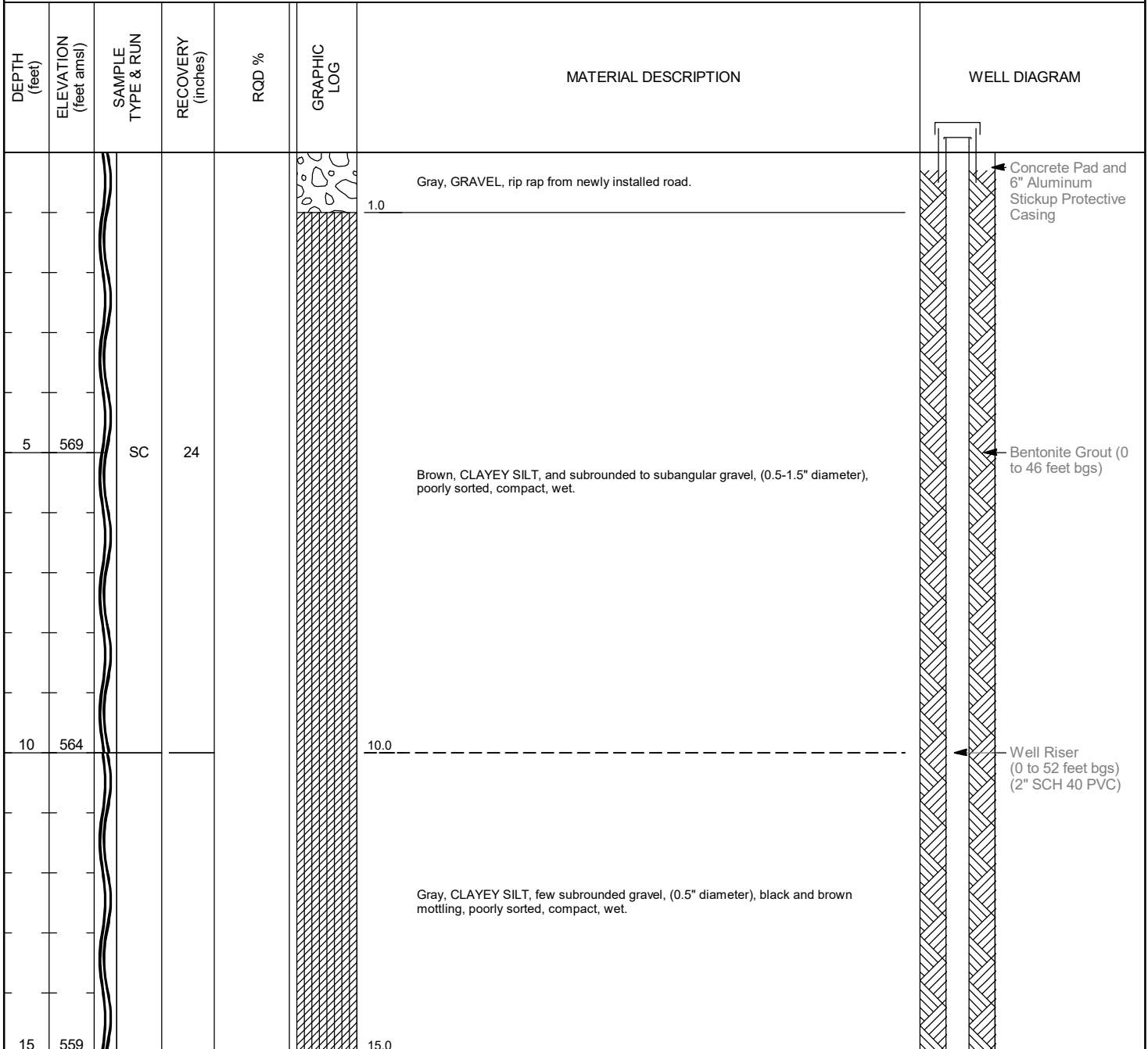


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BORING BAC-14

Client: Gavin Power, LLC Project Name: Bottom Ash Pond Monitoring Well Installation
 Project Number: 0643653 Project Location: Cheshire, OH

DATE STARTED: <u>7/8/2022</u>	TOTAL DEPTH: <u>64 feet bgs</u>	WELL DEVELOPMENT
DATE COMPLETED: <u>7/8/2022</u>	DIAMETER: <u>6 inches</u>	METHOD(S): <u>Grundfos & Buffalo Pump</u>
DRILLING CONTRACTOR: <u>Cascade Drilling</u>	GROUND ELEVATION: <u>573.740</u>	DATE STARTED: <u>8/12/2022</u>
DRILLING METHODS: <u>Sonic Drilling</u>	PVC ELEVATION: <u>576.22</u>	DATE ENDED: <u>8/12/2022</u>
LOGGED BY: <u>K. Popyack</u>	NORTHING: <u>338465.312</u>	DTW AT START: <u>36.85 feet bgs</u>
CHECKED BY: <u>A. Harford</u>	EASTING: <u>2077446.344</u>	DTW AT END: <u>NM</u>
NOTES: <u>Well ran dry during development, RQD only applicable for bedrock wells</u>		VOLUME PURGED: <u>80 gallons</u>



CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Poorly-graded Gravel Silty Clay Low Plasticity Clay Poorly-graded Sand with Clay Poorly-graded Gravelly Sand	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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BORING BAC-14

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
20	554	SC	89			Gray Brown, CLAYEY SILT, little black staining at 18 feet bgs, more brown than gray with depth, compact, wet. <i>(continued)</i>	<p>Well Riser (0 to 52 feet bgs) (2" SCH 40 PVC)</p> <p>Bentonite Grout (0 to 46 feet bgs)</p>
25	549	SC	120			Brown, CLAYEY SILT, increasing clay content with depth, increasing moisture with depth, compact, wet.	
30	544					Brown, CLAY, with silt, medium plasticity, wet.	

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Poorly-graded Gravel Silty Clay Low Plasticity Clay Poorly-graded Sand with Clay Poorly-graded Gravelly Sand	amsl = above mean sea level PVC = polyvinyl chloride bgs = below ground surface DTW = depth to water NA = not applicable NM = not measured NR = no recovery



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BORING BAC-14

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
35	539	SC	98			Brown, CLAY, with silt, medium plasticity, wet. (continued)	<p>Bentonite Grout (0 to 46 feet bgs)</p> <p>Well Riser (0 to 52 feet bgs) (2" SCH 40 PVC)</p> <p>Bentonite Seal (46 to 50 feet bgs)</p>
						37.0	
						Brown, CLAY, trace fine sand, medium plasticity, saturated.	
40	534					Brown, SANDY CLAY, medium plasticity, saturated.	
						40.0	
						Gray Brown, CLAY, some silt, low plasticity, saturated.	
						43.0	
45	529	SC	99			Gray, SILTY CLAY, trace fine sand, low plasticity, saturated.	
						49.0	
50	524					Gray, FINE SAND, and clay, cohesive, saturated.	
						50.0	

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Poorly-graded Gravel Silty Clay Low Plasticity Clay Poorly-graded Sand with Clay Poorly-graded Gravelly Sand	amsl = above mean sea level PVC = polyvinyl chloride bgs = below ground surface DTW = depth to water NA = not applicable NM = not measured NR = no recovery



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BORING BAC-14

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
55	519	SC	106			Brown, MEDIUM SAND, and subrounded gravel, (1-1.5" diameter), poorly sorted, loose, saturated. <i>(continued)</i> 52.0	
60	514					Orange Brown, MEDIUM SAND, and subrounded gravel, (0.5-1" diameter), poorly sorted, loose, saturated. 64.0	
65	509					Bottom of Boring @ 64.00 feet bgs	

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Poorly-graded Gravel Silty Clay Low Plasticity Clay Poorly-graded Sand with Clay Poorly-graded Gravelly Sand	amsl = above mean sea level PVC = polyvinyl chloride bgs = below ground surface DTW = depth to water NA = not applicable NM = not measured NR = no recovery



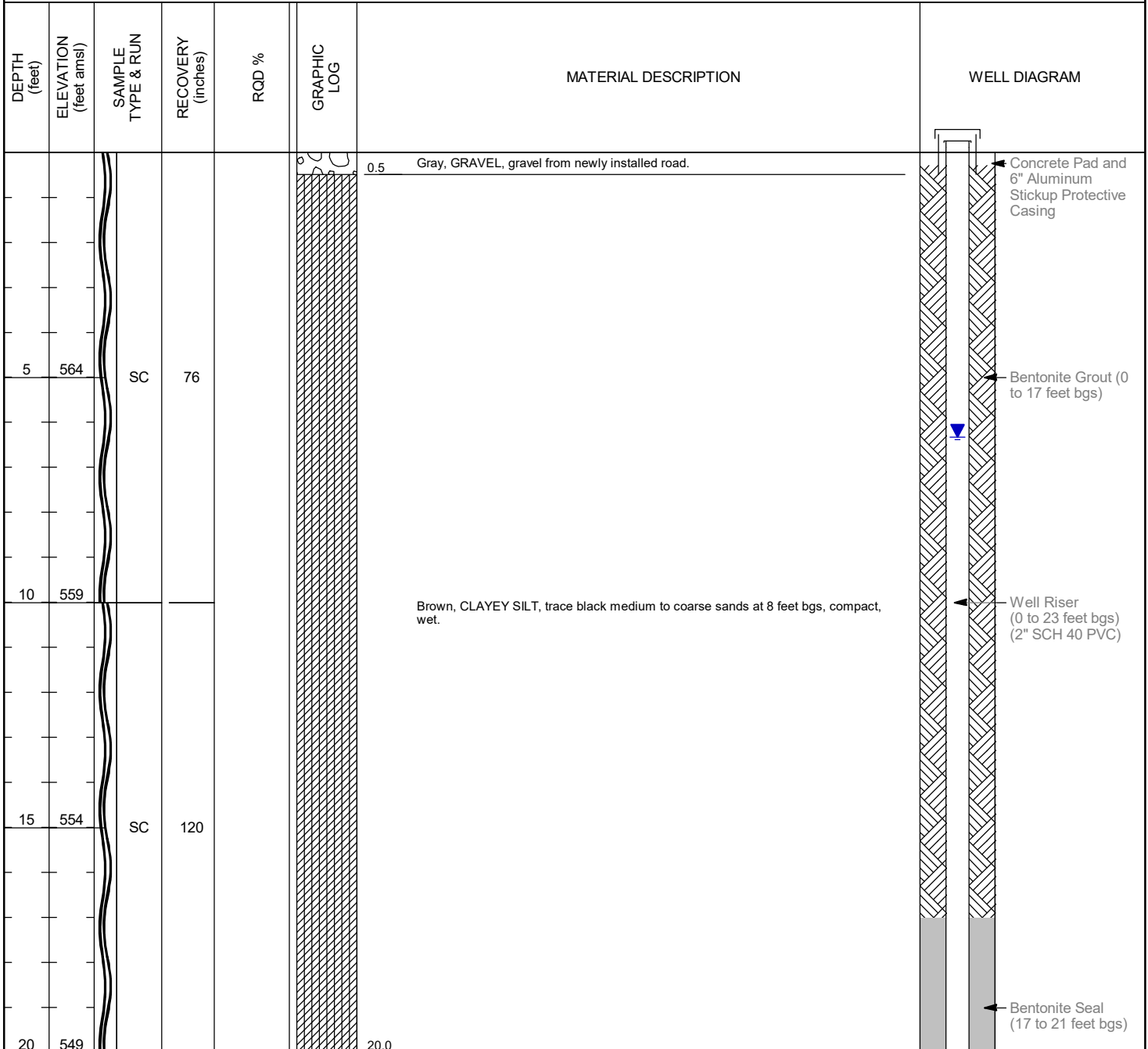
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BORING BAC-15

Page 1 of 2

Client: Gavin Power, LLC **Project Name:** Bottom Ash Pond Monitoring Well Installation
Project Number: 0643653 **Project Location:** Cheshire, OH

DATE STARTED: 7/7/2022	TOTAL DEPTH: 40 feet bgs	WELL DEVELOPMENT
DATE COMPLETED: 7/7/2022	DIAMETER: 6 inches	METHOD(S): Grundfos & Buffalo Pump
DRILLING CONTRACTOR: Cascade Drilling	GROUND ELEVATION: 569.060	DATE STARTED: 7/8/2022
DRILLING METHODS: Sonic Drilling	PVC ELEVATION: 571.50	DATE ENDED: 7/8/2022
LOGGED BY: K. Popyack	NORTHING: 338363.707	DTW AT START: 6.33 feet bgs
CHECKED BY: A. Harford	EASTING: 2076990.939	DTW AT END: NM
NOTES: Well ran dry during development, RQD only applicable for bedrock wells		VOLUME PURGED: 6 gallons



CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Poorly-graded Gravel Silty Clay Low Plasticity Sandy Clay Poorly-graded Gravelly Sand	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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BORING BAC-15

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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	544	SC	36			Brown, CLAYEY SILT, and fine sand, cohesive, saturated. (continued)	<p>Filter Sand (21 to 35 feet bgs) (Global #5)</p> <p>Well Screen (23 to 33 feet bgs) (2" SCH 40 PVC/ 0.01" slot)</p> <p>Sump (2" SCH 40 PVC/2' long)</p> <p>Borehole Collapse</p>
30	539						
35	534	SC	120			Gray, CLAY, and fine sand, cohesive, saturated.	
40	529					Orange Brown, MEDIUM SAND, and subrounded gravel, (0.5-1" diameter), poorly sorted, loose, saturated.	
						Bottom of Boring @ 40.00 feet bgs	

CORING TYPE

Sonic Drilling (SC)

GRAPHIC LOG LEGEND

Poorly-graded Gravel
 Silty Clay
 Low Plasticity Sandy Clay
 Poorly-graded Gravelly Sand

ACRONYM LEGEND

amsl = above mean sea level PVC = polyvinyl chloride
 bgs = below ground surface
 DTW = depth to water
 NA = not applicable
 NM = not measured
 NR = no recovery

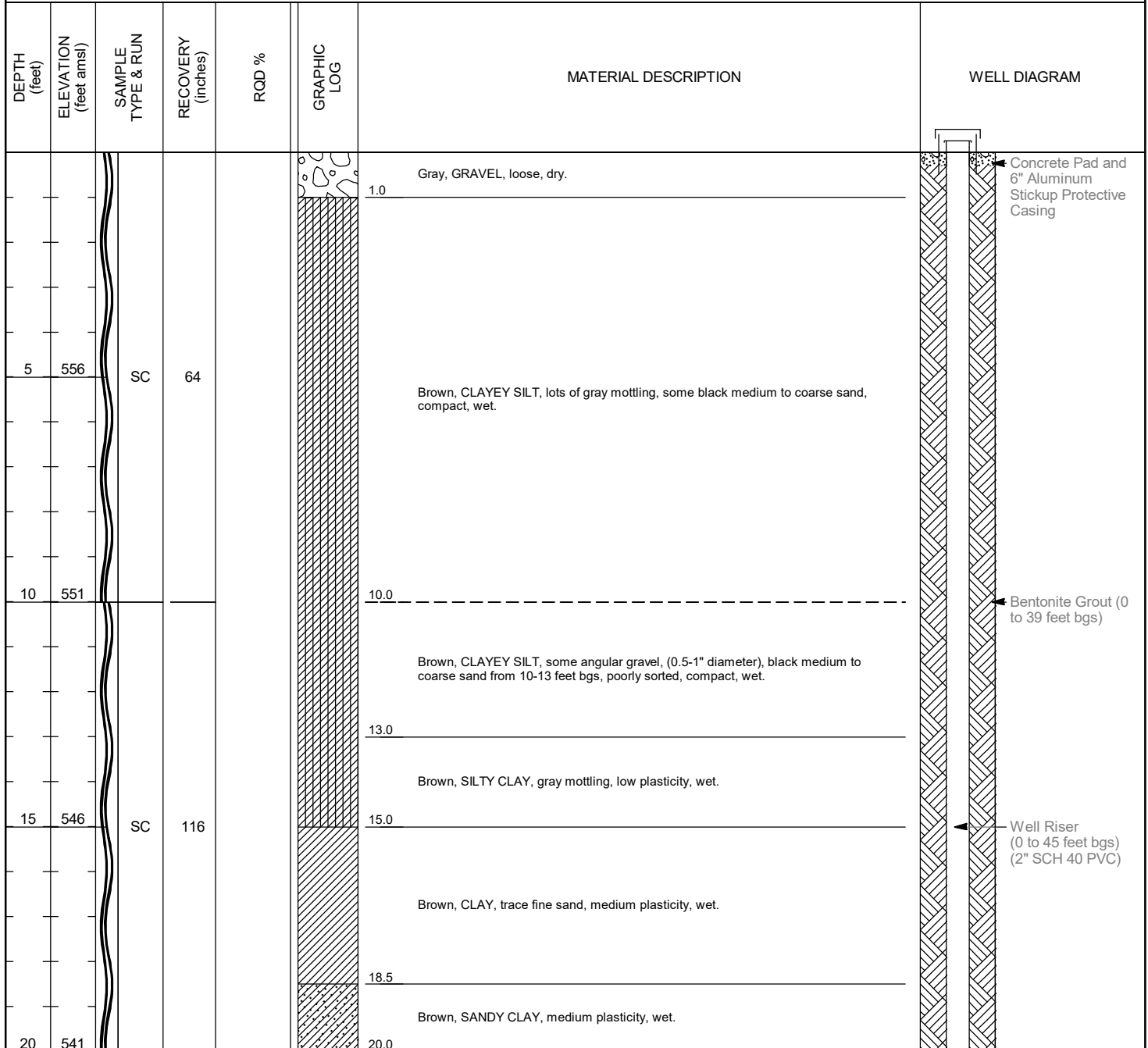


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BORING BAC-16

Client: Gavin Power, LLC Project Name: Bottom Ash Pond Monitoring Well Installation
Project Number: 0643653 Project Location: Cheshire, OH

DATE STARTED: <u>7/6/2022</u>	TOTAL DEPTH: <u>57 feet bgs</u>	WELL DEVELOPMENT
DATE COMPLETED: <u>7/7/2022</u>	DIAMETER: <u>6 inches</u>	METHOD(S): <u>Grundfos & Buffalo Pump</u>
DRILLING CONTRACTOR: <u>Cascade Drilling</u>	GROUND ELEVATION: <u>560.780</u>	DATE STARTED: <u>7/8/2022</u>
DRILLING METHODS: <u>Sonic Drilling</u>	PVC ELEVATION: <u>563.39</u>	DATE ENDED: <u>7/8/2022</u>
LOGGED BY: <u>K. Popyack</u>	NORTHING: <u>338410.228</u>	DTW AT START: <u>22.15 feet bgs</u>
CHECKED BY: <u>A. Harford</u>	EASTING: <u>2076051.726</u>	DTW AT END: <u>NM</u>
NOTES: <u>Well ran dry during development, RQD only applicable for bedrock wells</u>		VOLUME PURGED: <u>65 gallons</u>



CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Poorly-graded Gravel Silty Clay Low Plasticity Clay Low Plasticity Sandy Clay Silt Well-graded Sand	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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BORING BAC-16

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
20.5						Brown, SANDY CLAY, medium plasticity, wet. (continued)	<p>Well Riser (0 to 45 feet bgs) (2" SCH 40 PVC)</p> <p>Bentonite Grout (0 to 39 feet bgs)</p> <p>Bentonite Seal (39 to 43 feet bgs)</p>
						Gray Brown, CLAYEY SILT, some fine sand, sand lenses, low plasticity, wet.	
22.5						Gray Brown, FINE SAND, with clay, medium plasticity, saturated.	
23.0						Gray, CLAY, little silt, some orange brown sand lenses, medium plasticity, saturated.	
25.0		SC	120			Gray, FINE SAND, with clay, medium plasticity, saturated.	
27.0						Gray, SILT, some clay, white flakes, compact, saturated.	
29.0						Gray, CLAY, medium plasticity, saturated.	
31.5						Orange, FINE SAND, cohesive, saturated.	
32.5						Gray, SILT, and fine sand, poorly sorted, compact, saturated.	
33.0						Orange, FINE SAND, saturated.	
33.5						Orange Brown, MEDIUM SAND, and subrounded gravel, (0.5-1.5" diameter), some subangular gravel (4" diameter) at 36 feet bgs, poorly sorted, loose, saturated.	
35	526	SC	104			Brown, MEDIUM SAND, trace subrounded gravel, (0.5" diameter), poorly sorted, loose, saturated.	
36.0						Brown, FINE TO MEDIUM SAND, trace subrounded gravel, (0.5" diameter), some orange sands at 37-38 feet bgs, finer sands with depth, poorly sorted, loose, saturated.	
37.0						Brown, FINE TO MEDIUM SAND, trace subrounded gravel, (0.5" diameter), increasing gravel with depth, poorly sorted, loose, saturated.	
40.0	521					Brown, FINE TO MEDIUM SAND, trace subrounded gravel, (0.5" diameter), increasing gravel with depth, poorly sorted, loose, saturated.	
25	536						
30	531						

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Poorly-graded Gravel Silty Clay Low Plasticity Clay Low Plasticity Sandy Clay Silt	Well-graded Sand 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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BORING BAC-16

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
45	516	SC	112			Brown, FINE TO MEDIUM SAND, trace subrounded gravel, (0.5" diameter), increasing gravel with depth, poorly sorted, loose, saturated. <i>(continued)</i>	<p>Filter Sand (43 to 57 feet bgs) (Global #5)</p> <p>Well Screen (45 to 55 feet bgs) (2" SCH 40 PVC/ 0.01" slot)</p> <p>Sump (2" SCH 40 PVC/2' long)</p>
50	511						
55	506						
60	501					Bottom of Boring @ 57.00 feet bgs	
65	496						

CORING TYPE

Sonic Drilling (SC)

GRAPHIC LOG LEGEND

- Poorly-graded Gravel
- Silty Clay
- Low Plasticity Clay
- Low Plasticity Sandy Clay
- Silt
- Well-graded Sand

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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BORING BAC-17

Page 1 of 2

Client: Gavin Power, LLC Project Name: Bottom Ash Pond Monitoring Well Installation

Project Number: 0643653 Project Location: Cheshire, OH

DATE STARTED: 7/7/2022 TOTAL DEPTH: 39.5 feet bgs WELL DEVELOPMENT

DATE COMPLETED: 7/7/2022 DIAMETER: 6 inches METHOD(S): Grundfos & Buffalo Pump

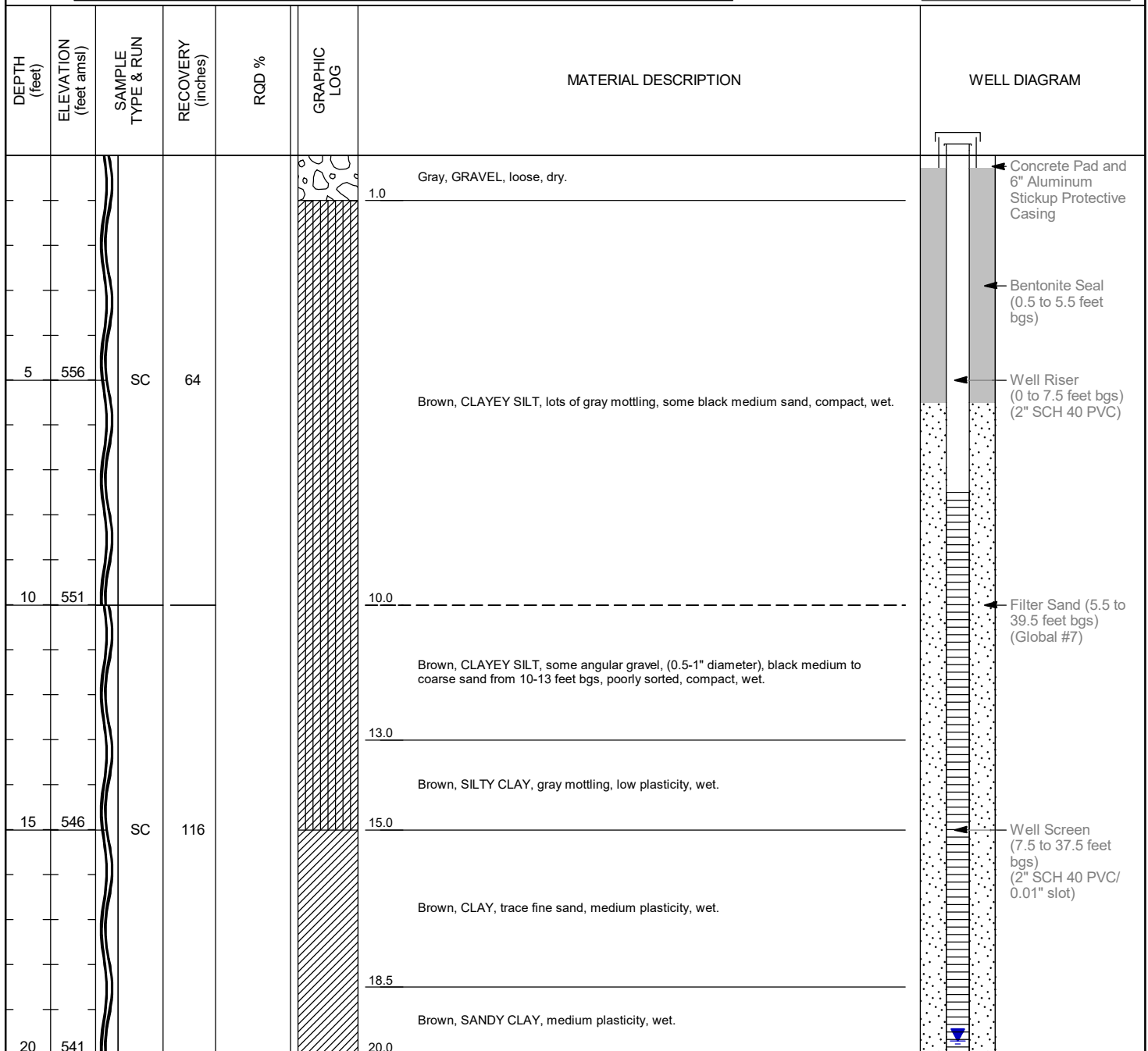
DRILLING CONTRACTOR: Cascade Drilling GROUND ELEVATION: 560.720 DATE STARTED: 7/8/2022

DRILLING METHODS: Sonic Drilling PVC ELEVATION: 563.49 DATE ENDED: 7/8/2022

LOGGED BY: K. Popyack NORTHING: 338411.758 DTW AT START: 19.7 feet bgs

CHECKED BY: A. Harford EASTING: 2076039.626 DTW AT END: NM

NOTES: RQD only applicable for bedrock wells VOLUME PURGED: 65 gallons



CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Poorly-graded Gravel Silty Clay Low Plasticity Clay Poorly-graded Sand with Clay Silt Poorly-graded Sand	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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BORING BAC-17

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
20.5						Brown, SANDY CLAY, medium plasticity, wet. <i>(continued)</i>	<p>Well Screen (7.5 to 37.5 feet bgs) (2" SCH 40 PVC/ 0.01" slot)</p> <p>Filter Sand (5.5 to 39.5 feet bgs) (Global #7)</p> <p>Sump (2" SCH 40 PVC/2' long)</p>
						Gray Brown, CLAYEY SILT, some fine sand, sand lenses, low plasticity, wet.	
22.5						Gray Brown, FINE SAND, with clay, medium plasticity, saturated.	
23.0						Gray, CLAY, little silt, some orange brown sand lenses, medium plasticity, saturated.	
25.0		SC	120			Gray, FINE SAND, with clay, medium plasticity, saturated.	
27.0						Gray, SILT, some clay, white flakes, compact, saturated.	
29.0						Gray, CLAY, medium plasticity, saturated.	
31.5						Orange, FINE SAND, cohesive, saturated.	
32.5						Gray, SILT, and fine sand, poorly sorted, compact, saturated.	
33.0						Orange, FINE SAND, saturated.	
33.5						Orange Brown, MEDIUM SAND, and subrounded gravel, (0.5-1.5" diameter), some subangular gravel (4" diameter) at 36 feet bgs, poorly sorted, loose, saturated.	
35	526	SC	104			Brown, MEDIUM SAND, trace subrounded gravel, (0.5" diameter), poorly sorted, loose, saturated.	
36.0						Brown, FINE TO MEDIUM SAND, trace subrounded gravel, (0.5" diameter), some orange sands at 37-38 feet bgs, finer sands with depth, poorly sorted, loose, saturated.	
37.0							
39.5							
40	521						
Bottom of Boring @ 39.50 feet bgs							

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Poorly-graded Gravel Silty Clay Low Plasticity Clay Poorly-graded Sand with Clay Silt Poorly-graded Sand	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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BORING BAC-18

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Client: Gavin Power, LLC Project Name: Bottom Ash Pond Monitoring Well Installation
Project Number: 0643653 Project Location: Cheshire, OH

DATE STARTED: <u>7/7/2022</u>	TOTAL DEPTH: <u>90 feet bgs</u>	WELL DEVELOPMENT
DATE COMPLETED: <u>7/7/2022</u>	DIAMETER: <u>6 inches</u>	METHOD(S): <u>Grundfos & Buffalo Pump</u>
DRILLING CONTRACTOR: <u>Cascade Drilling</u>	GROUND ELEVATION: <u>599.320</u>	DATE STARTED: <u>7/5/2022</u>
DRILLING METHODS: <u>Sonic Drilling</u>	PVC ELEVATION: <u>601.95</u>	DATE ENDED: <u>7/5/2022</u>
LOGGED BY: <u>K. Popyack</u>	NORTHING: <u>338525.719</u>	DTW AT START: <u>58.25 feet bgs</u>
CHECKED BY: <u>A. Harford</u>	EASTING: <u>2076056.126</u>	DTW AT END: <u>NM</u>
NOTES: <u>Well ran dry during development, RQD only applicable for bedrock wells</u>		VOLUME PURGED: <u>25 gallons</u>

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
5	594	SC	60			Brown, SILT, trace clay, trace black medium sand, hard, wet.	<p>Concrete Pad and 6" Aluminum Stickup Protective Casing</p> <p>Bentonite Grout (0 to 69 feet bgs)</p> <p>Well Riser (0 to 75 feet bgs) (2" SCH 40 PVC)</p>
10	589	SC	48			10.0	
15	584					Brown, SILT, trace clay, trace black medium sand until 18 feet bgs, some gray mottling, hard, wet.	

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Silt Sandy Silt Low Plasticity Clay Low Plasticity Sandy Clay Poorly-graded Sand Poorly-graded Gravelly Sand	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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BORING BAC-18

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
20	579	SC	100			Brown, SILT, trace clay, trace black medium sand until 18 feet bgs, some gray mottling, hard, wet. <i>(continued)</i>	<p>Bentonite Grout (0 to 69 feet bgs)</p> <p>Well Riser (0 to 75 feet bgs) (2" SCH 40 PVC)</p>
25	574	SC	120			Brown, SILT, trace clay, some black medium sand, some gray mottling, hard, wet.	
30	569					Brown, SILT, trace clay, some gray mottling, hard, wet.	

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Silt Sandy Silt Low Plasticity Clay Low Plasticity Sandy Clay Poorly-graded Sand Poorly-graded Gravelly Sand	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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BORING BAC-18

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
35	564	SC	108			Brown, SILT, trace clay, some gray mottling, hard, wet. (continued)	
						Gray, SILT, brown mottling, hard, wet.	
40	559					Brown, SILT, hard, wet.	
45	554	SC	120			Gray, SILT, little clay, some brown mottling, clay content increasing with depth, hard, wet.	
50	549					Brown, CLAY, some silt, trace fine sand, low plasticity, wet.	

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Silt Sandy Silt Low Plasticity Clay Low Plasticity Sandy Clay Poorly-graded Sand Poorly-graded Gravelly Sand	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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BORING BAC-18

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
55	544	SC	98			Brown, SANDY CLAY, some silt, sand content increases with depth to a clayey sand, medium plasticity, saturated. <i>(continued)</i>	 Bentonite Grout (0 to 69 feet bgs) Well Riser (0 to 75 feet bgs) (2" SCH 40 PVC)
60	539					Gray, SANDY CLAY, with silt, fine sands, some orange sands, low plasticity, saturated.	
65	534	SC	97			Gray, SANDY SILT, little clay, some light gray mottling, compact, saturated.	

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling	Silt Low Plasticity Clay Low Plasticity Sandy Clay Sandy Silt Poorly-graded Sand Poorly-graded Gravelly Sand	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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BORING BAC-18

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
90	509					Brown, CLAYEY SAND, trace rounded gravel, (0.5-2" diameter), gravel ends at 85 feet bgs. some gray mottling towards 90 feet bgs, poorly sorted, loose, wet. (continued)	<p>Sump (2" SCH 40 PVC/2' long)</p> <p>Borehole Collapse</p>
95	504					Bottom of Boring @ 90.00 feet bgs	
100	499						

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Silt Sandy Silt Low Plasticity Clay Low Plasticity Sandy Clay Poorly-graded Sand Poorly-graded Gravelly Sand	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

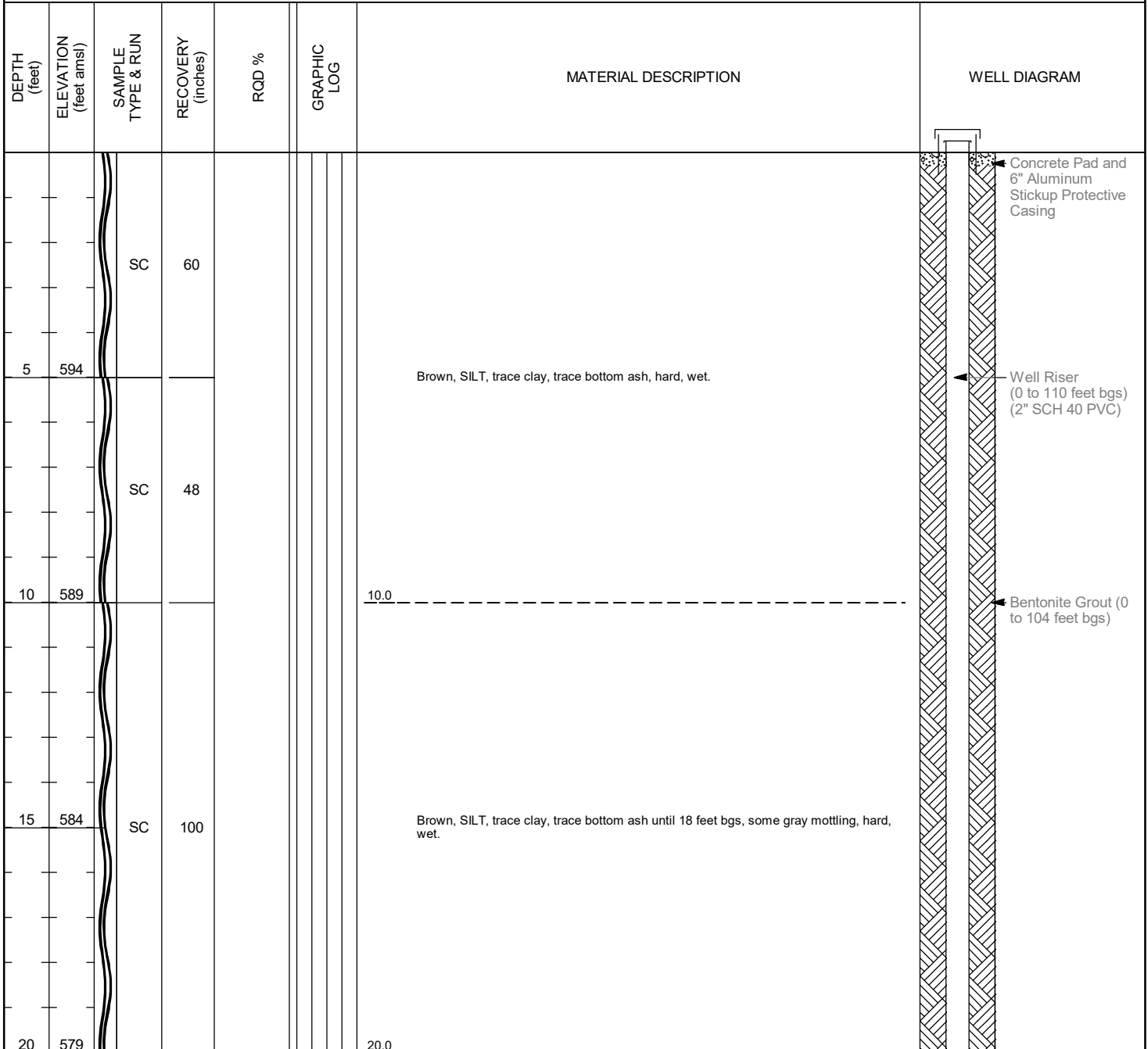


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BORING BAC-19

Client: Gavin Power, LLC Project Name: Bottom Ash Pond Monitoring Well Installation
Project Number: 0643653 Project Location: Cheshire, OH

DATE STARTED: <u>6/14/2022</u>	TOTAL DEPTH: <u>122 feet bgs</u>	WELL DEVELOPMENT
DATE COMPLETED: <u>6/14/2022</u>	DIAMETER: <u>6 inches</u>	METHOD(S): <u>Grundfos & Buffalo Pump</u>
DRILLING CONTRACTOR: <u>Cascade Drilling</u>	GROUND ELEVATION: <u>599.280</u>	DATE STARTED: <u>7/5/2022</u>
DRILLING METHODS: <u>Sonic Drilling & Wireline Rock Coring</u>	PVC ELEVATION: <u>602.11</u>	DATE ENDED: <u>7/5/2022</u>
LOGGED BY: <u>K. Popyack</u>	NORTHING: <u>338526.438</u>	DTW AT START: <u>58.2 feet bgs</u>
CHECKED BY: <u>A. Harford</u>	EASTING: <u>2076037.426</u>	DTW AT END: <u>NM</u>
NOTES: <u>RQD only applicable for bedrock wells</u>		VOLUME PURGED: <u>25 gallons</u>



CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC) Wireline Rock Coring (RC)	Silt Low Plasticity Clay Clayey Sand Sandy Silt Poorly-graded Sand Poorly-graded Gravelly Sand	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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BORING BAC-19

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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	574	SC	120			Brown, SILT, trace clay, some bottom ash, some gray mottling, hard, wet. <i>(continued)</i>	<p>Well Riser (0 to 110 feet bgs) (2" SCH 40 PVC)</p> <p>Bentonite Grout (0 to 104 feet bgs)</p>
30	569				30.0	Brown, SILT, trace clay, some gray mottling, hard, wet.	
35	564	SC	108		35.0	Gray, SILT, brown mottling, hard, wet.	
40	559				37.5	Brown, SILT, hard, wet.	
					40.0	Gray, SILT, little clay, some brown mottling, increasing clay content with depth, hard, wet.	

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC) Wireline Rock Coring (RC)	Silt Sandy Silt Low Plasticity Clay Clayey Sand Poorly-graded Sand Poorly-graded Gravelly Sand	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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BORING BAC-19

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
45	554	SC	120			Gray, SILT, little clay, some brown mottling, increasing clay content with depth, hard, wet. (continued)	<p>Well Riser (0 to 110 feet bgs) (2" SCH 40 PVC)</p> <p>Bentonite Grout (0 to 104 feet bgs)</p>
50	549					48.0 Brown, CLAY, some silt, trace fine sand, low plasticity, wet.	
55	544	SC	98			50.0 Brown, SANDY CLAY, some silt, sand content increases with depth to a clayey sand, medium plasticity, saturated.	
60	539					58.7 Gray, SANDY CLAY, with silt, some fine sands, some orange sands, low plasticity, saturated.	
65	534	SC	97			60.0 Gray Brown, SANDY CLAY, some silt, low plasticity, saturated.	
						64.5 Gray, SANDY SILT, little clay, some light gray mottling, compact, saturated.	

CORING TYPE

- Sonic Drilling (SC)
- Wireline Rock Coring (RC)

GRAPHIC LOG LEGEND

- Silt
- Low Plasticity Clay
- Clayey Sand
- Sandy Silt
- Poorly-graded Sand
- Poorly-graded Gravelly Sand

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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BORING BAC-19

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
70	529					Gray, SANDY SILT, little clay, some light gray mottling, compact, saturated. (continued)	
						70.0	
						Gray, FINE TO MEDIUM SAND, little clay, some brown sand, loose, wet.	
						71.0	
75	524	SC	120			Brown, MEDIUM SAND AND GRAVEL, trace clay, rounded, (0.5-1" diameter), poorly sorted, loose, wet.	
						75.7	← Bentonite Grout (0 to 104 feet bgs)
						77.5	← Well Riser (0 to 110 feet bgs) (2" SCH 40 PVC)
						Brown, MEDIUM TO COARSE SAND, and gravel, 4 inches of orange sand at 77 feet bgs, 3 inches of dark gray sand at 77.5 feet bgs, loose, wet.	
80	519					Dark Brown, MEDIUM SAND, and rounded gravel, (0.5" diameter), poorly sorted, loose, wet.	
						83.7	
						Brown, COARSE SAND, lithic sand, loose, wet.	
85	514	SC	95			Brown, CLAYEY SAND, trace rounded gravel, (0.5-2" diameter), gravel ends at 85 feet bgs, some gray mottling towards 90 feet bgs, poorly sorted, loose, wet.	
						84.5	
90	509					Gray, FINE SANDY SILT, some clay, some orange mottling, loose, wet.	
						90.0	

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC) Wireline Rock Coring (RC)	Silt Low Plasticity Clay Clayey Sand Sandy Silt Poorly-graded Sand Poorly-graded Gravelly Sand	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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BORING BAC-19

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Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
						Gray, FINE SANDY SILT, some clay, some orange mottling, loose, wet. <i>(continued)</i>	
95	504	SC	103			92.5 Brown, GRAVEL, some coarse sand, subrounded to subangular, poorly sorted, loose, saturated.	
						97.0 Brown, COARSE SAND, some subrounded gravel, (0.5-1" diameter), poorly sorted, loose, saturated.	
100	499					100.0 Brown, GRAVELLY SAND, rounded (2.5-3" diameter), may be beginning of the Round Knob, poorly sorted, loose, saturated.	
						103.0 Gray, SILT, weathered, lots of brown mottling, wet.	
105	494	SC	108			104.0 Gray, CLAYSTONE, (Round Knob), brittle, dry.	
						109.0 NO RECOVERY.	
110	489	RC	0	0		111.0 Red Brown, CLAYSTONE, (Round Knob), natural fractures seen at 111.5-111.9, 112.6, 113.0-113.4, and 113.8 feet bgs.	
		RC	39.6	0			

Bentonite Grout (0 to 104 feet bgs)

Well Riser (0 to 110 feet bgs) (2" SCH 40 PVC)

Bentonite Seal (104 to 108 feet bgs)

Filter Sand (108 to 122 feet bgs) (Global #5)

Well Screen (110 to 120 feet bgs) (2" SCH 40 PVC/ 0.01" slot)

CORING TYPE

- Sonic Drilling (SC)
- Wireline Rock Coring (RC)

GRAPHIC LOG LEGEND

- Silt
- Low Plasticity Clay
- Clayey Sand
- Sandy Silt
- Poorly-graded Sand
- Poorly-graded Gravelly Sand

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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BORING BAC-19

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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	484	RC	72			Red Brown, CLAYSTONE, (Round Knob), natural fractures seen at 111.5-111.9, 112.6, 113.0-113.4, and 113.8 feet bgs. (continued)	<p>Well Screen (110 to 120 feet bgs) (2" SCH 40 PVC/ 0.01" slot)</p> <p>Filter Sand (108 to 122 feet bgs) (Global #5)</p> <p>Sump (2" SCH 40 PVC/2' long)</p>
120	479						
						122.0	
						Bottom of Boring @ 122.00 feet bgs	
125	474						
130	469						
135	464						

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC) Wireline Rock Coring (RC)	Silt Sandy Silt Low Plasticity Clay Clayey Sand Poorly-graded Sand Poorly-graded Gravelly Sand	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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BORING BAC-20

Client: Gavin Power, LLC Project Name: Bottom Ash Pond Monitoring Well Installation
Project Number: 0643653 Project Location: Cheshire, OH

DATE STARTED: <u>6/23/2022</u>	TOTAL DEPTH: <u>30 feet bgs</u>	WELL DEVELOPMENT
DATE COMPLETED: <u>6/23/2022</u>	DIAMETER: <u>6 inches</u>	METHOD(S): <u>Grundfos & Buffalo Pump</u>
DRILLING CONTRACTOR: <u>Cascade Drilling</u>	GROUND ELEVATION: <u>562.570</u>	DATE STARTED: <u>7/5/2022</u>
DRILLING METHODS: <u>Sonic Drilling</u>	PVC ELEVATION: <u>565.06</u>	DATE ENDED: <u>7/6/2022</u>
LOGGED BY: <u>K. Popyack</u>	NORTHING: <u>338477.169</u>	DTW AT START: <u>20.2 feet bgs</u>
CHECKED BY: <u>A. Harford</u>	EASTING: <u>2075096.614</u>	DTW AT END: <u>NM</u>
NOTES: <u>Well ran dry during development, RQD only applicable for bedrock wells</u>		VOLUME PURGED: <u>1.25 gallons</u>

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
						Gray, GRAVEL, rip rap from the newly installed road, dry.	
5	558	SC	36			Brown, SILTY CLAY, compact, wet.	
10	553	SC	55			Dark Brown, SILT, trace clay, some gray mottling, brittle, wet.	
15	548					Brown, CLAYEY GRAVEL, some silt, subangular, (1-2" diameter), poorly sorted, loose, saturated.	
						Brown, SILT, and clay, compact, saturated.	

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Poorly-graded Gravel Silty Clay Silt Clayey Gravel Clayey Sand Poorly-graded Gravelly Sand	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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BORING BAC-20

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
20	543	SC	114			Brown, SILT, and clay, compact, saturated. (continued)	<p>Filter Sand (10 to 25 feet bgs) (Global #7)</p> <p>Well Screen (12 to 22 feet bgs) (2" SCH 40 PVC/ 0.01" slot)</p> <p>Sump (2" SCH 40 PVC/2' long)</p>
25	538	SC	108			Brown, SANDY CLAY, medium plasticity, saturated.	
30	533					Brown To Dark Brown, MEDIUM SAND, and subrounded gravel, (0.5-1" diameter), poorly sorted, loose, saturated.	<p>Borehole collapse</p>
Bottom of Boring @ 30.00 feet bgs							

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Poorly-graded Gravel Clayey Gravel Silty Clay Clayey Sand	Silt Poorly-graded Gravelly Sand 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

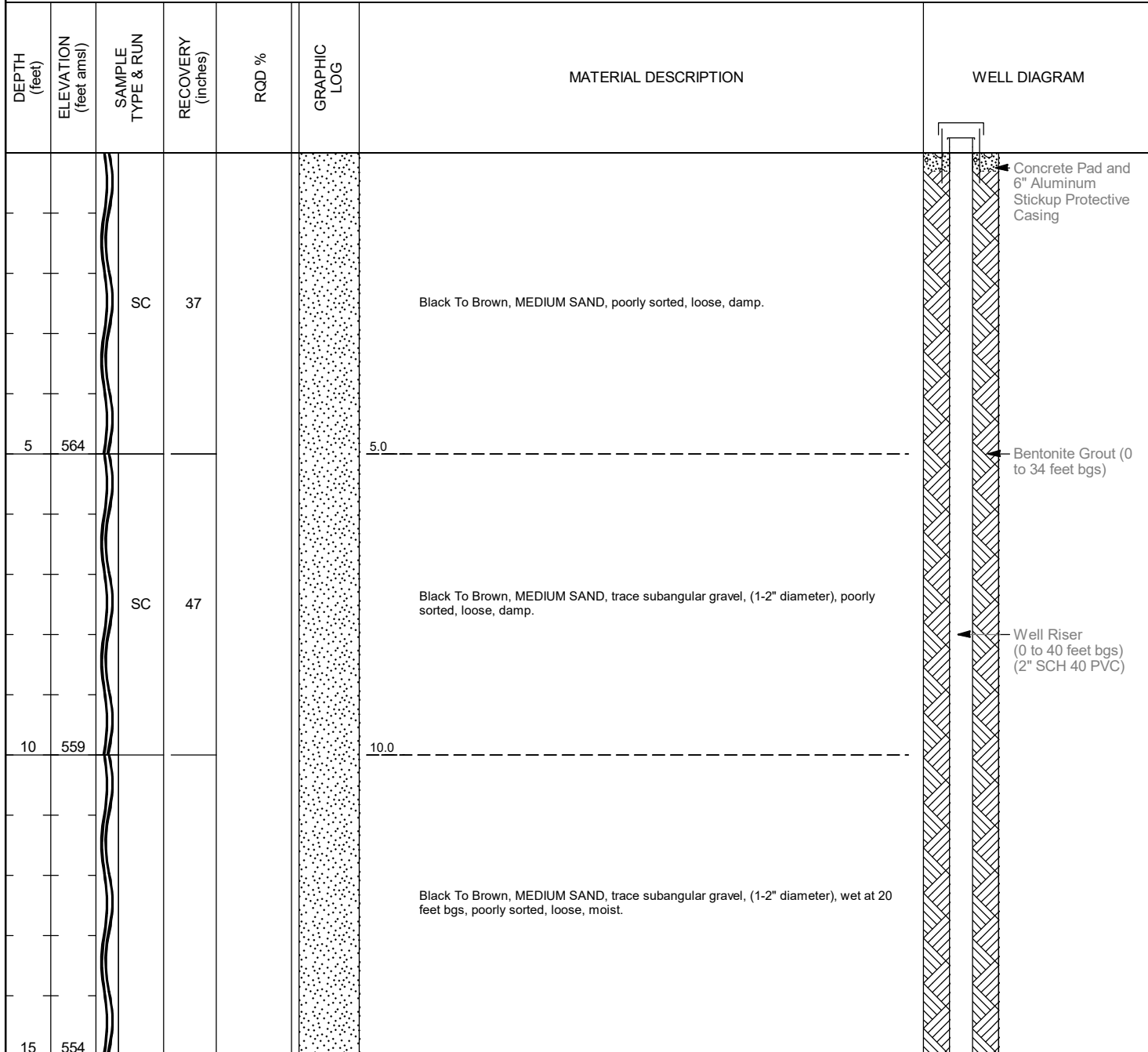


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BORING BAC-21

Client: Gavin Power, LLC Project Name: Bottom Ash Pond Monitoring Well Installation
Project Number: 0643653 Project Location: Cheshire, OH

DATE STARTED: <u>7/5/2022</u>	TOTAL DEPTH: <u>60 feet bgs</u>	WELL DEVELOPMENT
DATE COMPLETED: <u>7/5/2022</u>	DIAMETER: <u>6 inches</u>	METHOD(S): <u>Grundfos & Buffalo Pump</u>
DRILLING CONTRACTOR: <u>Cascade Drilling</u>	GROUND ELEVATION: <u>569.300</u>	DATE STARTED: <u>7/7/2022</u>
DRILLING METHODS: <u>Sonic Drilling</u>	PVC ELEVATION: <u>572.41</u>	DATE ENDED: <u>7/7/2022</u>
LOGGED BY: <u>K. Popyack</u>	NORTHING: <u>339439.529</u>	DTW AT START: <u>35.0 feet bgs</u>
CHECKED BY: <u>A. Harford</u>	EASTING: <u>2074896.107</u>	DTW AT END: <u>NM</u>
NOTES: <u>Well ran dry during development, RQD only applicable for bedrock wells</u>		VOLUME PURGED: <u>27 gallons</u>



CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Poorly-graded Sand Low Plasticity Clay High Plasticity Clay Silty Clay Poorly-graded Gravelly Sand Poorly-graded Sandy Gravel	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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BORING BAC-21

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
20	549	SC	108			Black To Brown, MEDIUM SAND, trace subangular gravel, (1-2" diameter), wet at 20 feet bgs, poorly sorted, loose, moist. (continued)	
						Brown, CLAY, trace silt, low plasticity, wet.	
						Brown, CLAY, some silt, medium plasticity, wet.	
25	544	SC	114			Gray Brown, CLAY, high plasticity, wet.	
						Brown, CLAY, little silt, medium plasticity, wet.	
30	539					Gray, SILTY CLAY, with fine sand, sand increases with depth, increasing silt at 33-36 feet bgs, tan and brown mottling, white fragments from 37-39 feet bgs, low plasticity, saturated.	

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Poorly-graded Sand Low Plasticity Clay High Plasticity Clay Silty Clay Poorly-graded Gravelly Sand Poorly-graded Sandy Gravel	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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BORING BAC-21

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
35	534	SC	115			Gray, SILTY CLAY, with fine sand, sand increases with depth, increasing silt at 33-36 feet bgs, tan and brown mottling, white fragments from 37-39 feet bgs, low plasticity, saturated. (continued)	
40	529						
45	524	SC	118			Orange Brown, MEDIUM SAND, and subrounded gravel, (0.5-1" diameter), little black staining, poorly sorted, loose, saturated.	
43.0	Orange Brown, GRAVEL, and coarse sand, subrounded, (0.5-1.5" diameter), poorly sorted, loose, saturated.						
44.0	Orange Brown, MEDIUM TO COARSE SAND, some subrounded gravel, (0.5" diameter), poorly sorted, loose, saturated.						
45.0	Light Brown, MEDIUM SAND, little subrounded gravel, (0.5" diameter), poorly sorted, loose, saturated.						
47.0	Orange Brown, GRAVEL, some coarse sand, subrounded, (0.5-1" diameter), poorly sorted, loose, saturated.						
48.0	Gray, GRAVEL, some coarse sand, subrounded, (0.5-1" diameter), poorly sorted, loose, saturated.					Gray, GRAVEL, little coarse sand, subrounded to subangular, (0.5-1.5" diameter), poorly sorted, loose, saturated.	
49.0	Gray, MEDIUM SAND, trace subrounded gravel, (0.5" diameter), poorly sorted, loose, saturated.						
49.5	Gray, SILTY CLAY, and subrounded gravel, (0.5" diameter), poorly sorted, firm, saturated.						
50	519					Gray, SILTY CLAY, and subrounded gravel, (0.5" diameter), poorly sorted, firm, saturated.	

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Poorly-graded Sand Low Plasticity Clay High Plasticity Clay Silty Clay Poorly-graded Gravelly Sand Poorly-graded Sandy Gravel	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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BORING BAC-21

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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	
55	514	SC	107			Gray, GRAVEL, and coarse sand, subrounded, (0.5-1" diameter), poorly sorted, loose, saturated. <i>(continued)</i>	<p>Sump (2" SCH 40 PVC/2' long)</p> <p>Borehole Collapse</p>	
								Light Brown, FINE SAND, trace subrounded gravel, (0.5" diameter), poorly sorted, cohesive, saturated.
60	509							Gray Brown, FINE SAND, trace subrounded gravel, (0.5" diameter), trace subrounded gravel (4" diameter), poorly sorted, cohesive, saturated.
								Dark Gray, MEDIUM SAND, and subrounded to subangular gravel, (0.5-1" diameter), poorly sorted, loose, saturated.
65	504					Bottom of Boring @ 60.00 feet bgs		

CORING TYPE

Sonic Drilling (SC)

GRAPHIC LOG LEGEND

- Poorly-graded Sand
- Low Plasticity Clay
- High Plasticity Clay
- Silty Clay
- Poorly-graded Gravelly Sand
- Poorly-graded Sandy Gravel

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

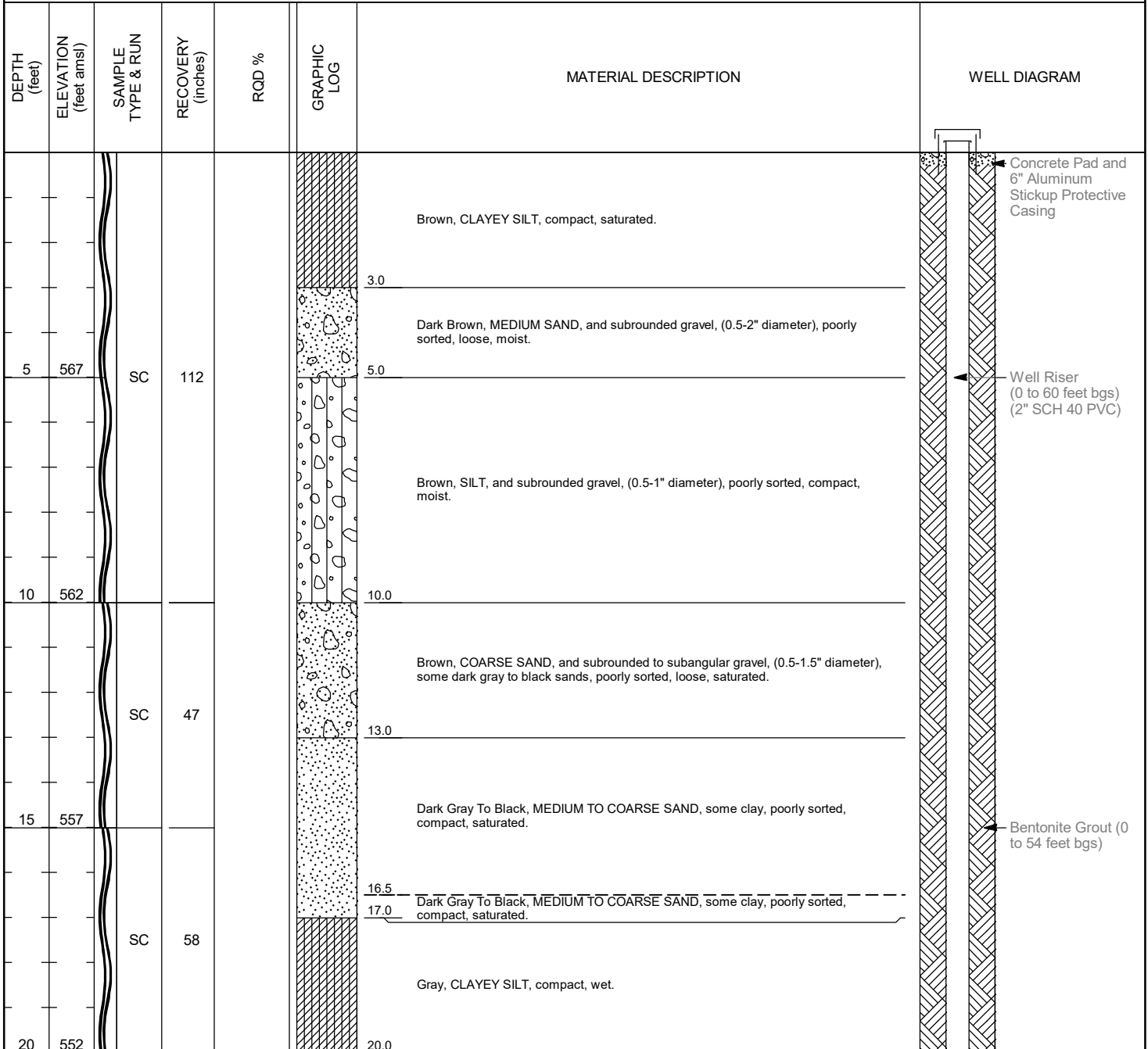


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BORING BAC-22

Client: Gavin Power, LLC Project Name: Bottom Ash Pond Monitoring Well Installation
Project Number: 0643653 Project Location: Cheshire, OH

DATE STARTED: <u>7/1/2022</u>	TOTAL DEPTH: <u>75 feet bgs</u>	WELL DEVELOPMENT
DATE COMPLETED: <u>7/1/2022</u>	DIAMETER: <u>6 inches</u>	METHOD(S): <u>Grundfos & Buffalo Pump</u>
DRILLING CONTRACTOR: <u>Cascade Drilling</u>	GROUND ELEVATION: <u>572.280</u>	DATE STARTED: <u>7/6/2022</u>
DRILLING METHODS: <u>Sonic Drilling</u>	PVC ELEVATION: <u>574.88</u>	DATE ENDED: <u>7/6/2022</u>
LOGGED BY: <u>K. Popyack</u>	NORTHING: <u>340273.51</u>	DTW AT START: <u>27.9 feet bgs</u>
CHECKED BY: <u>A. Harford</u>	EASTING: <u>2074761.802</u>	DTW AT END: <u>NM</u>
NOTES: <u>Well ran dry during development, RQD only applicable for bedrock wells</u>		VOLUME PURGED: <u>35 gallons</u>



CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Silty Clay Poorly-graded Gravelly Sand Poorly-graded Sand with Clay Low Plasticity Clay	Gravelly Silt Poorly-graded Sand with Clay 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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BORING BAC-22

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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	547	SC	114			Brown, CLAYEY SILT, more clay with depth, gray mottling begins at 24 feet bgs, compact, wet. (continued)	<p>Bentonite Grout (0 to 54 feet bgs)</p> <p>Well Riser (0 to 60 feet bgs) (2" SCH 40 PVC)</p>
30	542					30.0 Brown, CLAYEY SILT, low plasticity, wet.	
35	537	SC	109			33.0 Gray, CLAY, trace fine sand, trace silt, high plasticity, wet.	
40	532					40.0 Gray, CLAY, trace fine sand, more silt with depth, medium plasticity, wet.	

CORING TYPE

Sonic Drilling (SC)

GRAPHIC LOG LEGEND

- Silty Clay
- Poorly-graded Gravelly Sand
- Gravelly Silt
- Poorly-graded Sand
- Low Plasticity Clay
- Poorly-graded Sand with Clay

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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BORING BAC-22

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Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
45	527	SC	119			Gray, CLAY, trace fine sand, more silt with depth, medium plasticity, wet. <i>(continued)</i>	
						47.0	
						Gray, FINE SAND, and clay, black wood fragment at 47.5 feet bgs, cohesive, wet.	
50	522					50.0	
						Gray, GRAVEL, and medium sand, subrounded, (0.5-1" diameter), poorly sorted, loose, saturated.	
						52.5	
						Gray, FINE TO MEDIUM SAND, trace subrounded gravel, (0.5" diameter), poorly sorted, loose, saturated.	
						53.0	
						Gray, GRAVEL, subangular (0.5-2" diameter), poorly sorted, loose, saturated.	
						53.5	
55	517	SC	112			Gray, FINE TO MEDIUM SAND, finer sands with depth, cohesive, saturated.	
						60.0	
60	512						
		SC	60			Gray, FINE TO MEDIUM SAND, cohesive, saturated.	
						65.0	
65	507						
						Brown, FINE SAND, trace subrounded gravel, (0.5" diameter), trace gravel at 68 feet bgs, poorly sorted, loose, saturated.	

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Silty Clay Poorly-graded Gravelly Sand Poorly-graded Sand Low Plasticity Clay	Gravelly Silt Poorly-graded Sand with Clay 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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BORING BAC-22

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
70	502	SC	112			Brown, FINE SAND, trace subrounded gravel, (0.5" diameter), trace gravel at 68 feet bgs, poorly sorted, loose, saturated. <i>(continued)</i>	<p>Filter Sand (58 to 72 feet bgs) (Global #5)</p> <p>Well Screen (60 to 70 feet bgs) (2" SCH 40 PVC/ 0.01" slot)</p> <p>Sump (2" SCH 40 PVC/2' long)</p> <p>Borehole Collapse</p>
75	497					Blue Gray, CLAYSTONE, dry.	
80	492						
85	487						
90	482						
						Bottom of Boring @ 75.00 feet bgs	

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Silty Clay Poorly-graded Gravelly Sand Gravelly Silt Poorly-graded Sand Low Plasticity Clay Poorly-graded Sand with Clay	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: 617-646-7800

BORING BAC-23

Client: Gavin Power, LLC Project Name: Bottom Ash Pond Monitoring Well Installation
Project Number: 0643653 Project Location: Cheshire, OH

DATE STARTED: <u>6/30/2022</u>	TOTAL DEPTH: <u>67 feet bgs</u>	WELL DEVELOPMENT
DATE COMPLETED: <u>6/30/2022</u>	DIAMETER: <u>6 inches</u>	METHOD(S): <u>Grundfos & Buffalo Pump</u>
DRILLING CONTRACTOR: <u>Cascade Drilling</u>	GROUND ELEVATION: <u>574.790</u>	DATE STARTED: <u>7/6/2022</u>
DRILLING METHODS: <u>Sonic Drilling</u>	PVC ELEVATION: <u>577.47</u>	DATE ENDED: <u>7/6/2022</u>
LOGGED BY: <u>K. Popyack</u>	NORTHING: <u>340155.161</u>	DTW AT START: <u>36.35 feet bgs</u>
CHECKED BY: <u>A. Harford</u>	EASTING: <u>2075954.818</u>	DTW AT END: <u>NM</u>
NOTES: <u>Well ran dry during development, RQD only applicable for bedrock wells</u>		VOLUME PURGED: <u>15 gallons</u>

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
						Dark Brown, SANDY SILT, few subangular gravel, (0.5-1" diameter), organics, poorly sorted, damp.	<p>Concrete Pad and 6" Aluminum Stickup Protective Casing</p> <p>Bentonite Grout (0 to 49 feet bgs)</p> <p>Well Riser (0 to 55 feet bgs) (2" SCH 40 PVC)</p>
		SC	60			Black, MEDIUM TO COARSE SAND, trace silt, poorly sorted, loose, damp.	
						Light Brown, SILT, and angular gravel, (0.5-2 diameter), poorly sorted, loose, damp.	
5	570					Brown, SILT, trace subrounded gravel, (1" diameter), little gray mottling, some black medium to coarse sand, trace clay, poorly sorted, compact, moist.	
		SC	60			Brown, SILT, with subrounded gravel, (0.5-1" diameter), poorly sorted, brittle, moist.	
10	565					Brown, SILT, with subrounded gravel, (0.5-1" diameter), trace gravel, poorly sorted, brittle, moist.	
						Brown, CLAYEY SILT, trace fine sand, loose, wet.	
15	560						

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Sandy Silt Silt Poorly-graded Sand Gravelly Silt Silty Clay Poorly-graded Gravelly Sand	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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BORING BAC-23

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
						15.3 Brown, CLAYEY SILT, trace fine sand, loose, wet. <i>(continued)</i>	
		SC	118			Brown, CLAYEY SILT, some gray mottling, compact, wet.	
						17.0	
						Brown, SANDY SILT, trace clay, trace fine sand, cohesive, wet.	
20	555					20.0	Well Riser (0 to 55 feet bgs) (2" SCH 40 PVC)
		SC	53			Brown, FINE SAND, little silt, some black organics, trace medium sands, loose, wet.	Bentonite Grout (0 to 49 feet bgs)
25	550						
30	545						
						30.0	
						Brown, MEDIUM SAND, trace rounded gravel, (0.5" diameter), poorly sorted, wet.	

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Sandy Silt Silt Poorly-graded Sand Silty Clay Gravelly Silt Poorly-graded Gravelly Sand	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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BORING BAC-23

Client: Gavin Power, LLC

Project Name: Bottom Ash Pond 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
35	540	SC	39			Brown, MEDIUM SAND, trace rounded gravel, (0.5" diameter), poorly sorted, wet. (continued)	
40	535					40.0	
45	530	SC	112			Brown, MEDIUM SAND, trace rounded gravel, (0.5" diameter), poorly sorted, wet.	
						47.0	
						Brown, MEDIUM TO COARSE SAND, and subrounded gravel, (0.5" diameter), trace angular gravel (4" diameter) gravel at 49 feet bgs, poorly sorted, wet.	
						49.5	
50	525					50.0 Orange Brown, COARSE SAND, and subrounded gravel, (0.5-1" diameter), poorly sorted, saturated.	
						Brown, FINE SAND, well sorted, saturated.	

CORING TYPE	GRAPHIC LOG LEGEND	ACRONYM LEGEND
Sonic Drilling (SC)	Sandy Silt Poorly-graded Sand Gravelly Silt Silt Silty Clay Poorly-graded Gravelly Sand	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



APPENDIX C

GAVIN BOTTOM ASH POND FIRST
SEMIANNUAL SAMPLING EVENT OF 2023
ALTERNATE SOURCE DEMONSTRATION
REPORT



Errata Sheet

Gavin Bottom Ash Pond

First Semiannual Sampling Event of 2023 Alternate Source Demonstration Report

31 January 2024

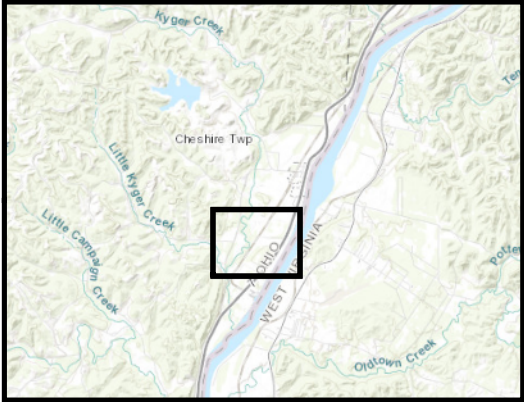
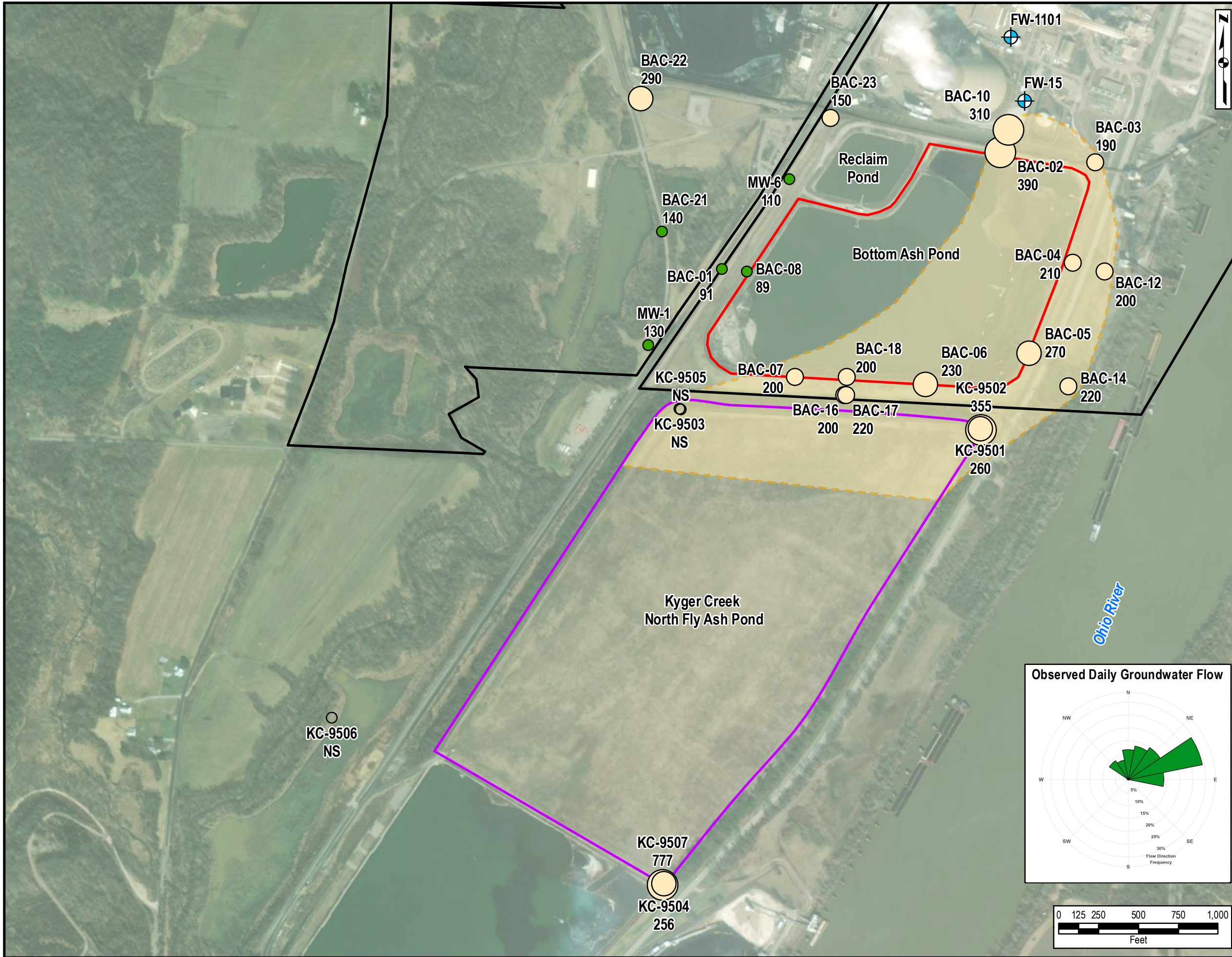
The following revisions have been incorporated into the **First Semiannual Sampling Event of 2023 Alternate Source Demonstration Report** dated 12 October 2023, as described in the following table.

Revision	Location	Description of Change
1	Figure 4-4	Replace Figure 4-4 (page 51 of this PDF), which inadvertently showed an incorrect plot of daily average groundwater flow directions, with an updated version (page 3 of this PDF), which includes an accurate plot of daily average groundwater flow directions between January 1 and June 30, 2023. Error in the original figure was due to an averaging error in MS Excel which has been corrected during the migration of the dataset to R Suite software in January 2024.
2	Figure 4-6	Replace Figure 4-6 (page 54 of this PDF), which inadvertently showed an incorrect plot of daily average groundwater flow directions, with an updated version (page 4 of this PDF), which includes an accurate plot of daily average groundwater flow directions between January 1 and June 30, 2023. Error in the original figure was due to an averaging error in MS Excel which has been corrected during the migration of the dataset to R Suite software in January 2024.

3

Figure 4-7

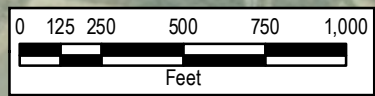
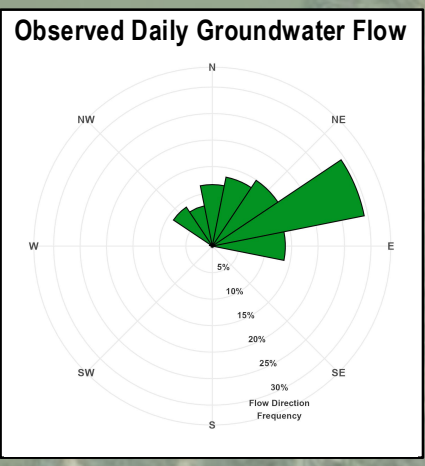
Replace Figure 4-7 (page 55 of this PDF), which inadvertently showed an incorrect plot of daily average groundwater flow directions, with an updated version (page 5 of this PDF), which includes an accurate plot of daily average groundwater flow directions between January 1 and June 30, 2023. Error in the original figure was due to an averaging error in MS Excel which has been corrected during the migration of the dataset to R Suite software in January 2024.



Legend

Sulfate Concentrations in Groundwater (mg/L)

- <140
- 140 - 220
- 220 - 300
- >300
- Not Sampled
- ⊕ Water Supply Well Location
- Approximated Sulfate Plume
- Approximate Location of Bottom Ash Pond Boundary
- Gavin Property Boundary
- Approximate Location of Kyger Creek North Fly Ash Pond Boundary

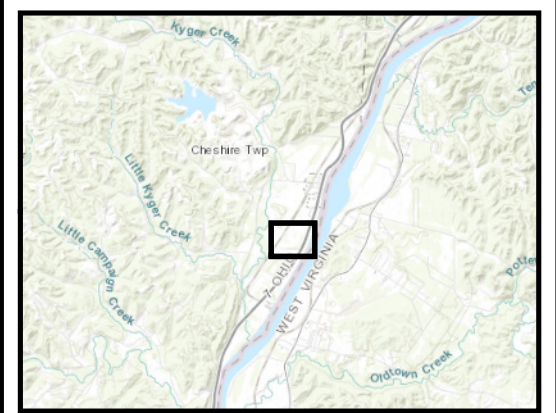
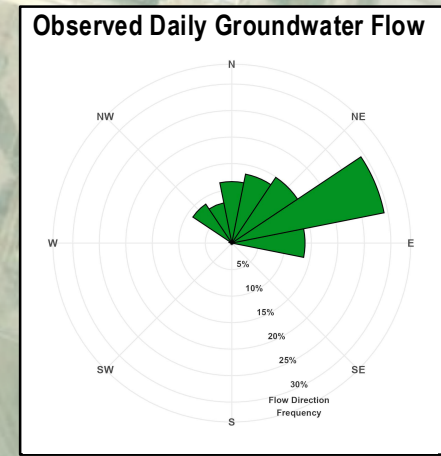


- NOTES:**
1. mg/L = milligrams per liter
 2. NS = Not Sampled
 3. Gavin samples were collected April 2023.
 4. Kyger Creek groundwater samples results collected 10/25/2022 (OVEC 2022).
 5. Daily groundwater flow direction calculated based on transducer data collected from 1 January 2023 through 30 June 2023.
 6. Aerial Imagery: ESRI World Imagery
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Figure 4-6: Sulfate Distribution in Groundwater (Map View) Gavin Generating Station Cheshire, Ohio



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Legend

pH Concentrations in Groundwater (SU)

- Yellow circle: <6.0
- Green circle: 6.0 - 6.6
- Blue circle: >6.6
- White circle: Not Sampled
- Blue circle with crosshair: Water Supply Well
- Blue circle: Alluvial Aquifer Well (BAC)
- Green circle: Separation Layer and Alluvial Aquifer Well (BAC)
- Red outline: Approximate Location of Bottom Ash Pond Boundary
- Black outline: Gavin Property Boundary
- Purple outline: Approximate Location of Kyger Creek North Fly Ash Pond Boundary

NOTES:

- SU = standard units
- NS = Not Sampled
- Groundwater samples were collected April 2023.
- Kyger Creek groundwater samples results collected 10/25/2022 (OVEC 2022). Surface water data is from H2 2022 event.
- Daily groundwater flow direction calculated based on transducer data collected from 1 January 2023 through 30 June 2023.
- Aerial Imagery: ESRI World Imagery
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0 62.5 125 250 375 500
Feet

Figure 4-7: pH Distribution in Groundwater (Map View)
Gavin Generating Station
Cheshire, Ohio

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Gavin Bottom Ash Pond

Gavin Power, LLC

First Semiannual Sampling Event of 2023 Alternate Source Demonstration Report

Gavin Power Plant
Cheshire, Ohio

12 October 2023

Project No.: 0679646

Signature Page

12 October 2023

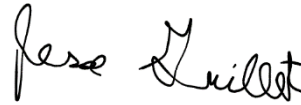
Gavin Bottom Ash Pond

First Semiannual Sampling Event of 2023 Alternate Source Demonstration Report

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PROFESSIONAL ENGINEER CERTIFICATION

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Appendices

Appendix A: Hydrogeologic Analysis
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Appendix C: 1998 and 2017 OEPA Interoffice Memorandum

Acronyms and Abbreviations

Name	Description
ASD	Alternate Source Demonstration
BAC	Bottom Ash Complex
BAP	Bottom Ash Pond
CCR	Coal Combustion Residuals
CCR Rule	Coal Combustion Residuals in Landfills and Surface Impoundments
CFR	Code of Federal Regulations
CSM	Conceptual Site Model
ERM	Environmental Resources Management
Gavin	Gavin Power, LLC
H1	First Semiannual
H2	Second Semiannual
mg/L	milligrams per liter
NFAP	North Fly Ash Pond
OEPA	Ohio Environmental Protection Agency
ORSANCO	Ohio River Valley Water Sanitation Commission
OVEC	Ohio Valley Electric Corporation
Plant	General James M. Gavin Power Plant
SFAP	South Fly Ash Pond
SSI	Statistically significant increase
TDS	Total Dissolved Solids
uS/cm	microsiemens per centimeter
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 Bottom Ash Pond (BAP) CCR Surface Impoundment at the General James M. Gavin Power Plant (Plant). 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 BAP in accordance with 40 CFR § 257.94. Statistically significant increases (SSIs) over background concentrations were detected in downgradient monitoring wells for Appendix III constituents for the first semiannual (H1) groundwater sampling event of 2023 and are explained in this Alternate Source Demonstration (ASD) Report.

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.
- The data supporting conclusions regarding the alternative source are historically consistent with the hydrogeologic conditions and findings of the monitoring program.

This ASD Report addresses each of these lines of evidence for the SSIs detected in groundwater collected from downgradient compliance wells at the BAP. The groundwater monitoring program and ASD have been prepared utilizing accepted practices incorporating both site specific and regional information. In 2022, Gavin responded to feedback from the USEPA concerning the groundwater monitoring program at the BAP (USEPA 2022). In consideration of this feedback, Gavin has installed additional monitoring

wells and conducted supplemental characterization at the BAP to refine the conceptual site model (CSM). Findings and updates were originally provided in the 2022 Annual Groundwater Monitoring and Corrective Action Report (ERM 2023a) as well as discussed below.

1.2 Background

The Plant is a coal-fired generating station located in Gallia County in Cheshire, Ohio (Figure 1-1), and is bounded to the east by the Ohio River. The BAP is one of three CCR units at the Plant that are subject to regulation under the CCR Rule and is located adjacent to and immediately south of the main Plant area (Figure 1-2). Adjacent to the BAP is the smaller Reclaim Pond (Figure 1-3) which, along with the BAP, make up the Bottom Ash Complex (BAC) that has operated since 1974.

The certified groundwater monitoring well network consists of three upgradient monitoring wells (BAC-01, MW-1, and MW-6) along the western perimeter of the BAP, two upgradient monitoring wells (BAC-06 and BAC-07) along the southern perimeter, and four downgradient monitoring wells (BAC-02, BAC-03, BAC-04, and BAC-05) positioned along the northern and eastern perimeter of the BAP (Figure 1-3). These wells are herein referred to as "network" wells for the purposes of this report.

Consistent with the CCR Rule and the Groundwater Monitoring Plan developed for Gavin (ERM 2017), an interwell prediction limit approach was used to identify potential impacts to groundwater. Upper prediction limits, and a lower prediction limit specifically for pH, were established based on the upgradient groundwater data. The 2017 Annual Groundwater Monitoring and Corrective Action Report was prepared to document the status of the groundwater monitoring program for the BAP (ERM 2018a) and included results from eight sampling events performed from August 2016 to July 2017. The 2017 report and each subsequent Annual Groundwater Monitoring and Corrective Action Report have included comparisons of the sampling results obtained from downgradient wells during each semiannual detection monitoring event with the upper and lower prediction limits calculated based on the initial eight background samples taken from upgradient wells. ASD reports (ERM 2018b; ERM 2018c; ERM 2019a; ERM 2019b; ERM 2020a; ERM 2020b; ERM 2021b; ERM 2021c; ERM 2022a; ERM 2022b; ERM 2023b) were prepared to address SSIs that were identified during the initial and subsequent reporting periods.

Sixteen additional monitoring wells were installed in key areas around the BAP in 2022 (Figure 1-3). These wells have not yet been added to the certified network. These supplemental wells were strategically installed for data gathering purposes to enhance the CSM and better understand the dynamic hydraulics beneath and surrounding the BAP. Well construction details and boring logs are provided in the 2022 BAP Annual Groundwater Monitoring and Corrective Action Report (ERM 2023a). The supplemental wells installed in 2022 include:

- Nine (9) Alluvial Aquifer wells (BAC-08, BAC-10, BAC-12, BAC-14, BAC-16, BAC-18, BAC-21, BAC-22, and BAC-23) installed in the coarse-grained alluvium.
- Two (2) Separation Layer wells (BAC-15 and BAC-20) installed in the primarily fine-grained silt and clay layer overlying the alluvial aquifer.
- Four (4) Bedrock wells (BAC-09, BAC-11, BAC-13, and BAC-19) installed in shallow bedrock underlying the alluvial aquifer.
- One (1) Alluvial Aquifer and Separation Layer well (BAC-17) installed to span both the alluvial aquifer and separation layer geologic units. This well was installed to replicate the construction of well B-0904, which was previously sampled by Gavin but is no longer sampled because it is not on Gavin's property. Monitoring well BAC-17 has replaced B-0904 in alternate source evaluations to define the shallow groundwater quality migrating from Ohio Valley Electric Corporation's (OVEC) Kyger Creek North Fly Ash Pond (NFAP) towards the BAP.

1.3 Geology

Observation of bedrock cores collected around the BAP in 2022 indicates the uppermost bedrock layers are claystone/siltstone (interpreted to be the Round Knob) and an underlying sandstone stratum (interpreted to be the Cow Run). A sharp contact exists between the bedrock units and the overlying coarser-grained glacial sands and gravels. These coarser sediments, consisting primarily of medium to coarse sands and gravels, are buried by the younger, finer-grained unit, which exists as a laterally extensive layer of clays and silts. This younger, finer-grained unit (referred to as the separation layer), exists between the base of the BAP and the coarser sediments below (the uppermost aquifer). Some fine-grained sands are also observed within the separation layer, though they are primarily intermixed within the clay and silt matrix and generally found at depth, closer to the alluvial aquifer. Two instances of interbedded fine sands have been described in borings advanced around the BAP; one at boring B-0904 which was installed in 2009 on the northern border of the neighboring Kyger Creek property and the other at boring BAC-13, which was installed in 2022 on the eastern berm of the BAP. The interbedding at B-0904 and BAC-13 were both described at the base of the separation layer where contact exists with the deeper, coarser sands and gravels. These intervals of interbedding are not laterally or vertically extensive, as evidenced by lithologic observations in adjacent borings. As such, these limited descriptions of interbedding are not considered to be representative of the clay and silt separation layer located above the uppermost aquifer. Rather these may be isolated depositional instances. The supplemental wells installed in 2022 around the BAP area show general agreement in Site lithology and provide more detailed geologic descriptions of the sediments beneath the BAP than did historical borings/wells installed in the area.

1.4 Site Hydrology and Hydrogeology

The uppermost aquifer beneath the BAP area is approximately 20 to 40 feet thick and consists primarily of the coarser-grained sands and gravels described in section 1.3, though some fine sand is also present. Also referred to as the alluvial aquifer, the uppermost aquifer is confined by the clay and silt separation layer above and by the siltstone/claystone bedrock units below (Figure 1-4). The Ohio River acts as a hydraulic boundary condition to the east that is dynamic in nature due to fluctuations in river stage. Two water supply wells operated by the Gavin plant (FW-15 and FW-1101) exist approximately 400 to 700 feet north of the BAP (Figure 1-3). These wells have 20-to-30-foot screens established within the alluvial aquifer and have a significant influence on groundwater at the BAP, which is discussed further in Sections 4 and 5. Two additional water supply wells (FW-17 and FW-1102) exist approximately 0.4 to 0.5 miles further north and are not expected to have a significant influence on groundwater at the BAP due to their distance from the BAP and infrequency of their use. A wetland area exists to the west of the BAP, which contains naturally occurring ponds and wetland vegetation.

Five undisturbed Shelby tube samples of the separation layer were collected from a barge within the BAP in 2020 for laboratory grain size distribution and permeameter testing (ERM 2021a). The samples ranged from 0.9% to 32.3% sand and 67.7% to 99.1% silt and clay. The permeameter testing of these samples yielded hydraulic conductivity values (K values) ranging from 1.44E-08 cm/sec to 1.18E-07 cm/sec. Thus, even the samples with the highest amount of sand yielded very low K values. These data are direct evidence that the separation layer beneath the BAP acts as an aquitard to downward migration of water stored in the BAP.

1.5 2023 H1 Groundwater Sampling Event

The first semiannual groundwater sampling event of 2023 was performed in April 2023. The data from this sampling event were compared to the upper and lower prediction limits, and SSIs for Appendix III analytes were identified. Table 1-1 summarizes occurrences of SSIs from the April 2023 sampling event.

Table 1-1: SSIs in Groundwater beneath the BAP

Analyte	Monitoring Well			
	BAC-02	BAC-03	BAC-04	BAC-05
Boron	X	X	X	X
Calcium	X	φ	φ	φ
Chloride	X	X	X	X
Fluoride	φ	φ	φ	φ
pH	X	X	X	X
Sulfate	X	X	X	X
Total Dissolved Solids	X	φ	φ	X

Notes: φ = No SSI; X = SSI; BAP = Bottom Ash Pond; SSI = statistically significant increase.
Results are for the downgradient wells sampled in April 2023.

This ASD Report identifies the regional discharge of bedrock groundwater as the source of calcium, chloride, and total dissolved solids (TDS), and the Kyger Creek NFAP is identified as the source of boron, sulfate, and low pH. Earlier ASDs identified bedrock as the alternate source of sulfate; however, the alternate source identified for sulfate was revised in the H2 2022 ASD (ERM 2023b) based on new information obtained from the *Ohio Valley Electric Corporation Kyger Creek Station – Closed North Fly Ash Pond Groundwater Semiannual Data Analysis* (OVEC 2022). Supporting information and additional discussion of each of the lines of evidence are presented in subsequent sections of this ASD Report.

2. DESCRIPTION OF ALTERNATE SOURCES

Identified alternate sources for the Appendix III constituents that are observed at the BAP include:

- Regional Brine – Naturally occurring brine originating from bedrock (i.e., Cow Run Sandstone) as observed in shallow groundwater in and around Gavin. Identified as the alternate source of calcium, chloride, and TDS.
- Kyger Creek Generating Station Closed North Fly Ash Pond – CCR-impacted groundwater migrating from the Closed North Fly Ash Pond. Identified as the alternate source for boron, low pH, and sulfate.

Additional influence on groundwater quality at the BAP is observed from mixing of the alternate sources and upgradient alluvial aquifer groundwater from west of the BAP and/or surface water from the Ohio River.

A summary of each of these alternate sources and influences on groundwater quality is provided below.

2.1 Regional Brine

Naturally occurring brine, which is known to have elevated levels of chloride, fluoride, and other trace elements, exists in the subsurface in the Ohio River Valley (Stout et al. 1932; ORSANCO 1984; ODNR 1995). The discharge of brines is seen at a regional scale, with shallow wells near to the Ohio River observing brine impacts as a result 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 (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 to groundwater at the Plant. Evidence of brine impacts near the Plant includes specific conductivity measurements at several monitoring wells upgradient of the Fly Ash Reservoir that are consistently greater than 10,000 $\mu\text{S}/\text{cm}$ and reach as high as 39,000 $\mu\text{S}/\text{cm}$. A brine signature was also observed in supplemental BAP monitoring well BAC-11 during sampling in April 2023. This signature included a specific conductivity field measurement of 48,189 $\mu\text{S}/\text{cm}$, TDS of 38,000 mg/L, and chloride levels of 23,000 mg/L. For reference, the approximate specific conductivity of seawater is 50,000 $\mu\text{S}/\text{cm}$ (USGS 2019).

The background groundwater data set is discussed further in Section 4.

2.2 Kyger Creek Generating Station

The Kyger Creek Generating Station is located along the Ohio River in Gallia County, south of and adjacent to the Gavin Plant (Figure 2-1). The Kyger Creek Fly Ash Pond complex consists of the 110-acre NFAP (closed) and 60-acre South Fly Ash Pond (SFAP). The construction history and groundwater monitoring results of these ponds are summarized in the first ASD Report (ERM 2018b). According to the approved Ohio Environmental Protection Agency (OEPA) Permit-to-Install (PTI), construction activities to close the NFAP were initiated in March 1998 and concluded in October 2000 (OVEC 2017). Semiannual groundwater sampling for PTI compliance at the NFAP has been performed since October 1997 and currently includes sampling of six monitoring wells (OEPA 1997). Per the PTI, samples are collected semiannually for:

- Groundwater Contamination Indicator Parameters – alkalinity, specific conductivity, sulfate, and total dissolved solids

- Groundwater Quality Parameters – barium, calcium, chloride, iron, lead, magnesium, manganese, selenium, sodium, gross alpha and gross beta, and pH

Groundwater monitoring for federal CCR compliance is performed at the SFAP only.

The closed Kyger Creek NFAP is located less than 300 feet from the Gavin BAP, and the units share an approximately 2,000-foot-long border (Figure 2-1). Gavin's network wells BAC-06 and BAC-07 were installed in 2020 at the top of the south berm along this boundary and screened within the alluvial aquifer. Six supplemental monitoring wells were installed along the south berm between the BAP and the Kyger Creek NFAP in 2022 to better understand the hydraulic relationship between the BAP and the NFAP and groundwater quality along the boundary. These supplemental wells include alluvial aquifer wells BAC-16 and BAC-18, separation layer wells BAC-15 and BAC-20, bedrock well BAC-19, and separation layer and alluvial aquifer well BAC-17.

The Kyger Creek NFAP has a higher potential to impact groundwater than the BAP because the Kyger Creek NFAP contains fly ash (approximately 1.7 million cubic yards), which when compared to bottom ash, has a greater potential to leach CCR constituents due to higher concentrations of CCR constituents and increased surface area due to smaller particle size (Cox et al. 1978; OEPA 1997; Jones et al. 2012), as described further in Section 7. The NFAP also contains approximately 900,000 cubic yards of boiler slag and boiler slag fines used to construct the NFPA berm and as cover material (OEPA 1997).

2.3 Upgradient Alluvial Aquifer Groundwater

Groundwater from upgradient of the BAP is observed at upgradient monitoring locations west of the BAP, including network wells MW-1, MW-6 and BAC-01, and supplemental wells BAC-08, BAC-21, BAC-22, and BAC-23. The upgradient status of these locations is confirmed by potentiometric surface maps which consistently show higher groundwater elevations west of the BAP than in wells north, south or east of the BAP. Potentiometric surface maps are presented and discussed further in Section 3. Groundwater from west of the BAP flows through the alluvial aquifer beneath the BAP where it ultimately mixes with groundwater migrating from Kyger Creek, groundwater discharging from bedrock, and surface water from the Ohio River.

2.4 Ohio River

The Ohio River extends approximately 981 river miles from Pittsburgh, Pennsylvania to Cairo, Illinois and drains an area of approximately 205,000 square miles (ORSANCO 2018). The Ohio River is located approximately 700 feet east of the BAP, and the alluvial aquifer beneath the BAP is hydraulically connected to the river.

While the Ohio River is not considered a source of impacts to groundwater under the BAP, the mixing of Ohio River surface water with groundwater does influence groundwater quality at the BAP through interaction of groundwater and river water (see Section 3). Surface water from the Ohio River enters the alluvial aquifer and interacts with groundwater beneath the BAP, driven by induced infiltration caused by pumping of the onsite water supply wells and during periods of rapidly rising and high river stage conditions (i.e., flooding). When the Ohio River floods, water from the river mixes with groundwater within the alluvial aquifer (ERM 2018b) beneath the BAP. The quality of the Ohio River water that mixes with groundwater is discussed in Section 4.

3. HYDRAULIC CONNECTIONS TO THE ALTERNATE SOURCES

Explanations of the hydraulic connections between potential alternate sources and the downgradient wells of the BAP were previously provided in the first ASD Report for the BAP (ERM 2018b). An updated summary of each of these connections is provided below.

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 flow of groundwater within these aquifers is primarily driven by the gravitational force on groundwater (differences in hydraulic head) within the bedrock.

At the BAP, groundwater discharges upward from shallow fractured bedrock into the overlying alluvial aquifer. This upward discharge of groundwater from the bedrock aquifer to the overlying alluvial aquifer is attributable to three primary drivers:

- Higher hydraulic pressure (head) in the bedrock aquifer compared to the alluvial aquifer;
- Areas of high hydraulic conductivity related to the interconnected fracture network within the bedrock; and
- Active pumping conditions related to operation of the two water supply wells directly north of the BAP (FW-15 and FW-1101).

3.1.1 Hydraulic Conductivity

Groundwater flow within bedrock occurs primarily via flow through the network of interconnected and saturated fractures, which provides a much higher effective porosity (fracture/secondary porosity) than does the bedrock aquifer matrix (primary porosity). This is due to the effective pore size of the fractures (the ratio of volume of open fractures to the bulk volume of the bedrock matrix) as compared to the miniscule pore sizes between sedimentary grains making up the bedrock matrix. Consequently, the fracture network provides a flow system with significantly higher hydraulic conductivity than does the overall bedrock matrix porosity.

This network of fractures is highly heterogeneous, varying greatly in connectivity and conductivity from location to location. The fracture network is also anisotropic, which means the hydraulic conductivity varies in magnitude and direction at a particular location. As such, the occurrence of fracture interconnectivity and saturation varies greatly at a regional scale. In the Ohio River valley, stress relief fracturing in bedrock provides a structural framework for bedrock overlain by coarse glacial outwash alluvial deposits to be hydraulically interconnected (USGS 1981). The degree of stress fracturing is generally greatest in bedrock directly underlying the alluvial valley bottom, driving enhanced transmissivity of the fracture network in these areas (ERM 2023b). Such is the case of the Gavin plant BAP, where the Ohio River acts as a major regional groundwater discharge boundary, driving shallow brines towards the surface due to differences in hydraulic head.

Heterogeneity and anisotropy of the fracture network is clearly observed in the bedrock wells installed around the BAP. Hydraulic conductivity was measured to be $4.17\text{E-}02$ cm/sec at bedrock well BAC-11 where observations of significant fractures were made during drilling and geophysical logging. This high hydraulic conductivity value (K value) in BAC-11 is similar to K values measured in the alluvial aquifer. Conversely, substantially lower K values were measured at bedrock wells BAC-09 ($1.23\text{E-}06$ cm/sec) and BAC-19 ($2.65\text{E-}08$ cm/sec), where fewer instances of fracturing were observed. This difference in hydraulic conductivity values between wells screened within the same bedrock unit exemplifies the effect

of fracture network connectivity on hydraulic conductivity and helps to explain why some portions of the alluvial aquifer can be impacted by regional discharge (i.e., near BAC-02) while other areas may not be substantially influenced (i.e., near BAC-01 and BAC-18).

3.1.2 Influence of Pumping Conditions

As water is removed from the alluvial aquifer via pumping, it reduces the pressure that water within the aquifer exerts on the surrounding system. Under non-pumping conditions, the pressure head in the alluvial aquifer counteracts the pressure head in bedrock, decreasing upward vertical gradients and limiting upward migration of groundwater from bedrock. This relationship is more pronounced at couplet pairs BAC-02/BAC-11 and BAC-04/BAC-13 to the north and east and is less pronounced at couplet pairs BAC-01/BAC-09 and BAC-18/BAC-19 on the western and southern sides of the BAP where the effects of pumping are less noticeable due to their further distance from the water supply wells. When the water supply wells are actively pumping, the pressure head in the alluvial aquifer is diminished, allowing for a stronger upward migration of groundwater from bedrock to the alluvial aquifer, as observed at couplet BAC-02/BAC-11 under pumping conditions. A similar observation was made in wells BAC-04/BAC-13 along the eastern portion of the BAP, despite a smaller magnitude change in the resulting vertical gradient.

Vertical gradients were calculated for three gauging events performed in September 2022 (ERM 2023b). Results were depicted on three figures included with the report, which demonstrated consistent upward gradients in each of the four monitoring well couplet pairs around the BAP, under both pumping and non-pumping conditions. The results indicated that the steepest gradient exists in the well couplet closest to the river (east berm) under both pumping and non-pumping conditions. The upward gradient at the north berm was also relatively steep under pumping conditions. However, the vertical gradient at this well couplet decreased under non-pumping conditions due to reduced drawdown within the alluvial aquifer. Both the south berm and west berm couplets had relatively shallow upward gradients, and the difference between pumping and non-pumping observations was minimal, as expected given the distance to the pumping wells north of the BAP.

Comprehensive gauging was conducted in March 2023 to collect groundwater levels to be used in the evaluation of horizontal and vertical gradients. This gauging event took place under non-pumping conditions during a period when the Ohio river stage was 5 feet higher than it was during the September 2022 gauging events. The calculated vertical gradients for the March 2023 event were generally smaller than the gradients observed in 2022 under pumping conditions and were slightly negative. The negative gradients indicate that under conditions of elevated river stage and no pumping, there is a potential for downward hydraulic gradients from the alluvial to the bedrock aquifer. Given the short duration of most flooding events and the frequency of groundwater extraction operations, downward gradients are not expected to persist for extended periods of time. Results of the vertical gradient analysis for 2022 and 2023 are summarized in Table 3-1.

Table 3-1: Summary of Vertical Gradients at the BAP Boundary

Gauging Date	Pumping Condition	Vertical Gradients (ft/ft)			
		BAC-01/BAC-09	BAC-02/BAC-11	BAC-04/BAC-13	BAC-18/BAC-19
9 Sept 2022	Pumping	0.014	0.044	0.078	0.015
15 Sept 2022	Pumping	0.016	0.044	0.084	0.017
28 Sept 2022	Non-Pumping	0.010	0.003	0.061	0.004
23 March 2023	Non-Pumping	-0.006	-0.017	-0.019	-0.003

Note: Positive values represent upward vertical gradient.

To better understand the role of pumping on the dynamic flow field beneath the BAP, transducers were deployed in several wells around the BAP, and continuous long-term high-resolution groundwater elevation data was collected between August 2022 and April 2023. The results of this data indicate that pumping conditions occurred approximately 58% of the time over this period. This indicates that upward vertical gradients related to active pumping conditions were present for greater than half of the monitoring period and therefore, discharge of brine from the shallow bedrock to the overlying alluvial aquifer also occurred for the majority of the monitoring period.

In summary, the fractured sedimentary bedrock and alluvial aquifers are hydraulically connected, and groundwater is typically discharging from bedrock upward into the overlying alluvial aquifer (uppermost aquifer). This hydraulic connection varies spatially due to the heterogeneity and anisotropy of the fracture system, though it is evident that a stronger hydraulic connection exists in the northern and eastern areas of the BAP, closer to the Ohio River. The bedrock units beneath the BAP include the Round Knob and deeper Cow Run sandstone, which is known to contain regional brine (as described in Section 2.1), and upward vertical migration of water from the Cow Run sandstone to the alluvial aquifer beneath the BAP discharges brine to the alluvial aquifer. Additionally, the influence of active pumping as the prevalent groundwater condition exerts an amplified effect on the upward discharge of groundwater from bedrock to the alluvial aquifer.

3.2 Hydraulic Connection to Kyger Creek Generating Station

The installation of supplemental monitoring wells around the BAP in 2022 and implementation of transducers to collect continuous groundwater elevation data provided a higher resolution data set and contributed to an updated understanding of groundwater flow conditions surrounding the BAP area and particularly along the northern portion of the Kyger Creek NFAP. Although the naturally prevailing regional groundwater flow direction is from west to east toward the Ohio River, groundwater flow directions around the BAP are heavily influenced by pumping of Gavin water supply wells FW-15 and FW-1101 located to the north of the BAP. As shown from March 2023 groundwater elevation data, local groundwater flow directions on this day were primarily from west to east toward the Ohio River during non-pumping conditions (Figure 3-1). Groundwater elevations were not calculated in spring 2023 under pumping conditions; however, September 2022 results and the CSM indicate a strong north-northeasterly flow direction toward the water supply wells during pumping conditions (ERM 2023b). The impacts of pumping (and resulting drawdown) are clearly noticeable in wells located north and east of the BAP, and impacts were also evident in alluvial aquifer wells BAC-16 and BAC-18 along the southern boundary of the BAP near the NFAP, where drawdown of up to 0.50 feet was observed during pumping.

High resolution transducer data was evaluated to further analyze the effects of pumping on horizontal hydraulic gradients and flow directions in the alluvial aquifer beneath the BAP. The transducer data hydrographs for alluvial well couplet pairs were plotted with Ohio River stage for the period of August 2022 through April 2023, and horizontal gradients were calculated for each day of the monitoring period

using an R tool that calculates the best fit of a 2D plane to provided water levels based on the geometry of a given well-network. The approach was adapted from the EPA On-line Hydraulic Gradient Magnitude and Direction tool (USEPA 2021). The tool output is an overall flow vector magnitude and direction for the transducer network each day. The hydrograph for well couplet BAC-02 and BAC-10 was used to identify periods and approximate duration of pumping during the monitoring period due to the proximity of these wells to the water supply wells (Appendix A1), and pumping conditions were considered alongside calculated horizontal gradient vectors to determine the effects of pumping on horizontal gradients and flow direction at a higher resolution (Appendix A2-A6).

The results of this analysis revealed a nearly immediate response to pumping, regardless of whether one or both pumping wells were active (Appendix A2). Recovery response of the aquifer back to pre-pumping conditions was noticeable within one day after cessation of pumping, but recovery to the predominant natural groundwater flow direction (west to east) takes place gradually over the course of several days (Appendix A3). Aquifer response to rapid river stage changes indicated periods of steep gradients towards or away from the river depending on the specific moment relative to stage change (Appendix A4). Prior to the 23 March 2023 gauging event, pumps were on intermittently resulting in average flow in the northeasterly direction (Appendix A5). Given the predominant pumping condition during the transducer monitoring period (active pumping observed during approximately 58% of days), the prevailing flow direction for groundwater within the alluvial aquifer beneath the BAP was to the north-northeast (Appendix A6). It is critical to note that recovery of flow direction from north-northeast during pumping back to natural flow conditions (flow to the east) does not take place immediately. This delayed recovery effectively extends the duration of pumping-influenced flow directions and gradients, so the influence of pumping on flow conditions within the alluvial aquifer likely extends beyond the 58% of time calculated specifically for active pumping.

The following key points are associated with the interpreted groundwater flow paths:

- Due to the prevailing east-northeast regional and local groundwater flow direction, the Kyger Creek NFAP is not situated upgradient of the monitoring wells located along the western and northwestern areas of the Gavin BAP.
- Monitoring wells on the south side of the BAP are located downgradient of the Kyger Creek NFAP and upgradient of the BAP.
- During all groundwater flow conditions (pumping and non-pumping), the Kyger Creek NFAP is hydraulically upgradient of the monitoring wells along the southern and southeastern areas of the BAP.
- During pumping conditions, the Kyger Creek NFAP is hydraulically upgradient of the monitoring wells along the southern, eastern, and northeastern areas of the BAP.

It is evident that the Kyger Creek NFAP is hydraulically connected to the downgradient BAP monitoring wells (ERM 2018b; ERM 2021a; ERM 2023b) based on the prevalent northeastern direction of groundwater flow and the presence of the same alluvial aquifer beneath both the Kyger Creek NFAP and the Gavin BAP. Pumping activity of water supply wells FW-15 and FW-1101 creates a clear and nearly immediate anthropogenic influence on groundwater flow directions around the BAP, shifting groundwater flow northward, especially across the eastern half of the BAP. This shift in localized groundwater flow directions further orients the Kyger Creek NFAP as upgradient to a larger area of the BAP and results in an increased hydraulic connection between the Kyger Creek NFAP and the Gavin BAP.

4. CONSTITUENTS ARE PRESENT AT THE ALTERNATE SOURCES OR ALONG THE FLOW PATHWAYS

Groundwater quality at the BAP is influenced by multiple sources, as described in Sections 2 and 3. The Kyger Creek NFAP is identified as the source of boron, low pH, and sulfate. Regional brine is identified as the source of calcium, chloride, and TDS in BAP downgradient groundwater. Mixing of upgradient alluvial groundwater and water from the Ohio River also affect groundwater chemistry downgradient of the BAP. A summary of the constituents present at these sources is provided below.

4.1 Regional Brine

Regional brine is present in the area of the Gavin Plant and locally in bedrock under the BAP. Supplemental monitoring wells BAC-09, BAC-11, BAC-13, and BAC-19, which were installed in the Cow Run Sandstone at the BAP in 2022, all have chemical signatures indicating the presence of brine. The ranges for calcium, chloride, and TDS in bedrock groundwater and downgradient alluvial groundwater (BAC-02, BAC-03, BAC-04 and BAC-05) at the BAP is presented in Table 4-1.

Table 4-1: Comparison of Bedrock Groundwater to Downgradient BAP Groundwater

Analyte	Units	Bedrock Groundwater at BAP	Downgradient Alluvial Groundwater at BAP
Calcium	mg/L	84-2,200	74-140
Chloride	mg/L	870-23,000	35-76
TDS	mg/L	1,500-38,000	460-890

Notes: BAP = Bottom Ash Pond; mg/L = milligrams per liter; TDS = total dissolved solids. Results from samples collected in April 2023.

Cross section view figures for calcium (Figure 4-1a and 4-1b), chloride (Figure 4-2a and 4-2b), and TDS (Figure 4-3a and 4-3b) depict the distribution of concentrations for these three constituents within bedrock and the alluvial aquifer around the area of the BAP. Concentrations of calcium, chloride and TDS are generally one to two orders of magnitude higher in bedrock than in the overlying alluvial aquifer, consistent with a regional brine signature. Considering the upward hydraulic gradients observed at the bedrock/alluvium couplets and the higher concentrations of calcium, chloride and TDS in the bedrock groundwater, the SSIs in the alluvial aquifer are attributable to the discharge of groundwater from bedrock to the overlying alluvial aquifer.

4.2 Kyger Creek North Fly Ash Pond

4.2.1 Boron

Figure 4-4 depicts the distribution of boron concentrations across the BAP monitoring well network and the general horizontal flow path of boron from the northern boundary of the Kyger Creek NFAP under pumping conditions. This plume is consistent with the average observed daily groundwater flow vector as depicted on Figure 4-4, which is predominantly towards the north and/or east. The vector diagram summarizes transducer data collected from 25 August 2022 through 4 April 2023.

Boron concentrations and the approximated extent of boron impacts along the two primary flow directions (northeast and northward) from the Kyger Creek NFAP are also presented in cross section views (Figures 4-5a and 4-5b), as summarized by the following points:

- Monitoring well B-0904 is situated on Kyger Creek property downgradient of the Kyger Creek NFAP and upgradient of the BAP. Monitoring well B-0904 has historically had a higher boron concentration than any BAP well.
- BAC-17 was installed in 2022 as a replicant monitoring point for B-0904 (located on Kyger Creek property and inaccessible for sampling). BAC-17 is located downgradient of the Kyger Creek NFAP, upgradient of the BAP, and is screened in both the separation layer and into the underlying alluvial aquifer, mirroring the well screen of B-0904. The concentration of boron in BAC-17 was 3.6 mg/L in April 2023, a higher concentration than was observed in any downgradient well at the BAP. This concentration is consistent with the range historically observed at B-0904 of 3.7-4.2 mg/L boron.
- The concentration of boron in groundwater downgradient of the BAP ranged from 1.6 mg/L to 2.3 mg/L in the April 2023 samples. Contrarily, the most recent concentration of boron measured in surface water contained in the BAP was 0.44 mg/L in October 2022, and at upgradient wells BAC-01, MW-1, and MW-6 boron concentrations were less than 0.15 mg/L. Dewatering of the BAP has now commenced, and additional surface water measurements for boron will not be available.
- The highest boron concentrations in BAP downgradient wells were measured at wells BAC-04 and BAC-05, which are located nearest to and downgradient from the Kyger Creek NFAP.
- Concentrations of boron decrease with distance downgradient from the Kyger Creek NFAP, along the northeastern flow path (i.e., from BAC-05 to BAC-03).
- Monitoring wells BAC-06 and BAC-07 demonstrated slightly lower concentrations than measured in groundwater from monitoring well BAC-17 (and historically monitoring well B-0904), likely due to the slightly deeper position of the well screens combined with the mixing of water discharged from the underlying bedrock aquifer into the alluvial aquifer (Figure 4-4).

Correspondence obtained from the OEPA regarding Kyger Creek NFAP concluded that groundwater below the NFAP appears to be impacted by a release from the Kyger Creek NFAP and that an assessment of groundwater should be conducted (Appendix B and Appendix C). The Kyger Creek SFAP data also suggest that boron is present in groundwater below both Kyger Creek fly ash ponds. Table 4-2 summarizes boron analytical results from two groundwater sampling events conducted in March and October 2022 at monitoring wells downgradient of the Kyger Creek SFAP (AGES 2023). The highest concentrations were observed on the northeastern and southeastern boundaries of the SFAP. The northeastern boundary was interpreted to be downgradient from the Kyger Creek NFAP in 2020 (AGES 2021).

Table 4-2: Kyger Creek SFAP Boron 2022 Results

Analyte	Units	Maximum	Average
Boron	mg/L	16	8.1

Notes: mg/L = milligrams per liter; SFAP = South Fly Ash Pond.

The average concentration of boron (8.1 mg/L) in the Kyger Creek SFAP for 2022 is substantially higher than the maximum concentration of boron measured in groundwater beneath the BAP (2.3 mg/L) in April 2023 from network wells. The Kyger Creek SFAP and the now-closed NFAP both contain fly ash generated at the Kyger Creek Generating Station. As such, it is reasonable to expect that the chemical characteristics of the fly ash are similar in both units. Given the elevated boron concentrations in groundwater downgradient of the Kyger Creek SFAP and considering that both units are unlined, elevated concentrations of boron in groundwater downgradient of the Kyger Creek NFAP would be expected. Thus, this evidence supports the conclusion that boron is present in groundwater at the Kyger Creek Generating Station.

4.2.2 Sulfate

Figure 4-6 depicts the distribution of sulfate concentrations across the BAP monitoring well network and includes results from four Kyger Creek NFAP monitoring wells screened in the alluvial aquifer. Figure 4-6 also depicts the general horizontal flow path of sulfate from the northern boundary of the Kyger Creek NFAP under pumping conditions, along with the approximated extent of sulfate impacts from the Kyger Creek NFAP and around the BAP. This plume is consistent with the average observed daily groundwater flow vector as depicted on Figure 4-6, which is predominantly towards the north and/or east.

According to the December 2022 Kyger Creek Generating Station *Closed North Fly Ash Pond Groundwater Semiannual Data Analysis* (OVEC 2022), sulfate is present in wells surrounding the NFAP at concentrations exceeding those observed in groundwater around the BAP. Sulfate was present in monitoring well KC-9507 (located to the southeast of NFAP) at 777 mg/L and monitoring well KC-9502 (located to the northeast of the NFAP adjacent to the Gavin property boundary) at 355 mg/L.

4.2.3 pH

The pH of groundwater emanating from the Kyger Creek NFAP was previously measured in well B-0904 and was historically slightly acidic (ERM 2018b). Acidic pH results of 6.17 and 5.63 were measured at B-0904 replicant well BAC-17 in April 2023 and Kyger Creek well KC-9502 (located at the northeast corner of Kyger Creek property) in October 2022, respectively (OVEC 2022; Appendix A). The low pH at KC-9502 has been observed since 1997 (Appendix A) and was identified by OEPA in 1998 (OEPA 1998; Appendix B). Table 4-3 summarizes the pH data in groundwater in sources around the BAP.

Table 4-33: Groundwater and Surface Water pH Values

Location	pH (SU)
Kyger Creek NFAP: Upgradient BAP Groundwater (KC-9502; 25 October 2022)	5.63
Kyger Creek NFAP: Upgradient BAP Groundwater (B-0904; March 2020)	5.26
BAP: Upgradient Groundwater – Northwest (BAC-01, MW-1, and MW-6; April 2023)	6.54-7.14
BAP: Upgradient Groundwater – South (BAC-06, BAC-07, and BAC-17; April 2023)	6.15-6.57
BAP: Downgradient Groundwater (BAC-02 through BAC-05; April 2023)	5.99-6.23
BAP: Bedrock Groundwater (BAC-09, BAC-11, BAC-13, and BAC-19; April 2023)	7.31-7.79
Ohio River (October 2022)	6.89

Notes: BAP = Bottom Ash Pond; NFAP = North Fly Ash Pond; SU = Standard pH Units

The April 2023 results remain consistent with previous ASD Reports for the BAP (ERM 2018b, 2018c, 2019a, 2019b, 2020a, 2020b, 2021b, 2021c, 2022a, 2022b, 2023b). As shown in Figure 4-7, the distribution of pH and the northward flow direction demonstrate that low pH groundwater flows on-site from the Kyger Creek NFAP, where it mixes with upgradient alluvial groundwater, bedrock discharge, and water from the Ohio River, resulting in the intermediate pH observed in groundwater downgradient of the BAP. Monitoring wells BAC-06 and BAC-07 are not similarly impacted by acidic groundwater migrating from Kyger Creek, as evidenced by their higher pH. This is attributable to the well screens of BAC-06 and BAC-07 being substantially deeper than the well screens at B-0904 and BAC-17, lending to more influence by the regional discharge of groundwater from bedrock to the alluvial aquifer, as described further in Section 6.

5. LINKAGES OF CONSTITUENT CONCENTRATIONS AND DISTRIBUTIONS BETWEEN ALTERNATE SOURCES AND DOWNGRAIDENT WELLS

5.1 Regional Brine

As described in Section 3.1, groundwater typically discharges from bedrock upward into the overlying alluvial aquifer (uppermost aquifer). This hydraulic connection varies spatially due to the heterogeneity and anisotropy of the fracture system. The upward vertical migration of groundwater from the Cow Run sandstone to the alluvial aquifer beneath the BAP discharges brine to the alluvial aquifer. Additionally, the influence of active pumping as the prevalent groundwater condition exerts an amplified effect on the upward discharge of groundwater from bedrock to the alluvial aquifer.

Upward vertical gradients have been observed at all four locations around the BAP where bedrock and alluvial monitoring well couplet pairs are installed (ERM 2023b). Gradients were observed to be the steepest closest to the Gavin water supply wells and on the eastern side of the BAP nearest to the Ohio River. Pumping conditions were found to amplify upward vertical gradients by reducing pressure exerted by water within the alluvial aquifer, which normally counteracts pressure driving water upward from bedrock. The prevalence of pumping conditions (active pumping during approximately 58% of days) drives upward vertical gradients, which are steeper in areas of greater fracture density and interconnectedness within the bedrock aquifer. Additionally, delayed aquifer recovery from pumping conditions extends the duration under which the alluvial aquifer experiences upward vertical gradients related to pumping conditions.

Concentrations of calcium, chloride, and TDS in bedrock groundwater at the BAP as observed at BAC-11 are significantly higher than those observed in downgradient monitoring wells (Table 5-1). While the relative concentrations were lower at BAC-13 on the eastern side of the BAP, this may be due to lower connectivity and conductivity of the fracture sets. The measured hydraulic conductivity at BAC-11 was 4.17E-02 cm/sec, which is relatively high for bedrock and suggests that this well has a high degree of connectivity. Therefore, the relative concentrations observed in the downgradient monitoring wells are consistent with mixing of bedrock groundwater and groundwater from the alluvial aquifer.

Table 5-1: Ratio of Bedrock Groundwater to Downgradient BAP Groundwater for Regional Brine

Analyte	Units	Brine-Impacted Groundwater in Bedrock Beneath BAP (As measured at BAC-11)	Average Downgradient Well at BAP	Bedrock to Alluvial Aquifer Ratio
Calcium	mg/L	2,200	93	24:1
Chloride	mg/L	23,000	52	444:1
TDS	mg/L	38,000	588	65:1

Notes: BAP = Bottom Ash Pond; mg/L = milligrams per liter; TDS = total dissolved solids. Results from sample collected in April 2023.

5.2 Kyger Creek Generating Station

As described in Section 3.2 and Appendix C, the average direction of groundwater flow in the alluvial aquifer is to the north and east from Kyger Creek across the eastern side of the BAP towards the water supply wells. Figures 4-4 and 4-6 show the linkage for boron and sulfate between the alternate source and the downgradient monitoring wells. In addition, under non-pumping conditions (Figure 3-1), groundwater reverts to the eastward flow and constituents migrate towards the Ohio River.

5.2.1 Boron and Sulfate

The maximum boron concentration measured in onsite groundwater monitoring wells at the BAP was 3.6 mg/L at BAC-17. The average boron concentration observed at the adjacent SFAP in 2021 was 8.1 mg/L, with a maximum boron concentration reported to be 16 mg/L. The maximum sulfate concentration measured in upgradient onsite groundwater monitoring wells at the BAP was 290 mg/L at BAC-22 in spring 2023, while the maximum sulfate concentrations observed at the NFAP in fall 2022 were 355 mg/L in well KC-9502 located in the northeast corner of the NFAP and 777 mg/L in well KC-9507 located in the southeast corner of the NFAP. The ratio of the maximum Kyger Creek concentrations to the maximum downgradient BAP well is provided in Table 5-2. These ratios, and the predominance of pumping-influenced flow directions to the northeast demonstrate the linkage between boron and sulfate observed in downgradient BAP wells and Kyger Creek, the alternate source.

Table 5-2: Ratio of Kyger Creek Groundwater to Downgradient BAP Groundwater for Boron/Sulfate

Analyte	Units	Maximum Concentration			Ratio: Onsite to Downgradient BAP	Ratio: Kyger Creek to Downgradient BAP
		Onsite (BAC-17/ BAC-22)	Kyger Creek NFAP/SFAP (2022)	Downgradient BAP Well (BAC-02/BAC-05)		
Boron	mg/L	3.6	16	2.3	1.6	7:1
Sulfate	mg/L	290	777	390	0.7	2:1

Notes: BAP = Bottom Ash Pond; mg/L = milligrams per liter.

Results from Gavin samples collected in April 2023 and Kyger Creek samples collected in 2022.

5.2.2 pH

Table 5-3 summarizes the measured range of pH values measured at Kyger Creek, the BAP and the Ohio River. The observed pH SSIs at the BAP were below the lower prediction limit of 6.63, which was derived based on data from MW-1, BAC-01 and MW-6. BAP background groundwater, BAP bedrock groundwater and water from the Ohio River all have relatively neutral pH. Groundwater migrating from Kyger Creek NFAP has an acidic pH, as confirmed by the October 2022 pH measurement of 5.63 at monitoring well KC-9502, which is located approximately 150 feet south of the BAP. As discussed in Section 4.2.3, the low pH at KC-9502 has been observed since 1997 (Appendix A) and was identified by OEPA in 1998 (Appendix B). As discussed in Section 3, groundwater migrating northward from Kyger Creek mixes with upgradient groundwater migrating from the west and can mix with Ohio River water during high river stage conditions. This mixing of neutral and acidic waters causes groundwater at the downgradient BAP wells to become slightly acidic. These observations demonstrate the linkage between low pH groundwater observed in downgradient BAP wells and low pH groundwater from Kyger Creek, the alternate source.

Table 5-3: Comparison of Bedrock, Kyger Creek, and Downgradient BAP Groundwater for pH

Analyte	Units	Lowest Measured		Upgradient Wells West of BAP	Bedrock Wells	Ohio River	Downgradient BAP Wells (Mixing Area)
		Onsite BAP Well (BAC-07)	Kyger Creek NFAP (KC-9502)				
pH	SU	6.15	5.63	6.54 - 7.14	7.31 – 7.79	6.89	5.99 – 6.23

Notes: BAP = Bottom Ash Pond; SU = Standard pH Units.

Results from Gavin samples collected in April 2023, Ohio River and Kyger Creek samples collected in October 2022.

6. RELEASES FROM THE BAP ARE NOT SUPPORTED AS THE SOURCES

6.1 Evaluation of Groundwater Mounding at the BAP

Programmable electronic data loggers equipped with a pressure-sensitive water level transducer were installed at four alluvial aquifer monitoring well transects (eight monitoring wells) at the southern, western, northern, and eastern boundaries of the BAP to evaluate the potential for groundwater mounding. These monitoring well couplets were chosen based on their proximity to one another, and to the BAP. Each well couplet included a well on top of the berm directly adjacent to the BAP, and the other at the exterior base of the berm, which allowed for the evaluation of hydraulic heads and resulting hydraulic gradients between each couplet. A signature of mounding would be identified by consistently higher groundwater elevations at the well located at the top of the berm (closer to the BAP) compared to its counterpart at the base of the berm (further from the BAP). The four well couplet pairs included:

- BAC-01 (base of berm) and BAC-08 (top of berm), installed at the western boundary of the BAP
- BAC-10 (base of berm) and BAC-02 (top of berm), installed at the northern boundary of the BAP
- BAC-12 (base of berm) and BAC-04 (top of berm), installed at the eastern boundary of the BAP
- BAC-16 (base of berm) and BAC-18 (top of berm), installed at the southern boundary of the BAP

Groundwater elevations were compared over time for each well couplet to evaluate whether mounding was occurring. As a measure of data quality, transducer data were reviewed against corresponding manual water level measurements to ensure accuracy and consistency between the two datasets. In addition, a stilling well was installed in the Ohio River by permanently securing a steel pipe to a pier located in the river adjacent to the BAP. The top of the stilling well was surveyed which allowed manually and electronically recorded data to be converted to river stage elevation data, which was also reviewed against manual and transducer-based groundwater elevations. Transducers were deployed at the eight couplet wells between August 2022 and April 2023, with an intermittent period in October 2022 where data was not collected to allow for data download and other field activities. During the transducer deployment periods, water supply wells FW-15 and FW-1101 (located north of the BAP) were periodically cycled on and off for normal plant usage, which allows evaluation of groundwater elevations under both pumping and non-pumping conditions.

The conclusion of the initial analysis of data sets from August through December 2022 is that mounding at the BAP is not observed (ERM 2023b). Additional groundwater elevation data are being collected at the BAP in 2023, and a more comprehensive evaluation of the potential for groundwater mounding will be completed when long-term groundwater elevation trends become available.

6.2 Observed Boron Concentrations

Surface water samples at the BAP and Reclaim Pond were collected during each groundwater sampling event between 2016 and 2022. Boron has consistently been detected in surface water at 0.50 mg/L or lower, except for one event in 2019 when boron was measured at 1.30 mg/L, Table 6-1 compares the boron concentrations measured in surface water and monitoring wells. Based on this data, the boron concentration in the BAP surface water is too low to be the source of boron to the downgradient BAP wells. In contrast, groundwater flowing towards the BAP from under the Kyger Creek NFAP has consistently had a boron concentration higher than what is detected in downgradient groundwater. The average concentration at B-0904 from March 2018 to March 2020 was 3.95 mg/L, and BAC-17 had a boron concentration of 3.6 mg/L in April 2023, making the NFAP the most likely source.

Boron in the environment typically exists as boric acid or the borate ion. Both species are water-soluble and are not sensitive to redox conditions. Although adsorption/desorption reactions occur, adsorption is

strongest in slightly-to-moderately basic conditions (pH 7.5-10), which are not observed in groundwater around the BAP (ATSDR 2010). Therefore, it is not likely that oxidizing conditions present in surface water would impact boron concentrations in the BAP, nor is it likely that adsorption/desorption processes are significantly impacting the concentrations of boron in groundwater surrounding the BAP. Boron is expected to act as a conservative tracer due to its high solubility and mobility in water.

Table 6-1: Bottom Ash Pond Boron Results

Analyte	Units	Bottom Ash Pond ^a	Reclaim Pond ^a	Downgradient BAP Wells (Average) ^b
Boron	mg/L	0.44	0.51	2.0

^a Average sample results from February 2018 to October 2022

^b Sample results from April 2023

6.3 Chemical Fingerprints

The geochemical fingerprints of surface water from the BAP, from upgradient groundwater west of the BAP, from groundwater flowing from the Kyger Creek NFAP, and from surface water from the Ohio River were evaluated using the concentrations of parameters that are not expected to sorb strongly or participate in redox reactions. Boron, chloride, and potassium were chosen for these comparisons due to their high water solubility, limited redox chemistry, and presence in groundwater around the BAP. Boron-chloride and boron-potassium plots are shown in Figure 6-1 and Figure 6-2, respectively.

The samples presented on the concentration plots were collected from 2012 through 2023. The primary observations based on the concentration plots (Figures 6-1 and 6-2) are the following:

- Multiple samples collected from a single location (e.g., the Ohio River or Well BAC-01) tended to be tightly clustered, indicating that the chemical signatures of individual locations were consistent over time.
- Monitoring wells collected from a similar environment (i.e., upgradient wells located west of the BAP) tended to have similar concentrations and plot near each other.
- Groundwater from BAP upgradient wells MW-1, BAC-01, and MW-6 has a unique signature with relatively low boron, chloride, and potassium. The Ohio River has similar concentrations of boron and chloride, but generally has a higher concentration of potassium.
- Groundwater migrating from the Kyger Creek NFAP is captured by monitoring wells B-0904 and BAC-17, which was installed to replace B-0904. Concentrations of boron, chloride, and potassium at these wells are similar. These wells are characterized by high boron and low chloride and potassium.
- Groundwater from BAP downgradient wells BAC-02, BAC-03, BAC-04, and BAC-05 has a signature similar to groundwater migrating onto Gavin from the Kyger Creek NFAP (B-0904 and BAC-17). BAC-05, which is located closest to the Kyger Creek NFAP, plots closest to the Kyger Creek groundwater, followed by BAC-04, BAC-03, and BAC-02, respectively. This is consistent with their distance from the Kyger Creek NFAP. Groundwater at these wells is characterized by high boron, with elevated chloride and potassium relative to Kyger Creek groundwater due to the influence of bedrock groundwater. Supplemental monitoring wells BAC-12 and BAC-14 have chemical fingerprints consistent with other BAP downgradient wells. Groundwater local to monitoring well BAC-10 has slightly lower concentrations of boron, consistent with the attenuation of boron as groundwater flows away from the Kyger Creek NFAP.

- Groundwater from monitoring wells BAC-06 and BAC-07 show a distinct signature with similar concentrations of chloride and potassium to Kyger Creek groundwater, with lower but still elevated concentrations of boron. These wells are screened at a deeper interval than B-0904 and BAC-17, indicating that the boron plume flowing from the Kyger Creek NFAP is primarily located in shallower groundwater. Supplemental monitoring wells BAC-16 and BAC-18 have chemical fingerprints consistent with those at BAC-06 and BAC-07.
- Groundwater from supplemental bedrock wells BAC-09, BAC-11, BAC-13, and BAC-19 have a unique signature with moderate concentrations of boron (comparable to those observed at some upgradient locations) and very high chloride. Chloride concentrations are up to three orders of magnitude higher in bedrock groundwater than in alluvial background groundwater.
- Groundwater from supplemental upgradient monitoring wells located farther to west (BAC-21 and BAC-22) or to the northwest of the BAP (BAC-23) have a signature distinct from upgradient groundwater collected from the historical locations. Concentrations of boron, chloride, and potassium are slightly higher in these locations than in the historical upgradient wells.
- Groundwater from supplemental separation layer monitoring well BAC-15 has a distinct signature characterized by moderate boron and potassium and very low chloride. This well has limited connectivity to surrounding groundwater due to the low hydraulic conductivity of the separation layer.
- BAP surface water has a signature distinct from downgradient groundwater, characterized by moderate boron and chloride, with potassium concentrations higher than both upgradient and downgradient groundwater.

Based on the data summarized above and the chemical fingerprints of the groundwater at issue, the BAP 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

This ASD Report provides background groundwater quality data for the fractured sedimentary bedrock aquifers that underlie the Plant and surrounding area. Regional groundwater flow regimes through fractured bedrock near the BAP were established after the last deglaciation, which occurred approximately 14,000 years ago (Hansen 2017). Assuming a conservatively high effective porosity of 1 percent, estimated groundwater velocity values for the Morgantown Sandstone and Cow Run Sandstone units are approximately 78 feet per year and 45 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 BAP monitoring program.

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). The discharge of brines 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). At the site, upward gradients between bedrock and alluvial wells near the Ohio River are observed along the BAP, and locations with the strongest upward gradients generally have high hydraulic conductivities, which supports the conclusion that bedrock and alluvial aquifers are hydraulically connected on-Site with the predominant flow direction being upward. Additionally, the influence of pumping conditions further contributes to upward vertical gradients, as described in previous sections. Total dissolved solids concentrations observed in bedrock wells around the BAP are consistent with observations seen at brine-freshwater mixing zones at other brine-impacted sites (Yager et al. 2017). Therefore, the regional and site-scale data are in strong agreement, and lead to the conclusion that regional brines are discharging under the BAP and mixing with alluvial groundwater underneath the BAP.

7.2 Kyger Creek Generating Station

The Kyger Creek NFAP was constructed in 1955 on a native soil base and without an engineered liner system to capture and contain leachate. The unit was used to manage fly ash until it was drained and closed from 1998 to 2000. However, despite closure, ash is still present within the Kyger Creek NFAP (AEP 1994). The NFAP was not capped with a low permeability barrier at the land surface, and therefore no barrier exists to prevent infiltration of precipitation, subsequent migration of water through highly-leachable CCR materials in the subsurface, and resulting recharge of boron-impacted water to the alluvial aquifer. Approximately 900,000 cubic yards of boiler slag and boiler slag fines were also used as surface fill and as material to build berms. Both materials yielded low pH samples during leachability testing (OEPA 1997).

Groundwater in the alluvial aquifer flows from the Kyger Creek NFAP in a northeasterly direction toward the Gavin BAP. Given the six decades that this unit has contained fly ash and the alluvial aquifer groundwater velocity estimates of 140 to 290 feet per year, ample time has passed for groundwater to migrate from the Kyger Creek NFAP beneath the BAP. The following evidence therefore supports that the Kyger Creek NFAP is the alternate source of boron, sulfate, and low pH:

- The low concentration of boron in water from the BAP and the distribution of boron in groundwater beneath the BAP (Section 4 and Section 6).

- Analytical results from groundwater samples collected for the Kyger Creek NFAP and SFAP suggest boron and sulfate are present in Kyger Creek groundwater and groundwater has an acidic pH. Given the similarity in construction and types of CCR managed, it is reasonable to interpret Kyger Creek SFAP groundwater results for boron are also representative of Kyger Creek NFAP groundwater quality (Section 4).
- The chemical fingerprinting evidence suggests groundwater from Kyger Creek mixes with upgradient groundwater from west of the BAP, groundwater discharging from the bedrock, and water from the Ohio River water under the eastern portion of the BAP (Section 6).
- The OEPA has concluded that groundwater appears to be impacted by a release (i.e., elevated conductivity, sulfate, TDS, and low pH) from the Kyger Creek NFAP (Appendix A and Appendix B).

In addition, a comparison of the materials managed provides evidence that the BAP is not the source of boron – that the Kyger Creek NFAP is a more likely source of boron. The Kyger Creek NFAP has contained fly ash since 1955, while the BAP has been used primarily for the management of bottom ash since 1974. Bottom ash and fly ash have different physical and chemical properties; laboratory investigations have demonstrated elements (including Appendix III constituents) have a much greater potential to leach from fly ash compared to bottom ash (Cox et al. 1978; Jones et al. 2012). The higher concentrations of boron observed in Kyger Creek SFAP groundwater compared to the lower concentration of boron observed in groundwater downgradient of the BAP are consistent with the known leaching properties of fly ash and bottom ash. Boron, therefore, is more likely to leach from the Kyger Creek SFAP/NFAP than the BAP based on the historical use of each unit. These observations support the conclusion that the Kyger Creek NFAP, and not the BAP, is the source of boron in groundwater under the BAP. Thus, the data supporting these conclusions are historically consistent with hydrogeologic conditions and findings of the BAP monitoring program.

8. CONCLUSIONS

The SSIs identified in this ASD Report are based on results from downgradient BAP monitoring well samples collected in April 2023. Review of data for quality assurance and statistical comparison was complete on 14 July 2023. In response to the SSIs, this ASD Report was prepared within the required 90-day period in accordance with 40 CFR § 257.94(e)(2).

All SSIs in the downgradient BAP monitoring wells have been determined to result from alternate sources: discharge of regional brine present in bedrock and the Kyger Creek Power Plant NFAP. Table 8-1 summarizes the six lines of evidence for each of the SSIs.

In conclusion, the BAP is not the source of the SSIs associated with the first semiannual sampling event groundwater results for 2023. Thus, Gavin will continue detection monitoring at the BAP in accordance with 40 CFR § 257.94(e)(2).

Table 8-1: BAP 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 BAP	Data Are Historically Consistent with Hydrogeologic Conditions
Boron	BAC-02 BAC-03 BAC-04 BAC-05	Kyger Creek NFAP	X	X	X	X	X
Calcium	BAC-02	Regional Brine	X	X	X	X	X
Chloride	BAC-02 BAC-03 BAC-04 BAC-05	Regional Brine	X	X	X	X	X
pH	BAC-02 BAC-03 BAC-04 BAC-05	Kyger Creek NFAP	X	X	X	X	X
Sulfate	BAC-02 BAC-03 BAC-04 BAC-05	Kyger Creek NFAP	X	X	X	X	X
TDS	BAC-02 BAC-05	Regional Brine	X	X	X	X	X

Notes: BAP = Bottom Ash Pond; NFAP = North Fly Ash Pond; SSI = statistically significant increase; TDS = total dissolved solids; USEPA = United States Environmental Protection Agency.

PROFESSIONAL ENGINEER CERTIFICATION

I hereby certify that I, or an agent under my review, have prepared this Alternate Source Demonstration Report for the Bottom Ash Pond 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: 10/12/2023

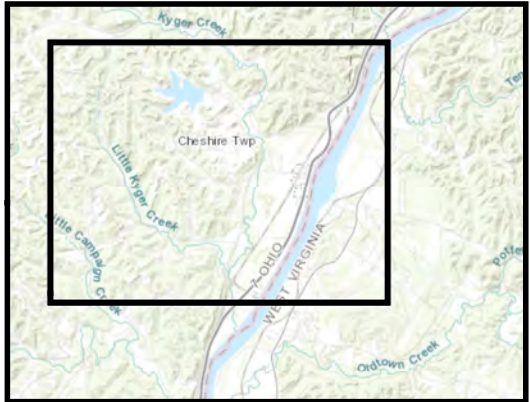
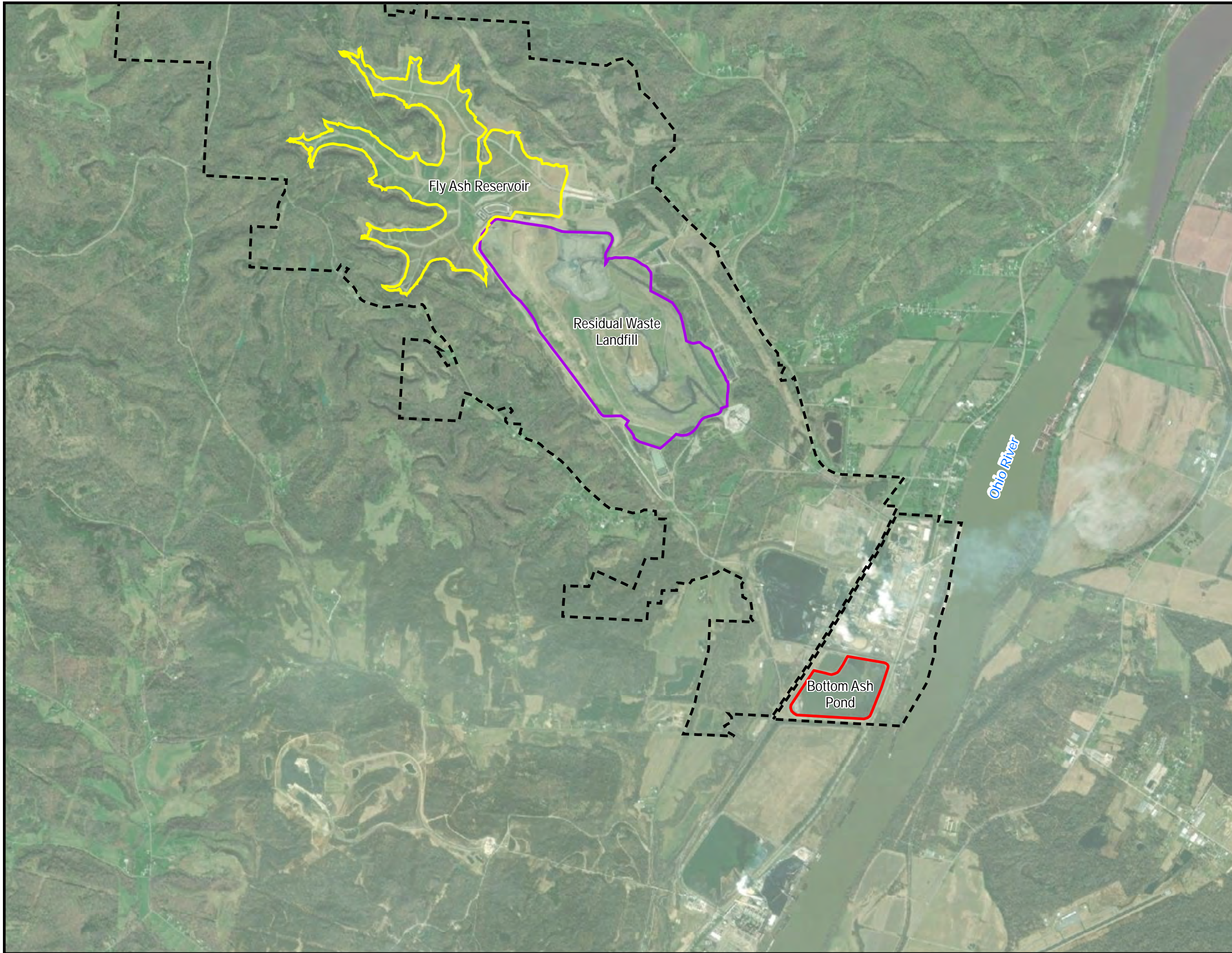
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FIGURES



Legend

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

NOTES:
 1. Aerial Imagery: ESRI World Imagery
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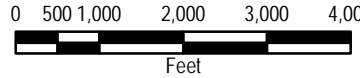
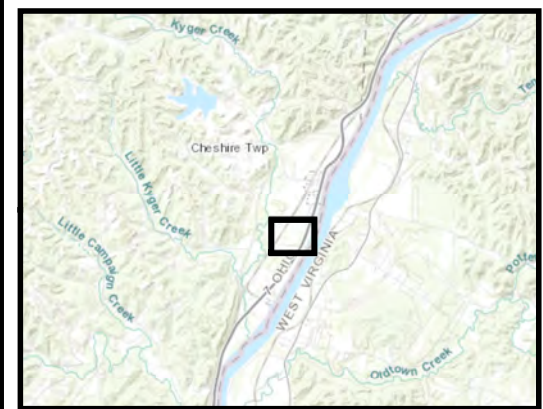


Figure 1-2: Bottom Ash Pond Location
 Gavin Generating Station
 Cheshire, Ohio



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Legend

- New 2022 Monitoring Well
- Federal Upgradient Monitoring Well
- Federal Downgradient Monitoring Well
- Upgradient Monitoring Well (Not in Federal Program)
- Water Supply Well
- Piezometer
- BAC Alluvial Aquifer Well
- Alluvial Aquifer/Separation Layer Well
- Separation Layer Well
- Bedrock Well
- Approximate location of Bottom Ash Pond boundary
- Gavin Property Boundary

NOTES:

1. Aerial Imagery: ESRI World Imagery
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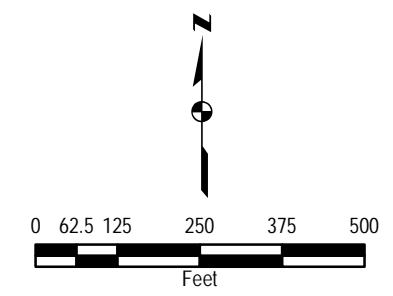
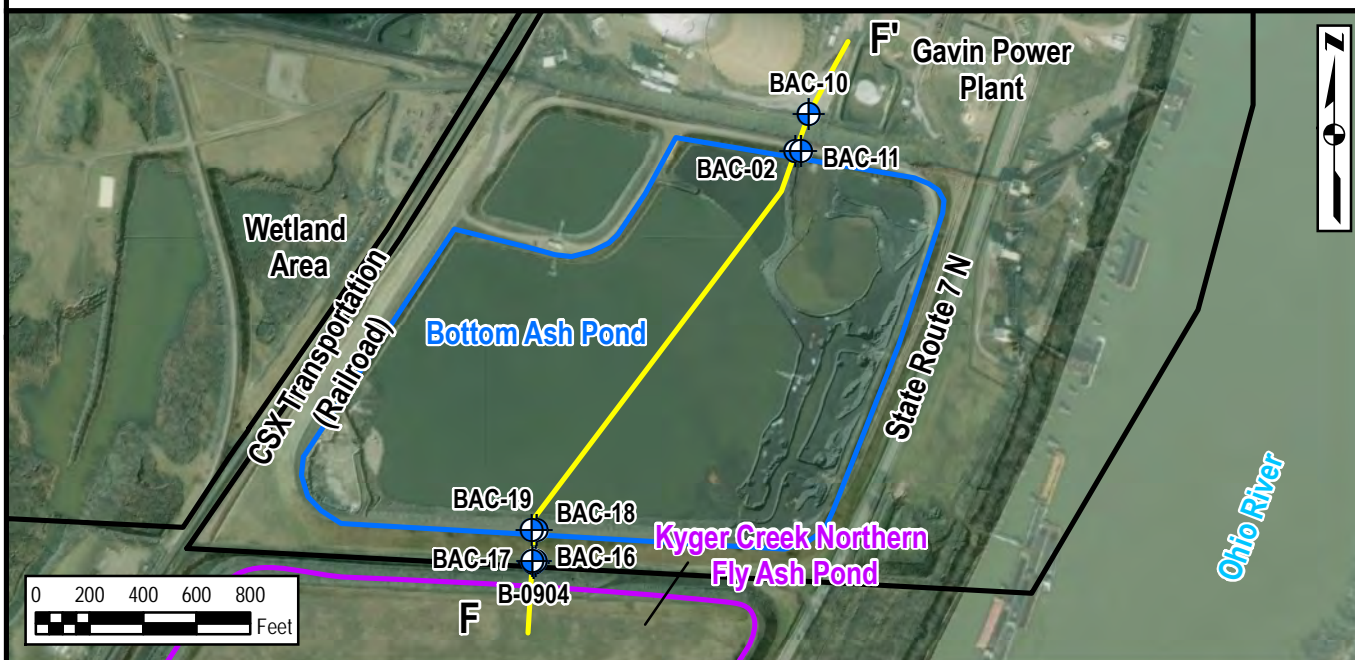
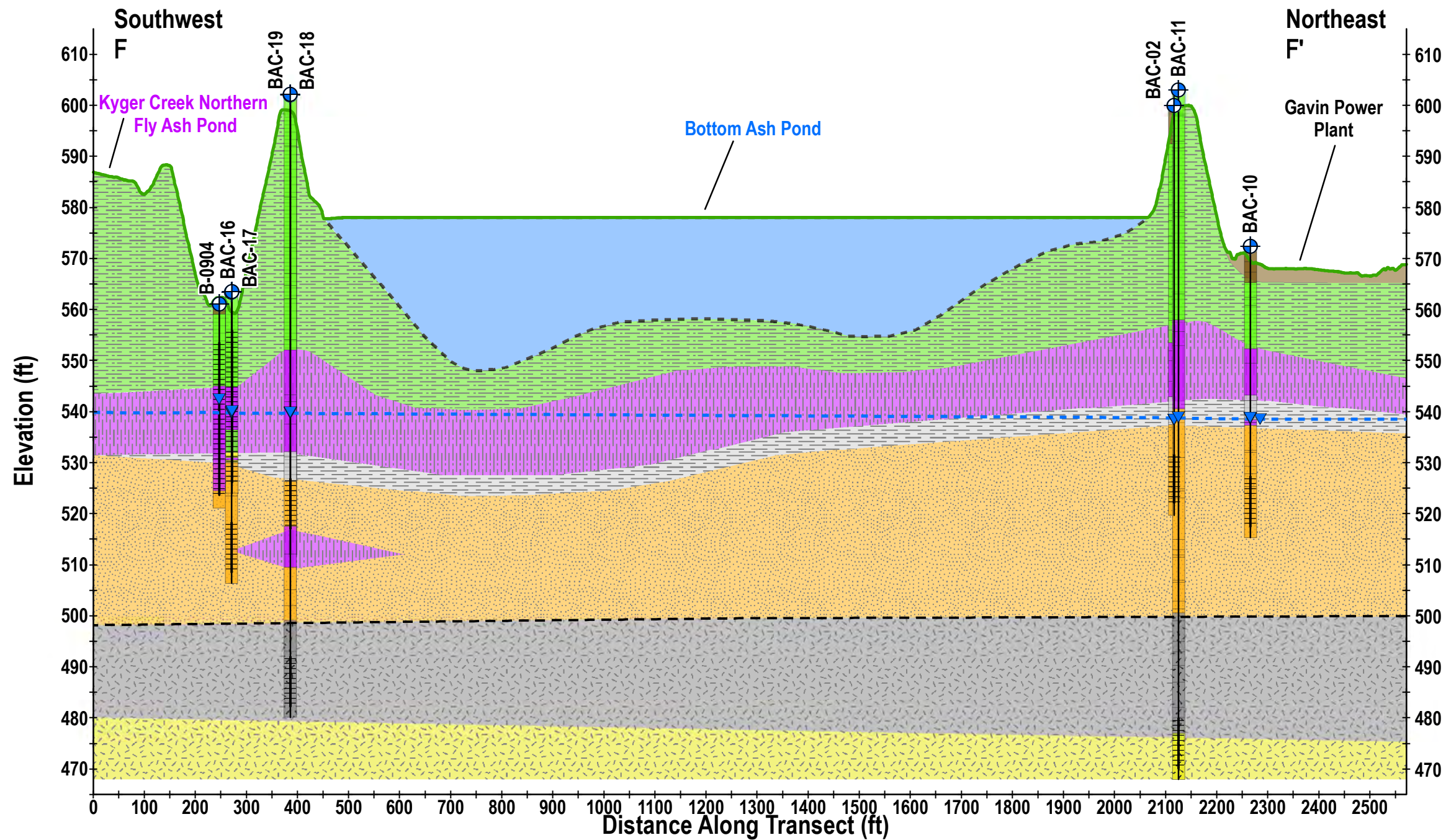


Figure 1-3: Bottom Ash Pond Monitoring Well Network
Gavin Generating Station
Cheshire, Ohio



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Legend

- Monitoring Well
- Water Level (September 2022)
- Potentiometric Surface
- Surface Profile
- Approximate Bedrock Surface
- Total Depth
- Well Screen
- Transect
- Site Boundary
- Bottom Ash Pond Boundary
- Kyger Creek Northern Fly Ash Pond
- Base of Bottom Ash Pond

Generalized Lithology

- Road Material
- Clay and Silt
- Sandy Clay and Silt
- Sand and Clay
- Sand and Gravel
- Sand
- Claystone/Siltstone
- Sandstone

Separation Layer

- Clay and Silt
- Sandy Clay and Silt

Alluvial Aquifer

- Sand and Gravel
- Sand

Bedrock Units

- Claystone/Siltstone
- Sandstone

NOTE:

1. Water level elevation from September 28, 2022.
2. Surface profile from OGRIP LiDAR 2020.
3. Elevation is exaggerated 10X.
4. Boring ground surface elevations, bedrock surface are projected along transect line.
5. The geology is generalized based on the lithology descriptions.
6. The bottom elevation profile of the bottom ash pond is from Integrated Solutions, Inc CPT borings conducted between 3/18/2020 to 5/28/20.





Figure 1-4: Bottom Ash Pond Cross Section
Gavin Power, LLC
Cheshire, Ohio



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Legend

-  Federal Upgradient Monitoring Well
-  Federal Downgradient Monitoring Well
-  Gavin Bottom Ash Pond
-  Kyger Creek Fly Ash Ponds

NOTES:

1. Kyger Creek features are from AEP. 1994. Hydrogeologic Site Investigation Plan for the Proposed North Fly Ash Pond Closure, Kyger Creek Station, Ohio Valley Electric Corporation, Gallia County, Ohio.
2. Aerial Imagery: ESRI World Imagery
Reproduced under license in ArcGIS 10.8

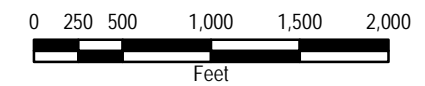
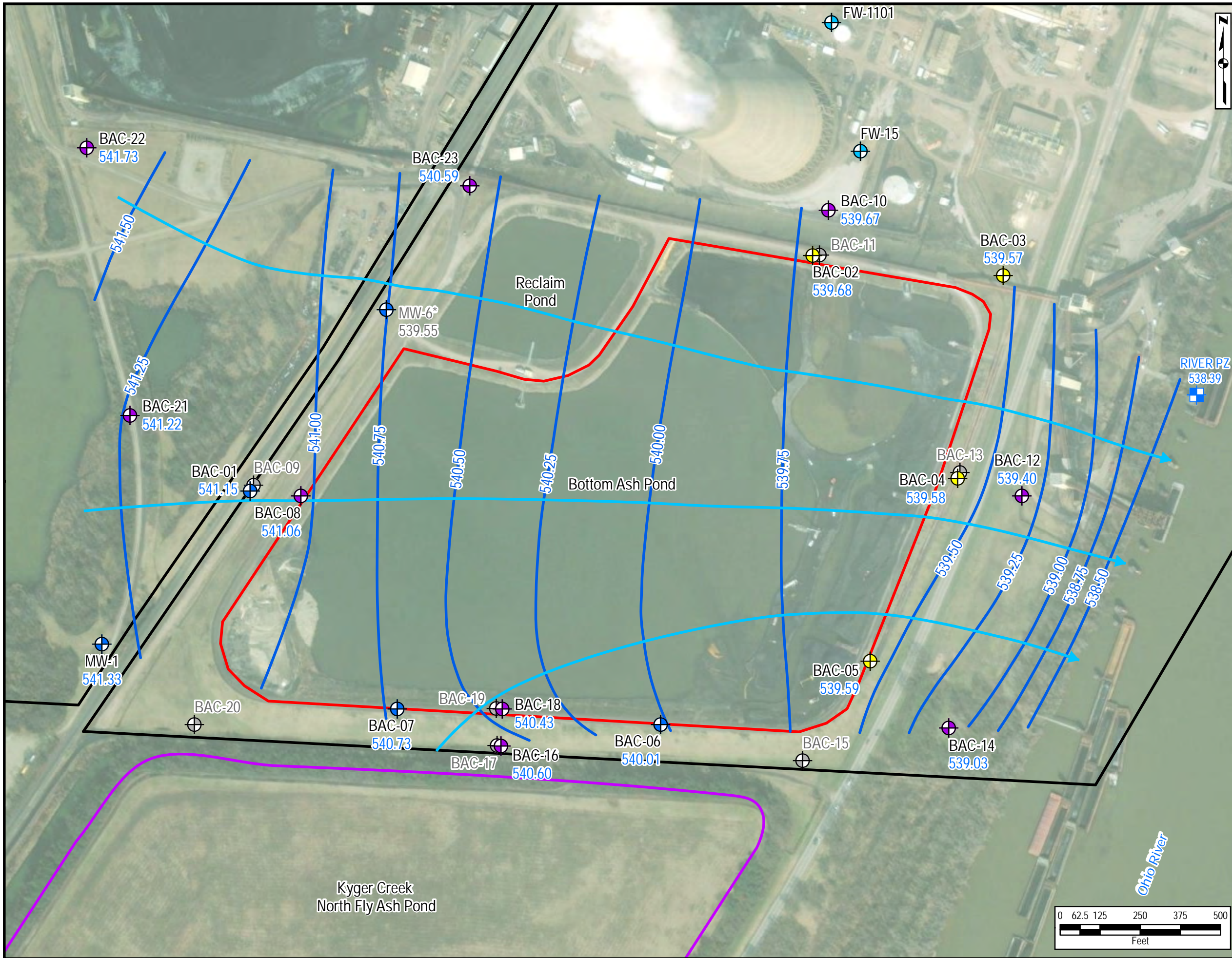


Figure 2-1: Kyger Creek Generating Station Location
Gavin Generating Station
Cheshire, Ohio



M:\SH\proj\GIS\AC\Backstage_ERP\GIS\PowerPlant\MM\02022_04\ASD_Report\figure_1_KygerCreekStationLocation_20221221.mxd - K:\City\MapInfo - 12/28/2022



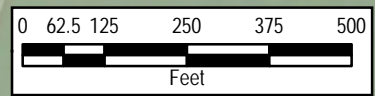
Legend

- New 2022 Monitoring Well
- Federal Upgradient Monitoring Well
- Federal Downgradient Monitoring Well
- River Stilling Well Location
- Bedrock or Silt/Clay Well (excluded from contouring)
- Water Supply Well
- 539.85 Groundwater Elevation (ft)
- Spring 2023 Interpreted Groundwater Elevation Contours
- Spring 2023 Interpreted Groundwater Flow Direction
- Approximate Location of Bottom Ash Pond Boundary
- Gavin Property Boundary
- Approximate Location of Kyger Creek North Fly Ash Pond Boundary

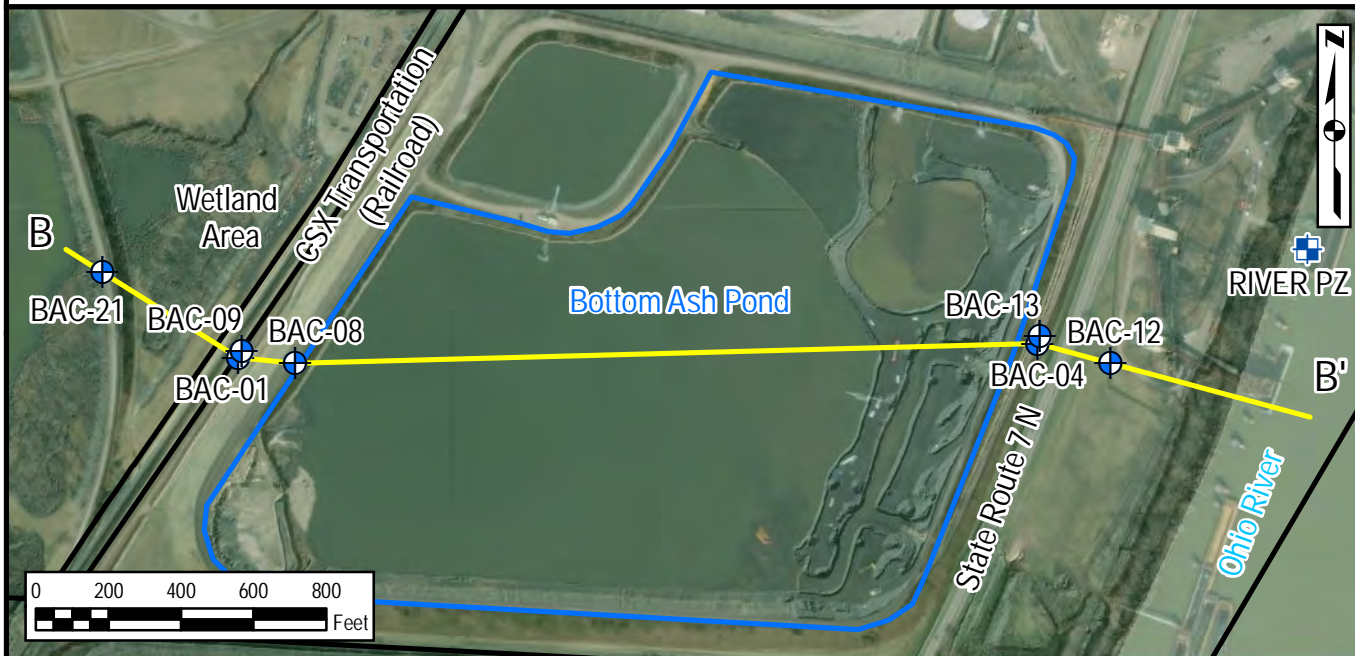
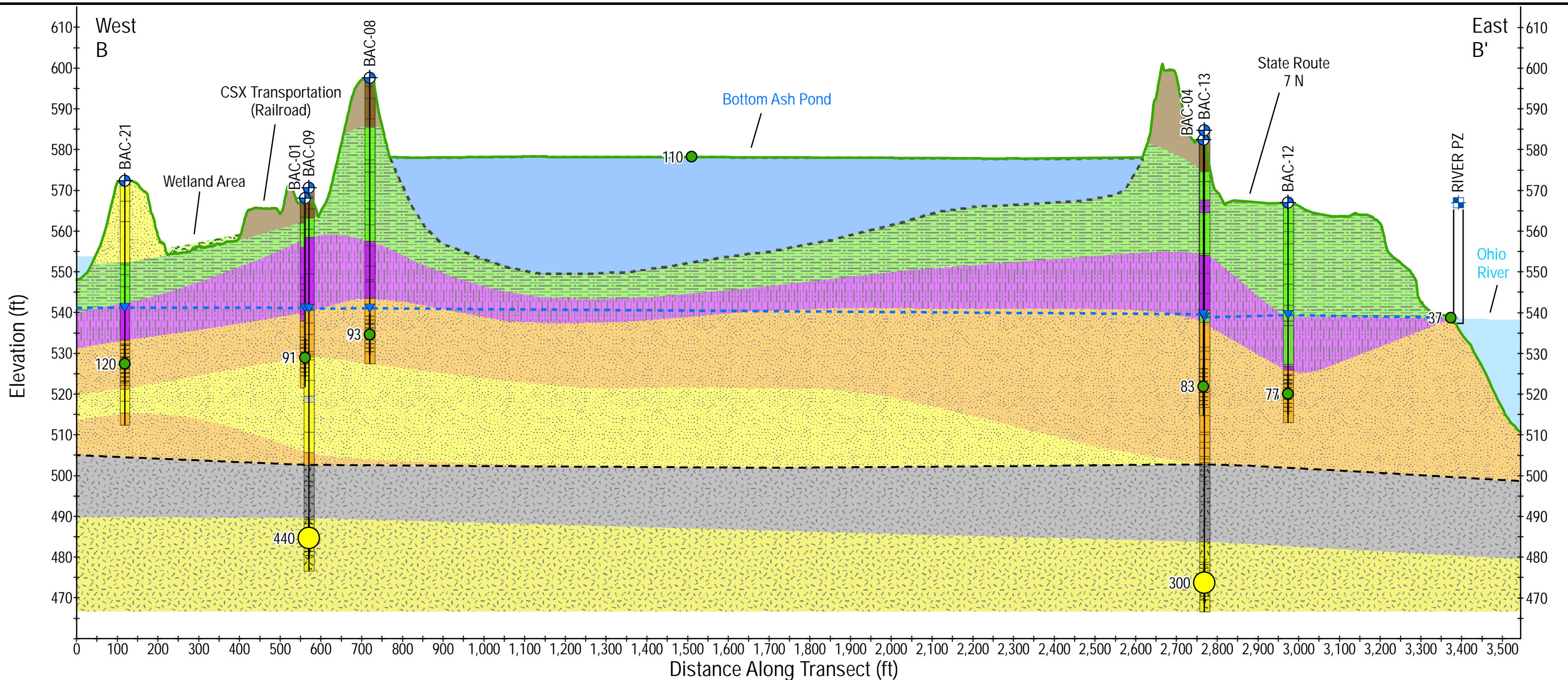
NOTES:

1. Monitoring wells were gauged on 3/23/2023 and 3/24/2023.
2. Wells not used for contouring of the Alluvium include wells screened in silt/clay or bedrock.
3. Flow lines indicate a general groundwater flow direction within alluvium beneath the Bottom Ash Pond. They do not represent all potential flow paths within the alluvium, nor do they represent preferential flow paths or convergence of flow.
4. *MW-6 not included in contour interpretation.
5. Aerial Imagery: ESRI World Imagery Reproduced under license in ArcGIS 10.8

Figure 3-1: Interpreted Groundwater Potentiometric Contour Map Spring 2023 - Non-Pumping Conditions



M:\Projects\AC\Blackstone_Spring2023\Figures\Fig_3-1_GWContours_Spring2023\Fig3-1_GWContours_Spring2023.mxd - Kelly McGee - 3/24/2023



Legend

- Monitoring Well
- Piezometer
- Water Level (March 2023)
- Potentiometric Surface
- Surface Profile
- Approximate Bedrock Surface
- Total Depth
- Well Screen
- Transect
- Site Boundary

Bottom Ash Pond Boundary

- Bottom Ash Pond Boundary
- Base of Bottom Ash Pond

Wetland Area

- Wetland Area

Calcium Concentrations in Groundwater (mg/L)

- <129
- 129 - 200
- 200 - 500
- 500 - 1,000
- >1,000

Generalized Lithology

- Road Material
- Clay and Silt
- Sandy Clay and Silt
- Sand and Clay
- Sand and Gravel
- Sand
- Claystone/Siltstone
- Sandstone

Separation Layer

- Clay and Silt
- Sandy Clay and Silt

Alluvial Aquifer

- Sand and Gravel
- Sand

Bedrock Units

- Claystone/Siltstone
- Sandstone

Surface Water

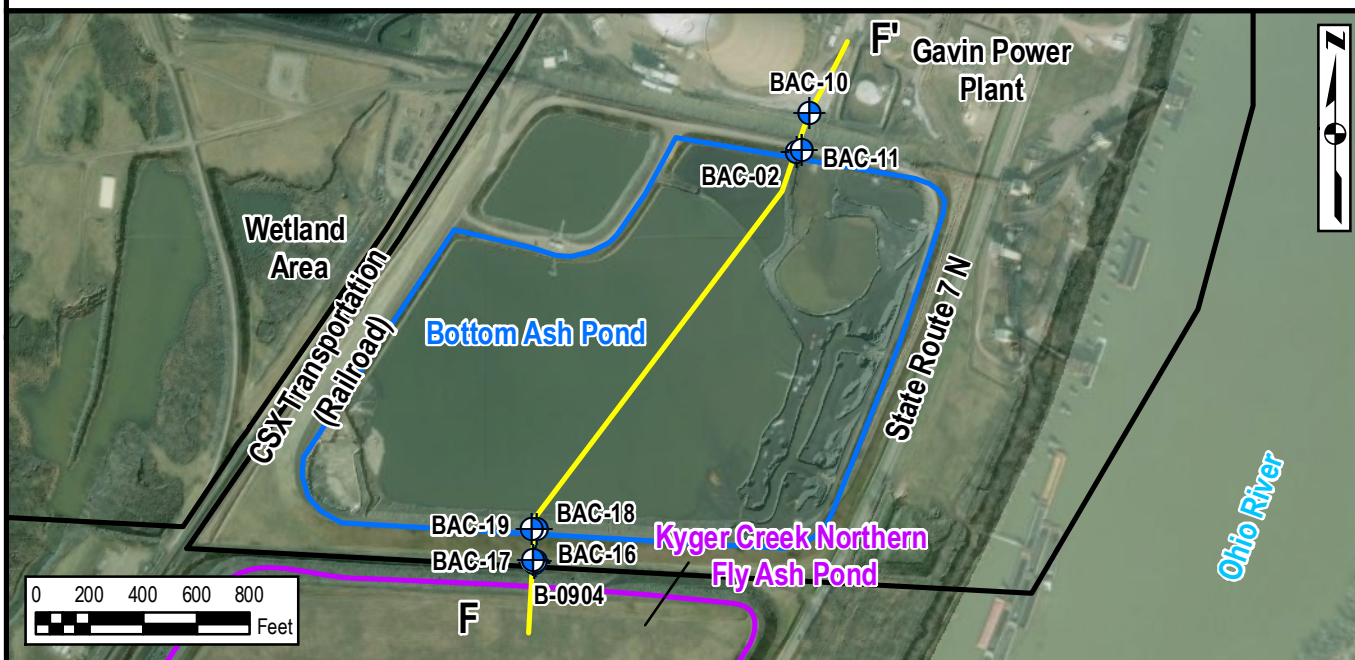
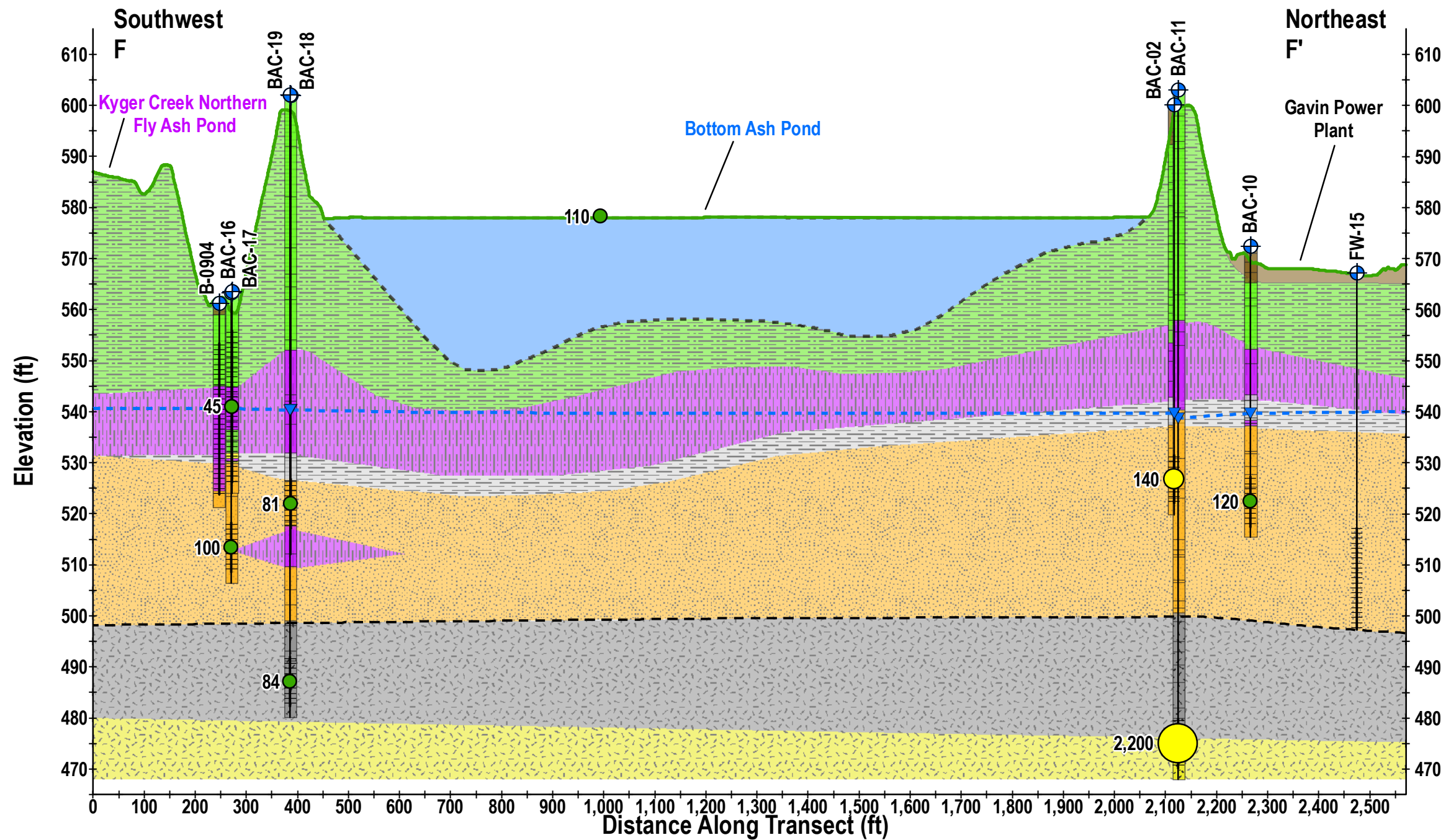
- Surface Water

Figure 4-1a: Calcium Concentrations - Cross Section View 1
Gavin Power, LLC
Cheshire, Ohio

NOTE:

- Water level elevation from March 2023.
- Monitoring well data is from H1 2023 event and surface water data is from H2 2022 event.
- Surface profile from OGRIP LIDAR 2020.
- Elevation is exaggerated 10X.
- Boring surface elevations, ground surface elevations and estimated bedrock surface are projected along transect line.
- The geology is generalized based on the lithology descriptions.
- The bottom elevation profile of the bottom ash pond is from Integrated Solutions, Inc CPT borings conducted between 3/18/2020 to 5/28/20.

ERM



Legend

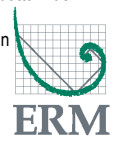
- Monitoring Well
- Water Levels (March 2023)
- Potentiometric Surface
- Surface Profile
- Approximate Bedrock Surface
- Total Depth
- Well Screen
- Transect
- Site Boundary
- Bottom Ash Pond Boundary

- Base of Bottom Ash Pond
 - Kyger Creek Northern Fly Ash Pond
- Calcium Concentrations in Groundwater (mg/L)**
- <129
 - 129 - 200
 - 200 - 500
 - 500 - 1,000
 - >1,000

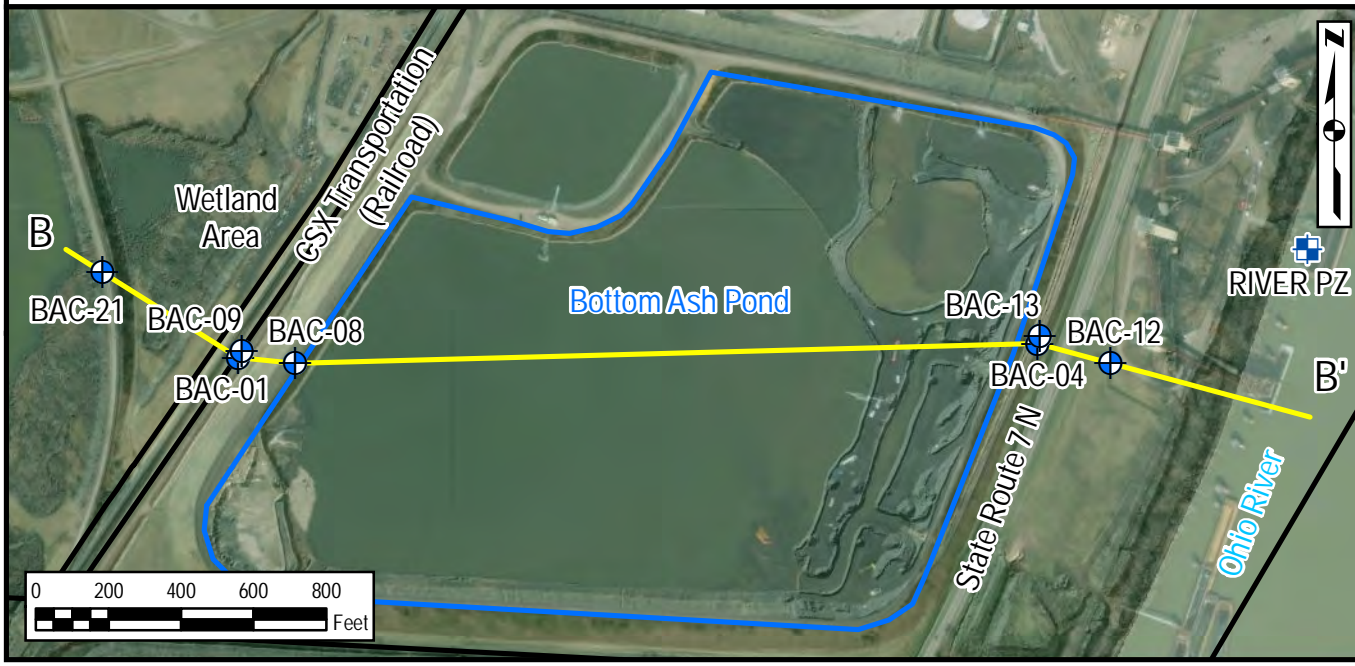
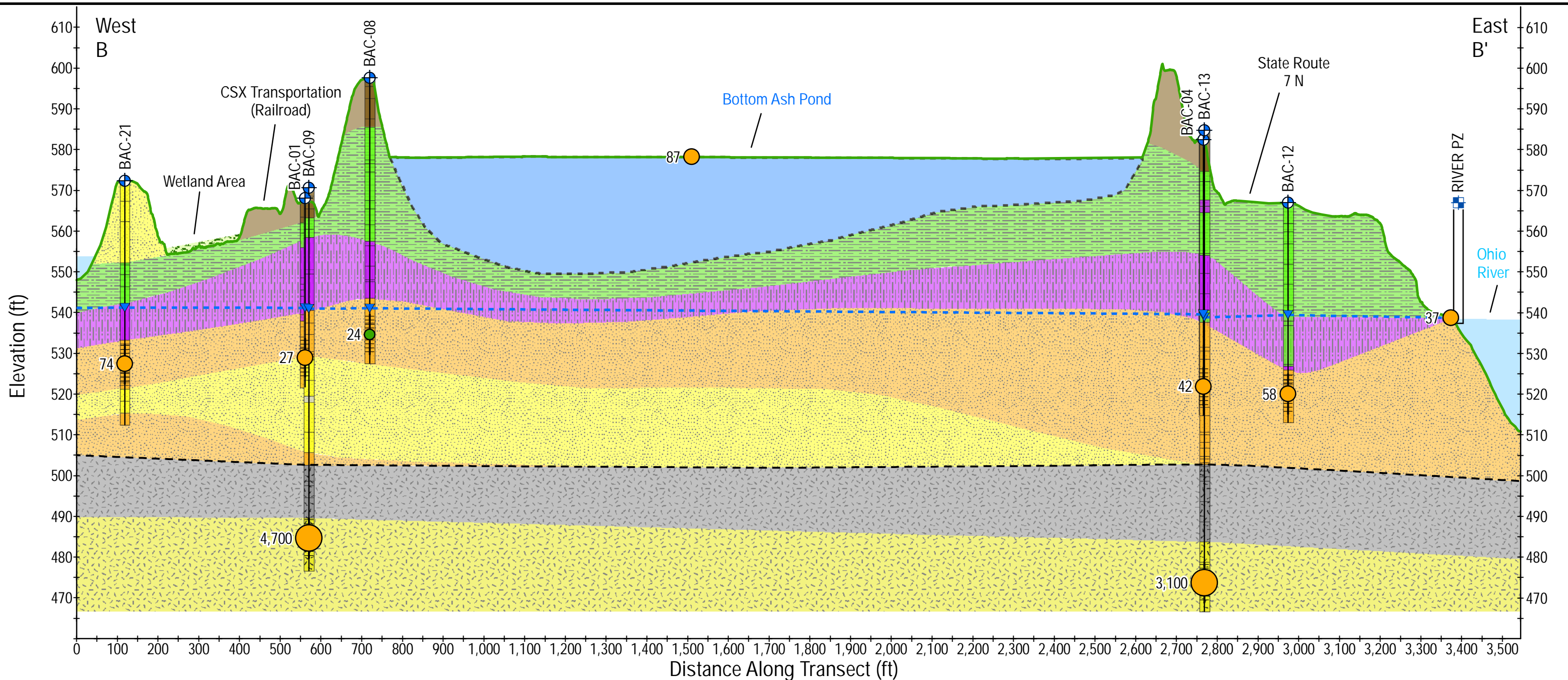
- Generalized Lithology**
- Road Material
 - Clay and Silt
 - Sandy Clay and Silt
 - Sand and Clay
 - Sand and Gravel
 - Sand
 - Claystone/Siltstone
 - Sandstone
- Separation Layer
- Alluvial Aquifer
- Bedrock Units

Figure 4-1b: Calcium Concentrations - Cross Section View 2
GavIn Power, LLC
Cheshire, Ohio

- NOTE:**
1. Water level elevation from March 2023.
 2. Monitoring well data is from H1 2023 event and surface water data is from H2 2022 event.
 3. Surface profile from OGRIP LiDAR 2020.
 4. Elevation is exaggerated 10X.
 5. Boring surface elevations, ground surface elevations and estimated bedrock surface are projected along transect line.
 6. The geology is generalized based on the lithology descriptions.
 7. The bottom elevation profile of the bottom ash pond is from Integrated Solutions, Inc CPT borings conducted between 3/18/2020 to 5/28/20.



M:\US\Projects\AC\Cheshire_Gov\GavInPower\PartM\2024\Figure4-1b_F_CalciumConcentrations_2024\Figure4-1b_F_CalciumConcentrations_2024.mxd - maddie.nayes - 10/11/2023



Legend

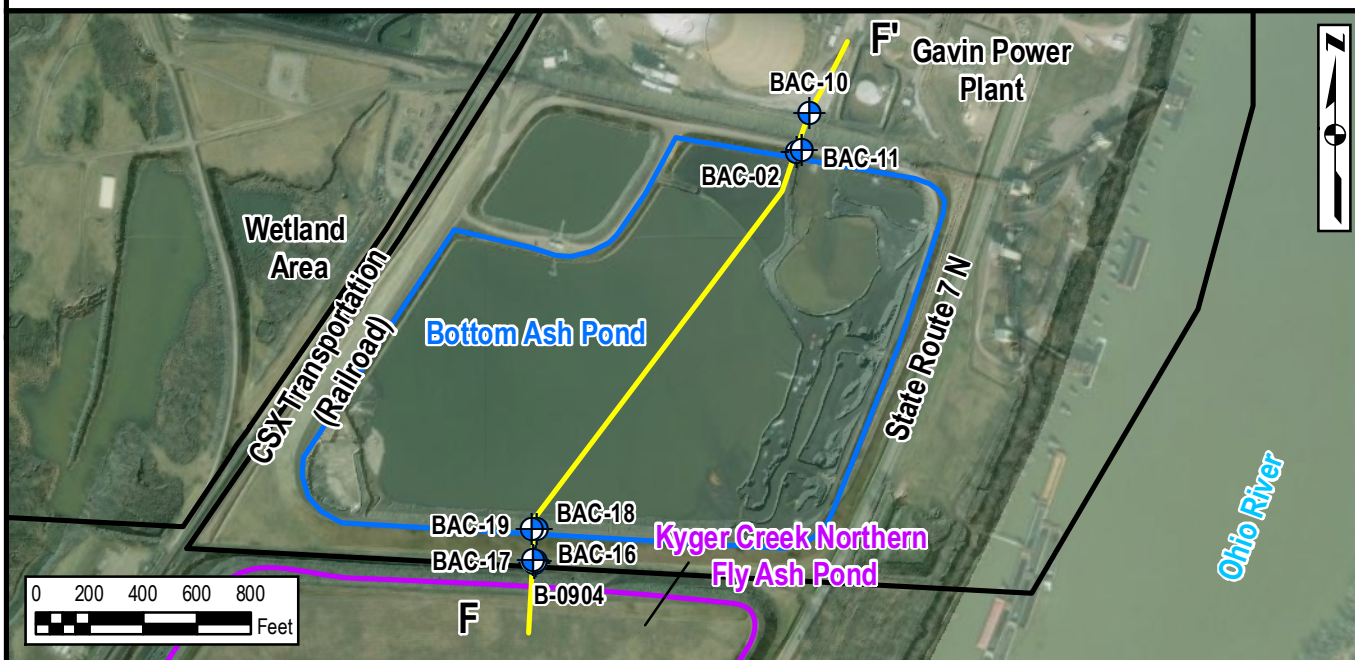
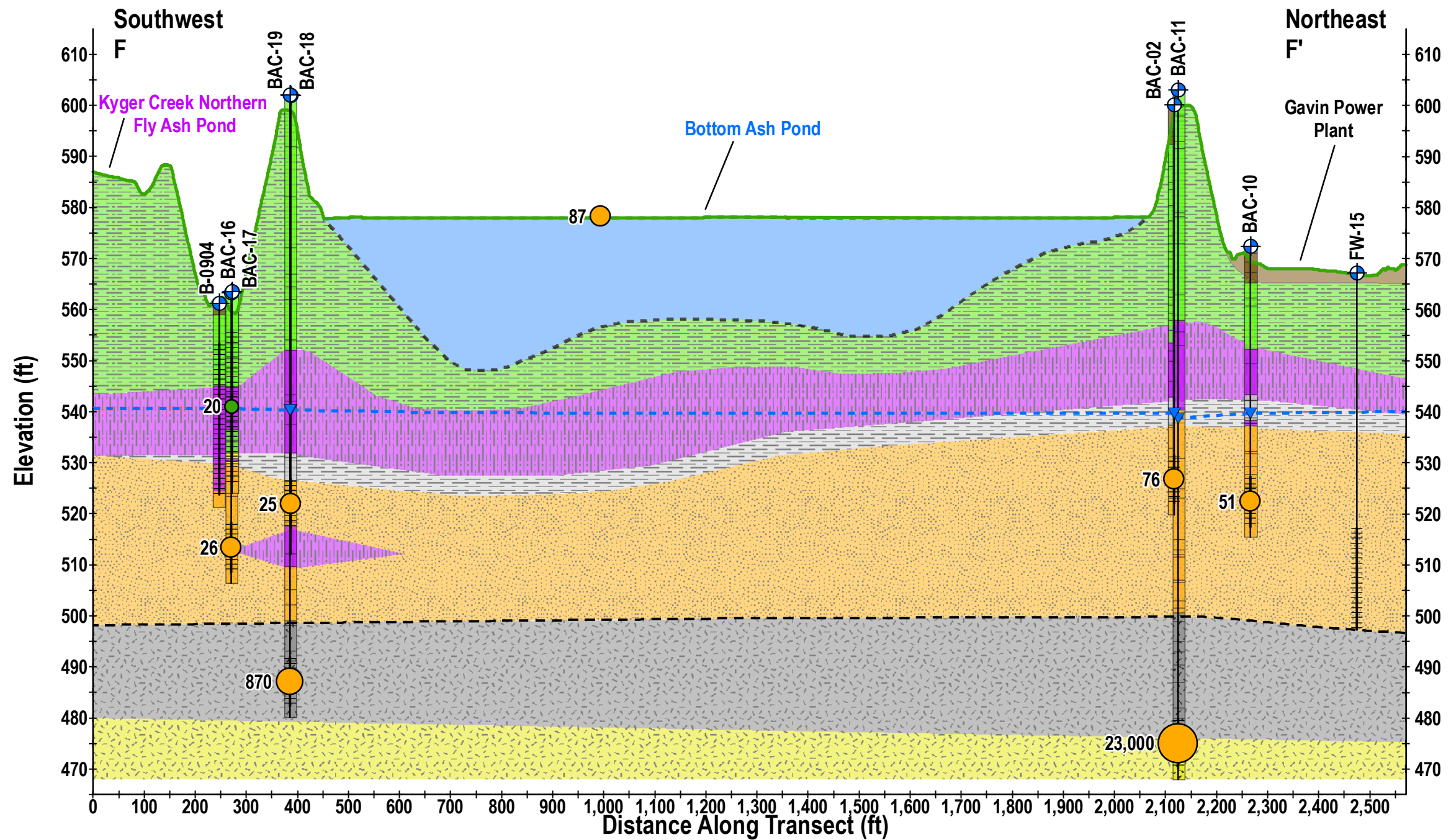
- Monitoring Well
- Piezometer
- Water Level (March 2023)
- Potentiometric Surface
- Surface Profile
- Approximate Bedrock Surface
- Total Depth
- Well Screen
- Transect
- Site Boundary
- Bottom Ash Pond Boundary
- Base of Bottom Ash Pond
- Wetland Area
- Chloride Concentrations in Groundwater (mg/L)
 - <24.7
 - 24.7 - 100
 - 100 - 1,000
 - 1,000 - 10,000
 - >10,000
- Surface Water
- Generalized Lithology
 - Road Material
 - Clay and Silt
 - Sandy Clay and Silt
 - Sand and Clay
 - Sand and Gravel
 - Sand
 - Claystone/Siltstone
 - Sandstone
- Separation Layer
- Alluvial Aquifer
- Bedrock Units

Figure 4-2a: Chloride Concentrations - Cross Section View 1
Gavin Power, LLC
Cheshire, Ohio

NOTE:

- Water level elevation from March 2023.
- Monitoring well data is from H1 2023 event and surface water data is from H2 2022 event.
- Surface profile from OGRIP LIDAR 2020.
- Elevation is exaggerated 10X.
- Boring surface elevations, ground surface elevations and estimated bedrock surface are projected along transect line.
- The geology is generalized based on the lithology descriptions.
- The bottom elevation profile of the bottom ash pond is from Integrated Solutions, Inc CPT borings conducted between 3/18/2020 to 5/28/20.

ERM

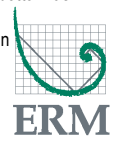


- Legend**
- Monitoring Well
 - Water Levels (March 2023)
 - Potentiometric Surface
 - Surface Profile
 - Approximate Bedrock Surface
 - Total Depth
 - Well Screen
 - Transect
 - Site Boundary
 - Bottom Ash Pond Boundary

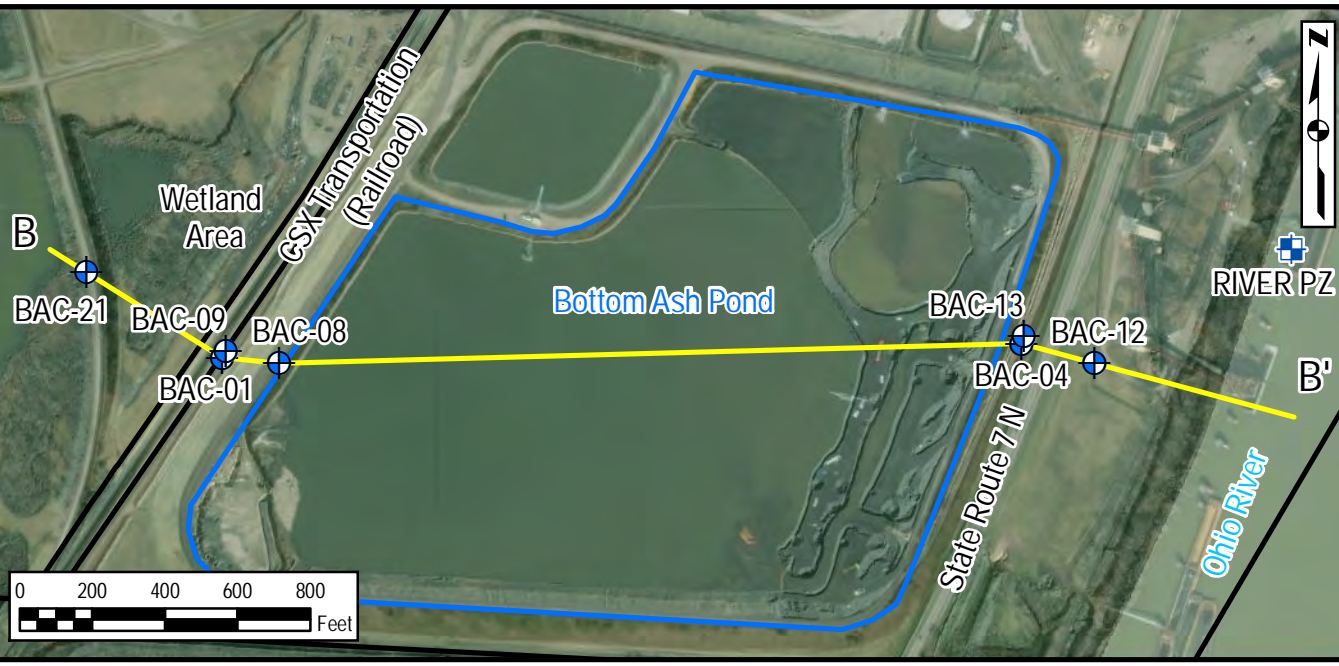
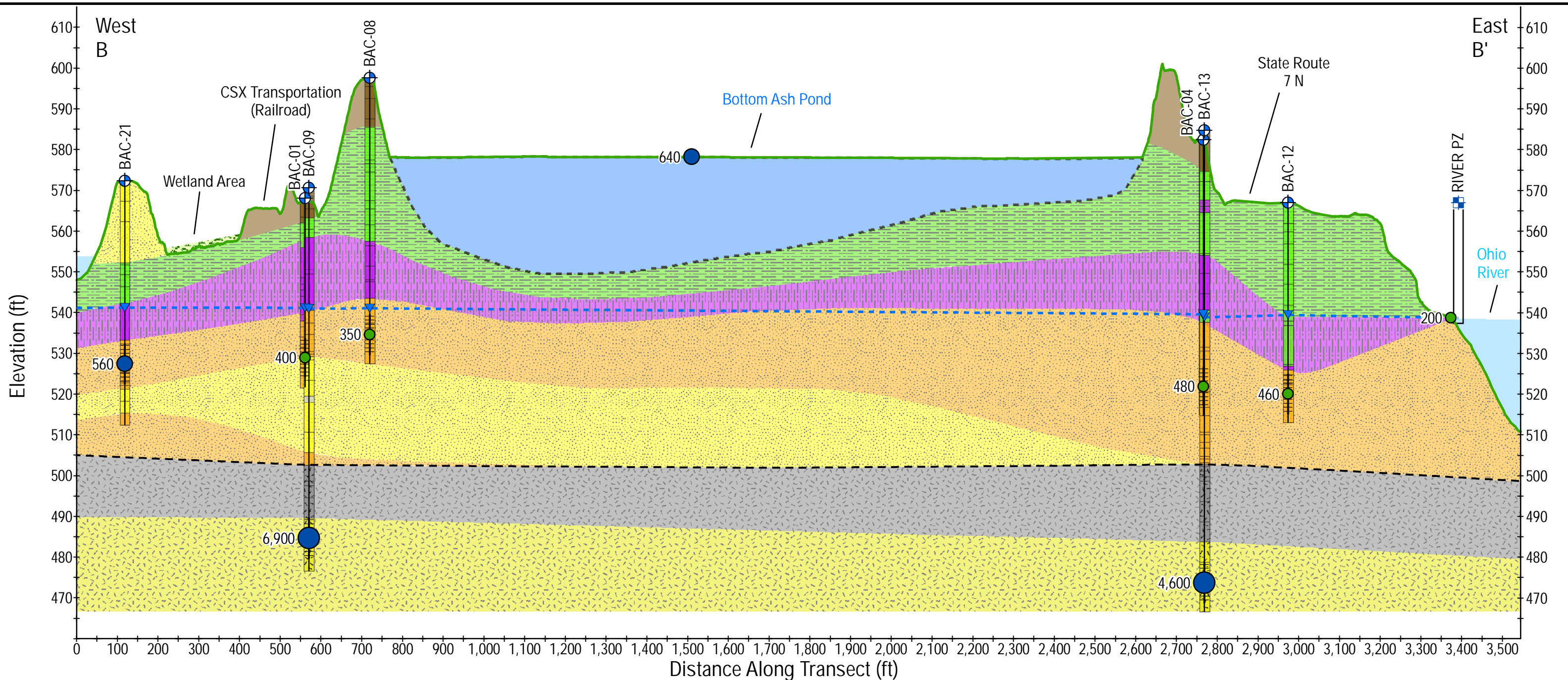
- Generalized Lithology**
- Road Material
 - Clay and Silt
 - Sandy Clay and Silt
 - Sand and Clay
 - Sand and Gravel
 - Sand
 - Claystone/Siltstone
 - Sandstone
- Chloride Concentrations in Groundwater (mg/L)**
- <24.7
 - 24.7 - 100
 - 100 - 1,000
 - 1,000 - 10,000
 - >10,000

- NOTE:**
1. Water level elevation from March 2023.
 2. Monitoring well data is from H1 2023 event and surface water data is from H2 2022 event.
 3. Surface profile from OGRIP LiDAR 2020.
 4. Elevation is exaggerated 10X.
 5. Boring surface elevations, ground surface elevations and estimated bedrock surface are projected along transect line.
 6. The geology is generalized based on the lithology descriptions.
 7. The bottom elevation profile of the bottom ash pond is from Integrated Solutions, Inc CPT borings conducted between 3/18/2020 to 5/28/20.

Figure 4-2b: Chloride Concentrations - Cross Section View 2 Gavin Power, LLC Cheshire, Ohio



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Legend

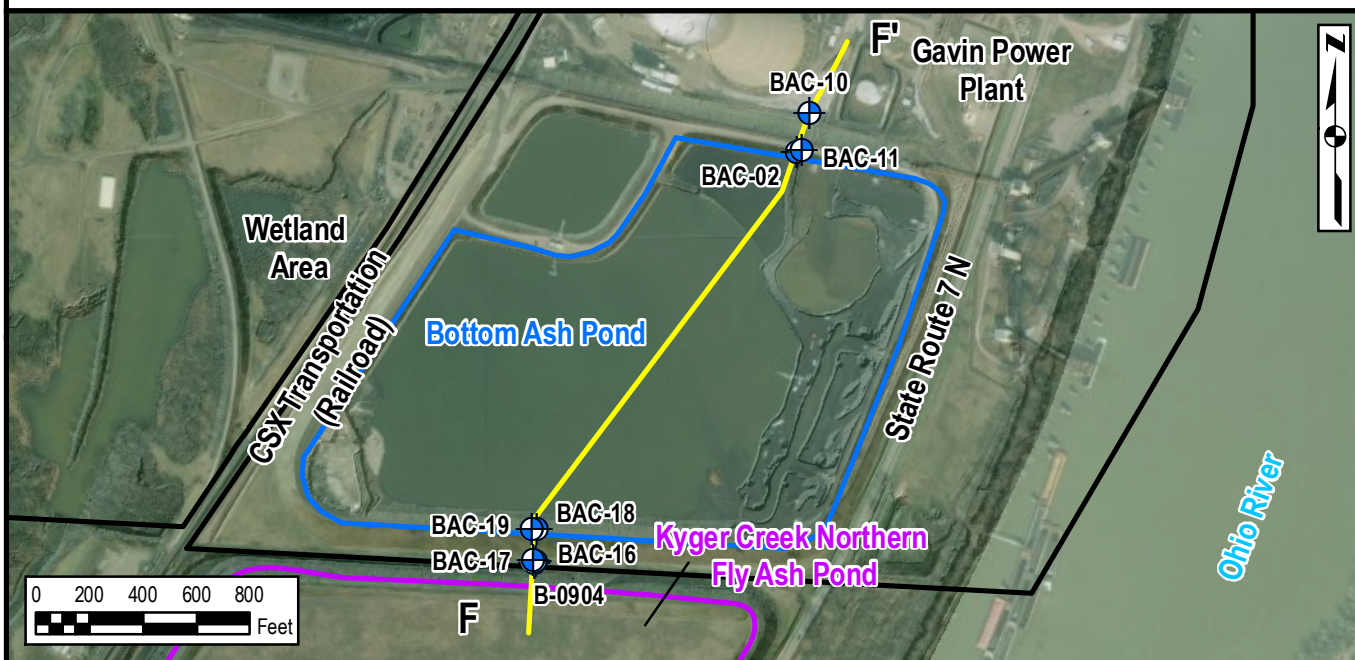
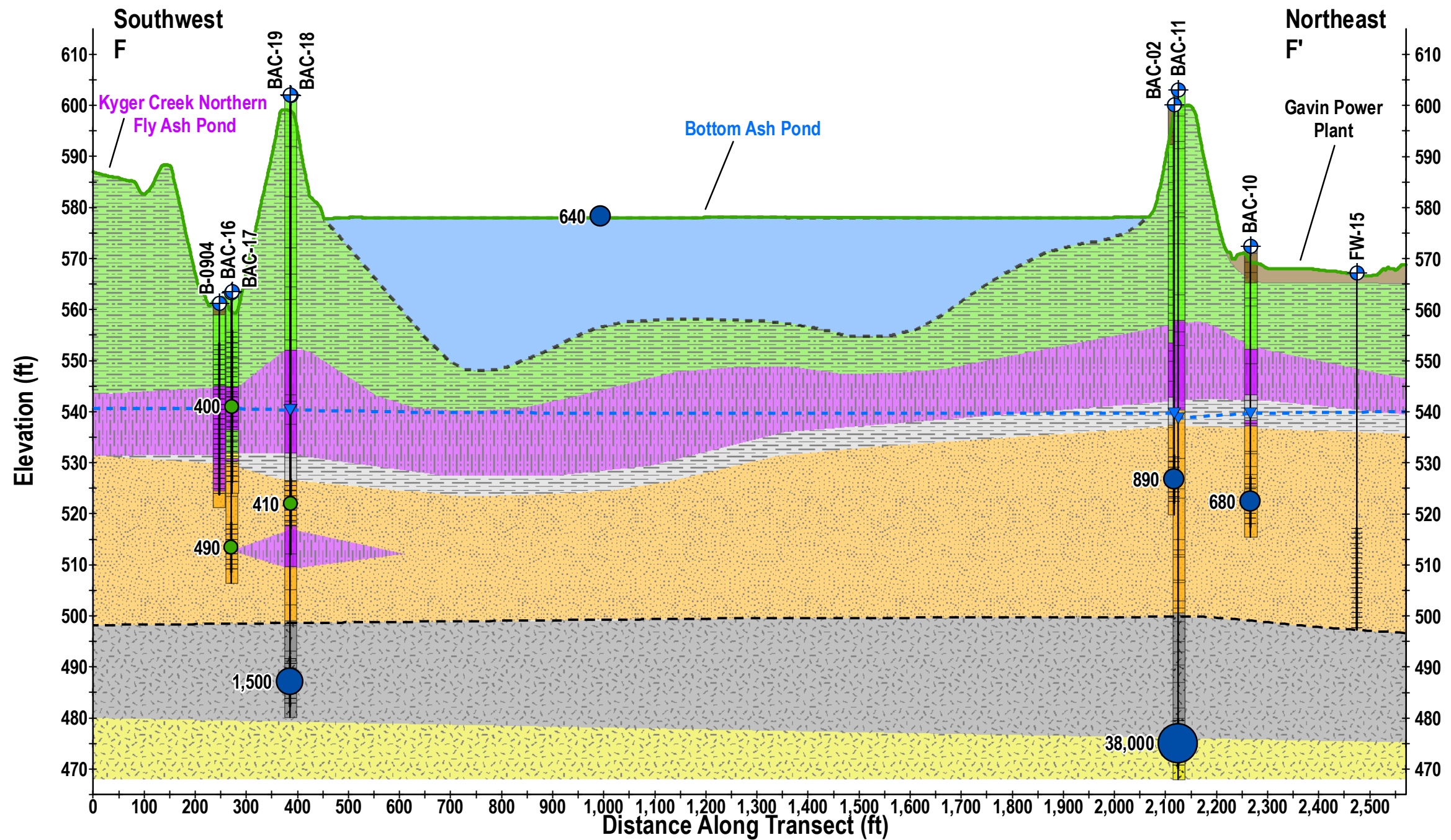
- Monitoring Well
- Piezometer
- Water Level (March 2023)
- Potentiometric Surface
- Surface Profile
- Approximate Bedrock Surface
- Total Depth
- Well Screen
- Transect
- Site Boundary
- Bottom Ash Pond Boundary
- Base of Bottom Ash Pond
- Total Dissolved Solids Concentrations in Groundwater (mg/L)
 - <505
 - 505 - 1,000
 - 1,000 - 10,000
 - 10,000 - 20,000
 - >20,000
- Wetland Area
- Generalized Lithology
 - Road Material
 - Clay and Silt
 - Sandy Clay and Silt
 - Sand and Clay
 - Sand and Gravel
 - Sand
 - Claystone/Siltstone
 - Sandstone
- Separation Layer
- Alluvial Aquifer
- Bedrock Units
- Surface Water

Figure 4-3a: TDS Concentrations - Cross Section View 1
Gavin Power, LLC
Cheshire, Ohio

NOTE:

1. Water level elevation from March 2023.
2. Monitoring well data is from H1 2023 event and surface water data is from H2 2022 event
3. Surface profile from OGRIP LIDAR 2020.
4. Elevation is exaggerated 10X.
5. Boring surface elevations, ground surface elevations and estimated bedrock surface are projected along transect line.
6. The geology is generalized based on the lithology descriptions.
7. The bottom elevation profile of the bottom ash pond is from Integrated Solutions, Inc CPT borings conducted between 3/18/2020 to 5/28/20.

ERM



Legend

- Monitoring Well
- Water Level (March 2023)
- Potentiometric Surface
- Surface Profile
- Approximate Bedrock Surface
- Total Depth
- Well Screen
- Transect
- Site Boundary
- Bottom Ash Pond Boundary

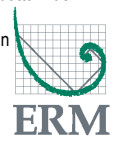
- Base of Bottom Ash Pond
 - Kyger Creek Northern Fly Ash Pond
- Total Dissolved Solids Concentrations in Groundwater (mg/L)**
- <505
 - 505 - 1,000
 - 1,000 - 10,000
 - 10,000 - 20,000
 - >20,000

- Generalized Lithology**
- Road Material
 - Clay and Silt
 - Sandy Clay and Silt
 - Sand and Clay
 - Sand and Gravel
 - Sand
 - Claystone/Siltstone
 - Sandstone
- Separation Layer
- Alluvial Aquifer
- Bedrock Units

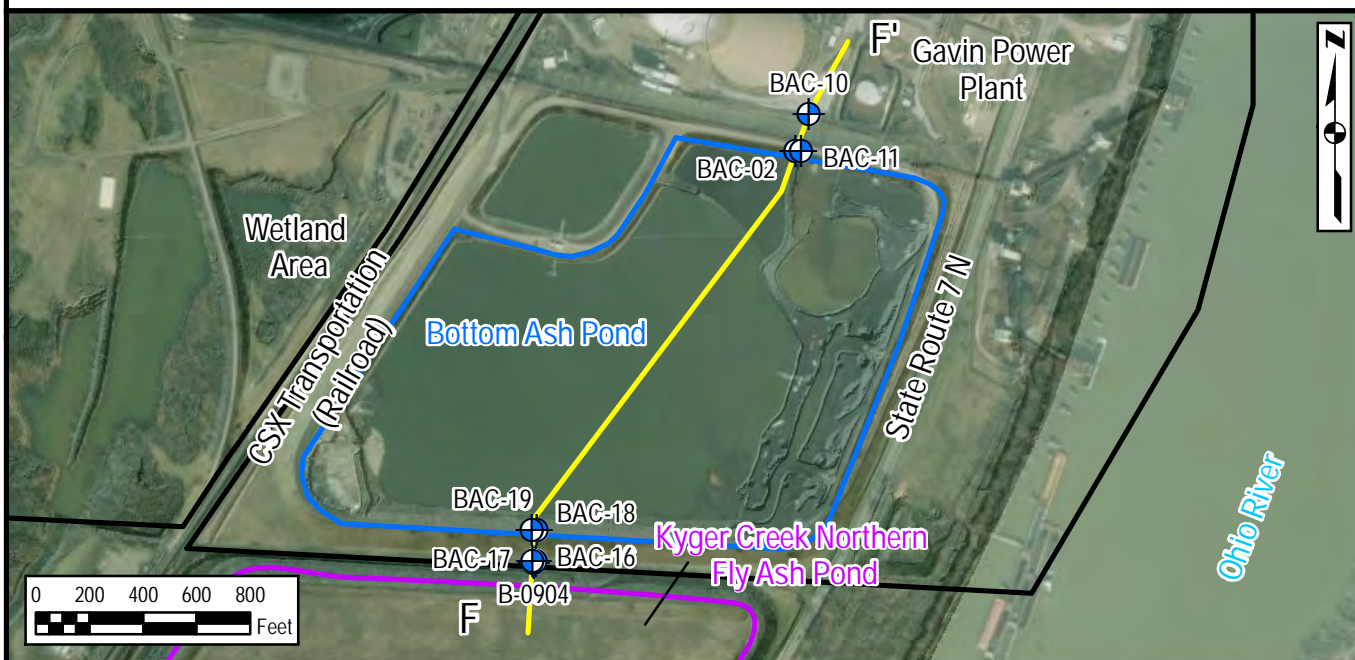
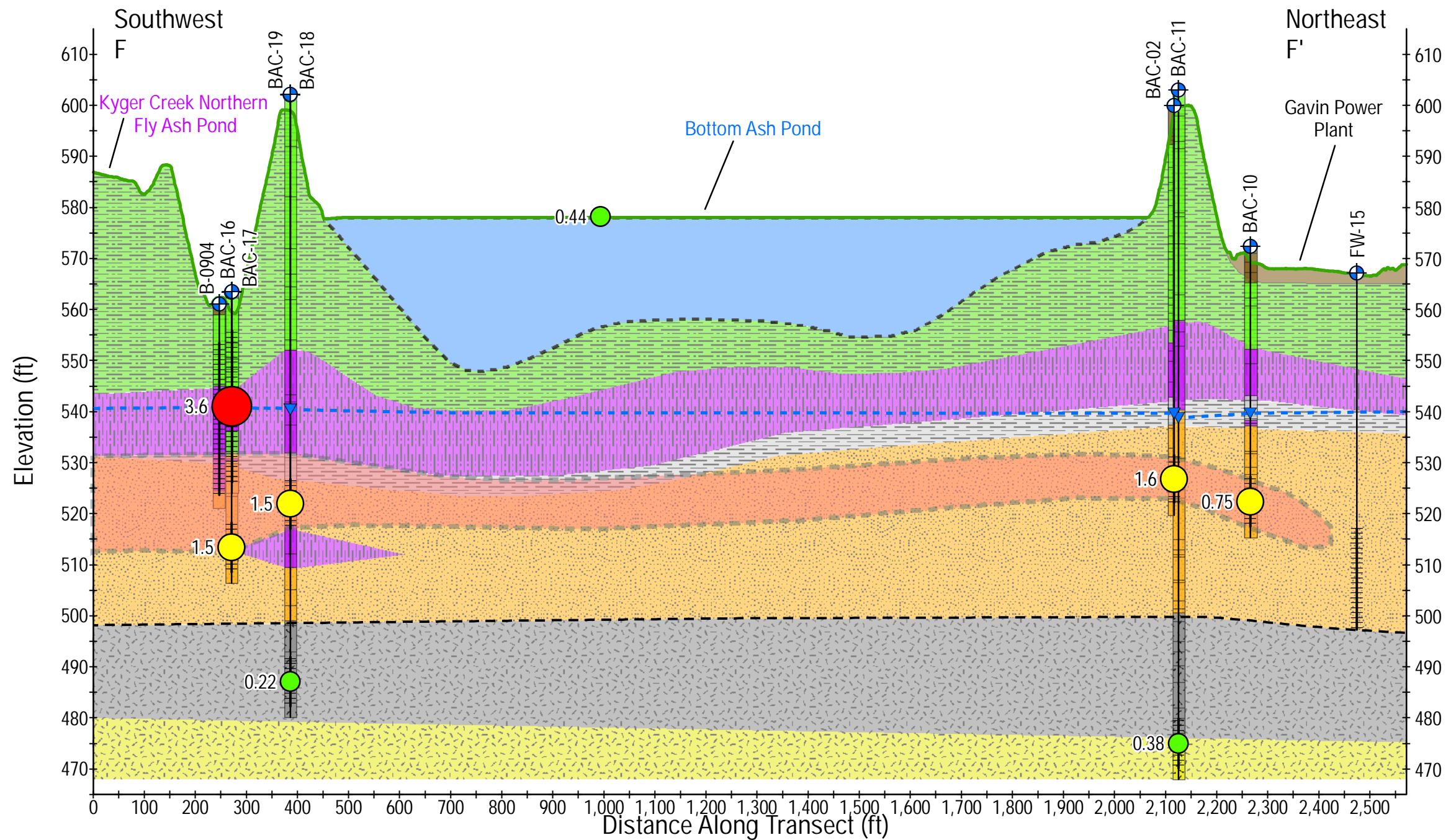
Figure 4-3b: TDS Concentrations - Cross Section View 2
Gavin Power, LLC
Cheshire, Ohio

NOTE:

1. Water level elevation from March 2023.
2. Monitoring well data is from H1 2023 event and surface water data is from H2 2022 event
3. Surface profile from OGRIP LiDAR 2020.
4. Elevation is exaggerated 10X.
5. Boring surface elevations, ground surface elevations and estimated bedrock surface are projected along transect line.
6. The geology is generalized based on the lithology descriptions.
7. The bottom elevation profile of the bottom ash pond is from Integrated Solutions, Inc CPT borings conducted between 3/18/2020 to 5/28/20.



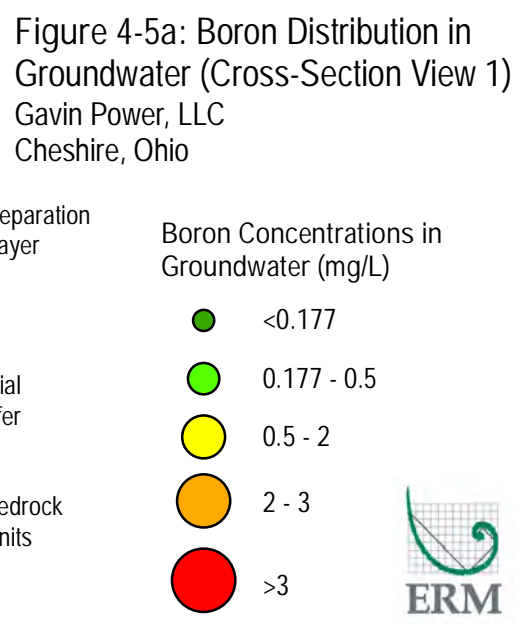
M:\USI\Projects\AC\Delaware_Gov\GavinPowerPlant\2023\20230424_Cross Sections_2023\Figure 4-3b_TDS Concentrations_2023\Figure 4-3b_TDS Concentrations_10/11/2023



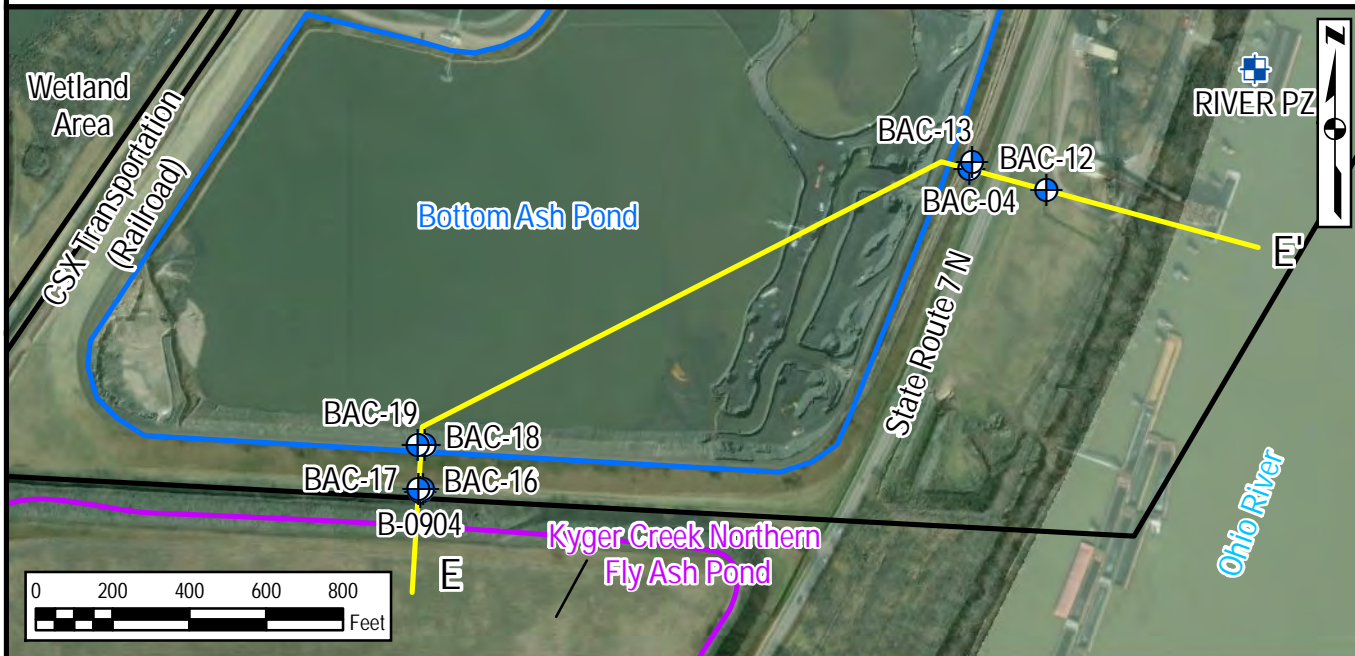
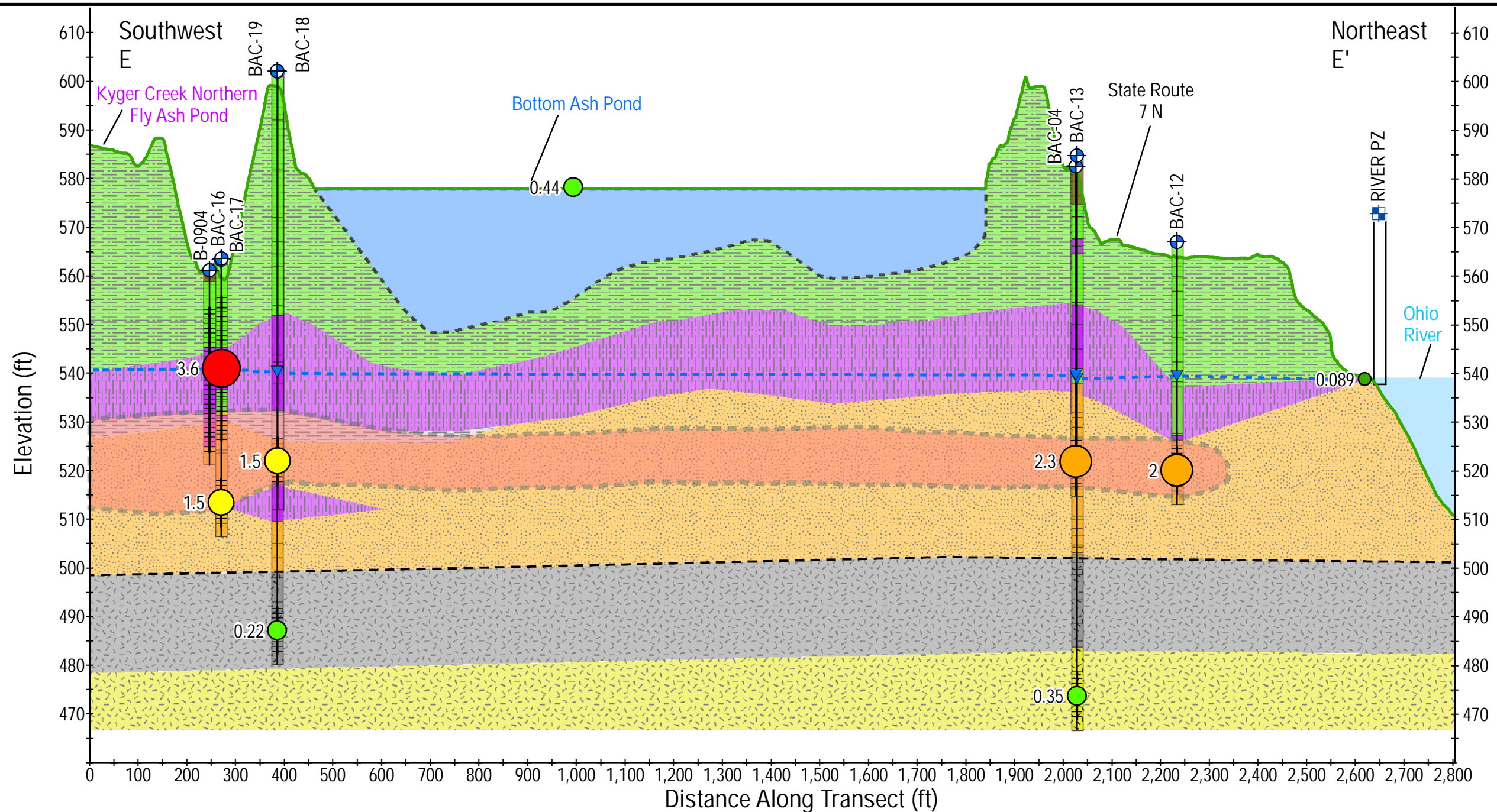
- Legend**
- Monitoring Well
 - Water Supply Well
 - Water Level (March 2023)
 - Potentiometric Surface
 - Surface Profile
 - Approximate Bedrock Surface
 - Total Depth
 - Well Screen
 - Transect
 - Site Boundary

- Bottom Ash Pond Boundary
 - Base of Bottom Ash Pond
 - Kyger Creek Northern Fly Ash Pond
 - Approximated Boron Plume
- NOTE:**
- Water level elevation from March 2023.
 - Monitoring well data is from H1 2023 event and surface water data is from H2 2022 event.
 - Surface profile from OGRIP LIDAR 2020.
 - Elevation is exaggerated 10X.
 - Boring surface elevations, ground surface elevations and estimated bedrock surface are projected along transect line.
 - The geology is generalized based on the lithology descriptions.
 - The bottom elevation profile of the bottom ash pond is from Integrated Solutions, Inc CPT borings conducted between 3/18/2020 to 5/28/20.

- Generalized Lithology**
- Road Material
 - Clay and Silt
 - Sandy Clay and Silt
 - Sand and Clay
 - Sand and Gravel
 - Sand
 - Claystone/Siltstone
 - Sandstone
- Separation Layer: Clay and Silt, Sandy Clay and Silt
- Alluvial Aquifer: Sand and Gravel, Sand
- Bedrock Units: Claystone/Siltstone, Sandstone



M:\US\Projects\Cheshire\GavinPower\Boron\BoronDistribution\Groundwater_CrossSection_V1_Figure_4-5a_BoronDistributionGroundwater_CrossSection_V1_Figure_4-5a_BoronDistributionGroundwater_CrossSection_V1_Figure_4-5a - Olivia Bolling - 7/27/2023



- Legend**
- Monitoring Well
 - Piezometer
 - Water Level (March 2023)
 - Potentiometric Surface
 - Surface Profile
 - Approximate Bedrock Surface
 - Total Depth
 - Well Screen
 - Transect
 - Site Boundary

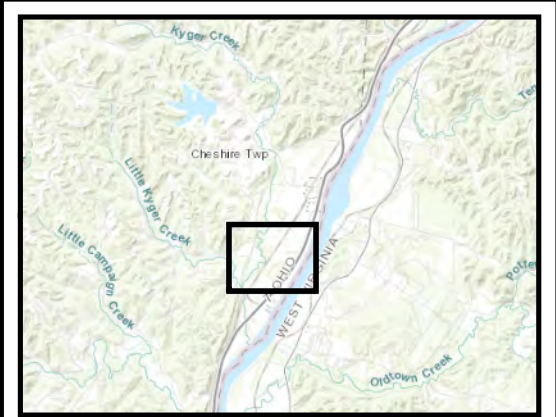
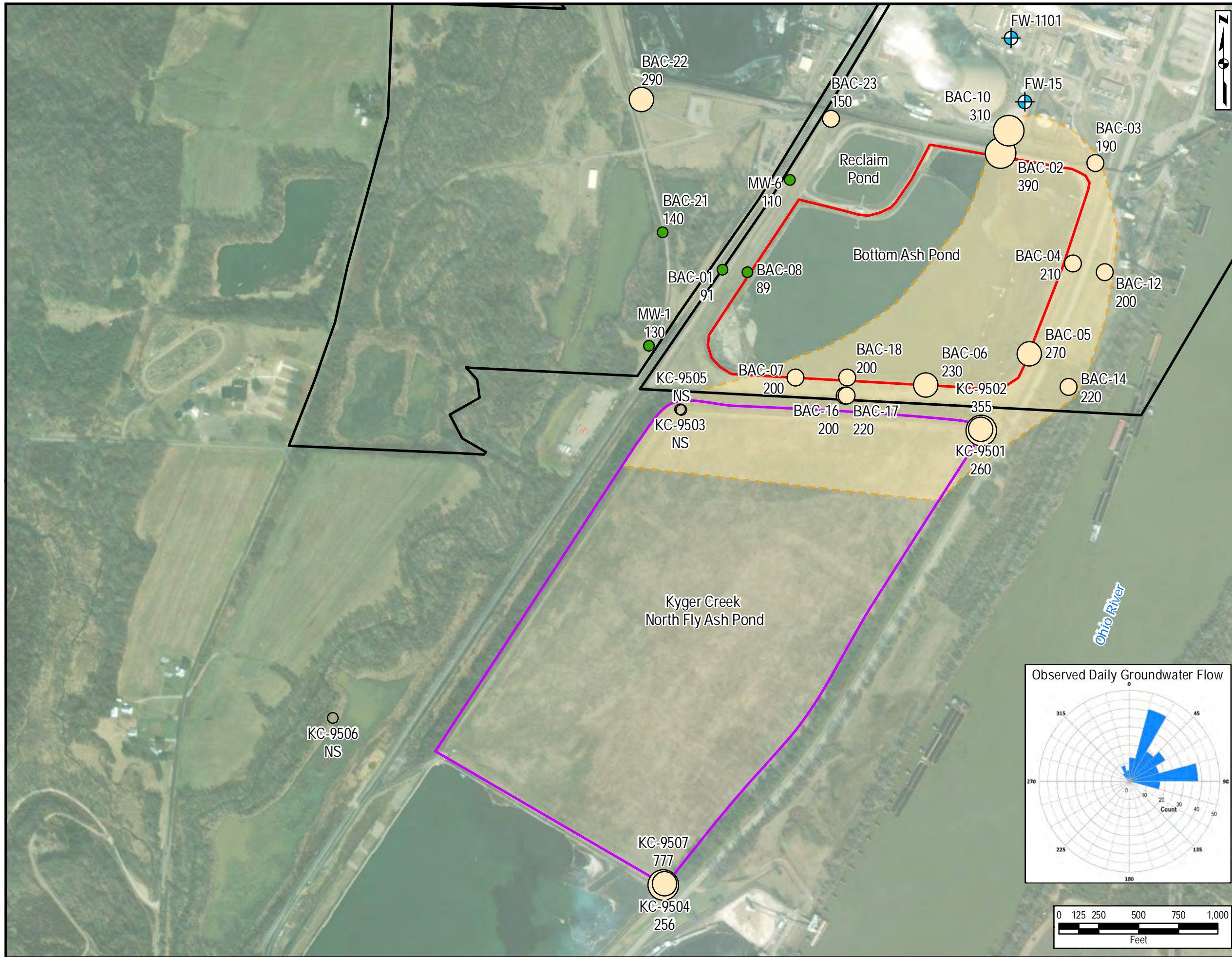
- Kyger Creek Northern Fly Ash Pond
 - Base of Bottom Ash Pond
 - Surface Water
 - Bottom Ash Pond Boundary
 - Approximated Boron Plume
- NOTE:**
1. Water level elevation from March 2023.
 2. Monitoring well data is from H1 2023 event and surface water data is from H2 2022 event.
 3. Surface profile from OGRIP LiDAR 2020.
 4. Elevation is exaggerated 10X.
 5. Boring surface elevations, ground surface elevations and estimated bedrock surface are projected along transect line.
 6. The geology is generalized based on the lithology descriptions.
 7. The bottom elevation profile of the bottom ash pond is from Integrated Solutions, Inc CPT borings conducted between 3/18/2020 to 5/28/20.

- Generalized Lithology**
- Road Material
 - Clay and Silt
 - Sandy Clay and Silt
 - Sand and Clay
 - Sand and Gravel
 - Sand
 - Claystone/Siltstone
 - Sandstone
- Separation Layer**
- Alluvial Aquifer**
- Bedrock Units**

Figure 4-5b: Boron Distribution in Groundwater (Cross-Section View 2)
Gavin Power, LLC
Cheshire, Ohio



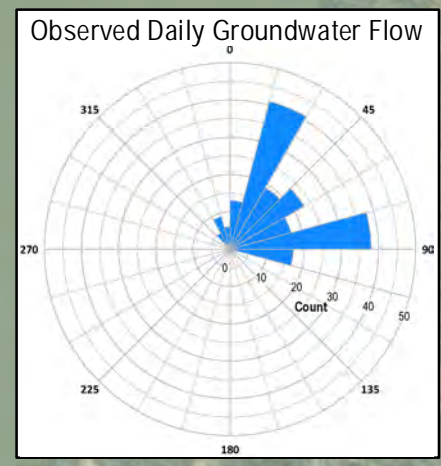
M:\US\Projects\VA\Collisions\Corp\GavinPower\Main\BODAP_CrossSections_2024\Figure 4-5b_BoronDistributionGroundwater_2024\30712.mxd - Olivia Bolling - 7/27/2023



Legend

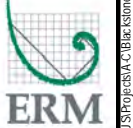
Sulfate Concentrations in Groundwater (mg/L)

- <140
- 140 - 220
- 220 - 300
- >300
- Not Sampled
- ⊕ Water Supply Well Location
- Approximated Sulfate Plume
- Approximate Location of Bottom Ash Pond Boundary
- Gavin Property Boundary
- Approximate Location of Kyger Creek North Fly Ash Pond Boundary

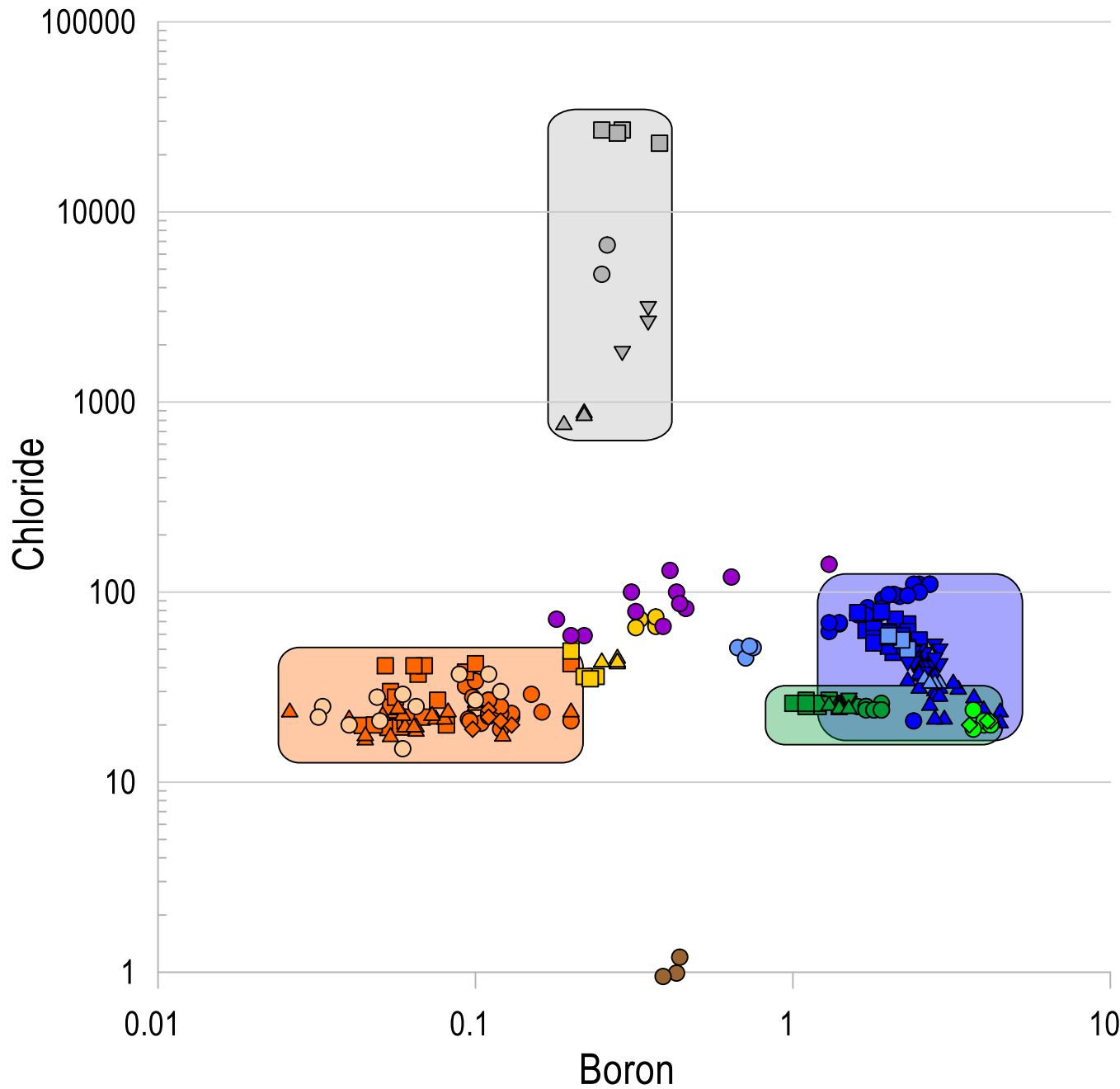


- NOTES:**
1. mg/L = milligrams per liter
 2. NS = Not Sampled
 3. Gavin samples were collected April 2023.
 4. Kyger Creek groundwater samples results collected 10/25/2022 (OVEC 2022).
 5. Daily groundwater flow direction calculated based on transducer data collected from 25 August 2022 through 4 April 2023.
 6. Aerial Imagery: ESRI World Imagery
Reproduced under license in ArcGIS 10.8

Figure 4-6: Sulfate Distribution in Groundwater (Map View)
Gavin Generating Station
Cheshire, Ohio



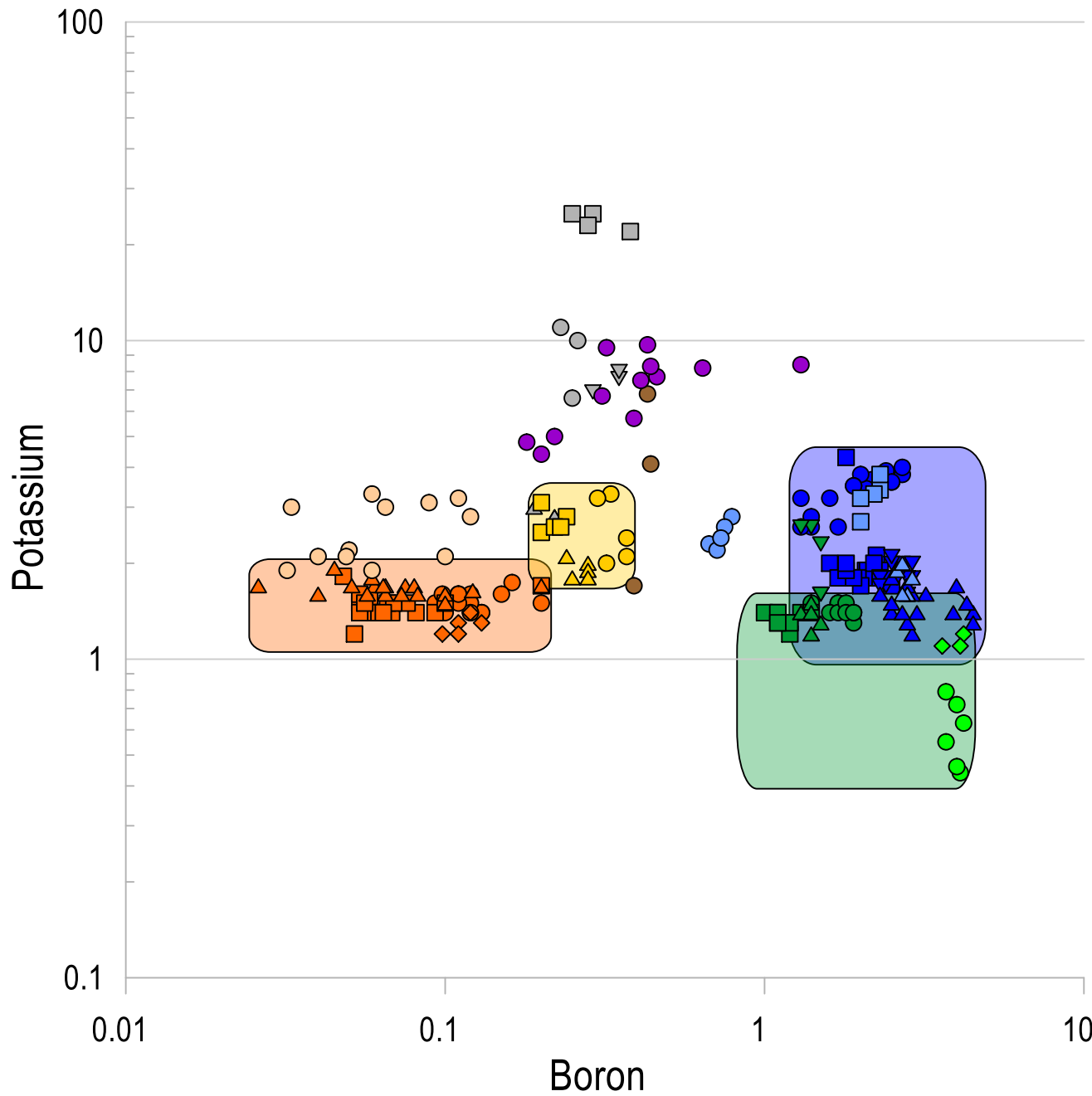
M:\Projects\A-C\Buckeye-ESP\GIS\PowerPlant\MDX\2023_BAC_ASD_Report\Figure 4-6_BAP_MWNetwork_SulfateConcentrations_20230119.mxd - maddie.hays - 9/18/2023



Legend	
● BAC-01	Historical Upgradient Wells
■ MW-1	
▲ MW-6	
● BAC-02	Historical Downgradient Wells
■ BAC-03	
▼ BAC-04	
▲ BAC-05	
● B-0904	Historical Kyger Creek Groundwater
● BAC-06	2020 Southern Boundary Wells
■ BAC-07	
○ BAC-09	2022 Bedrock Wells
■ BAC-11	
▼ BAC-13	
△ BAC-19	
○ BAC-21	
■ BAC-22	2022 Northwestern Wells
▲ BAC-23	
◆ BAC-08	
● BAC-10	2022 Downgradient Wells
■ BAC-12	
▲ BAC-14	
▼ BAC-16	2022 Southern Boundary Wells
▲ BAC-18	
◆ BAC-17	2022 Kyger Creek Groundwater
● BAC-15	2022 Silt and Clay Well
○ Ohio River	
● Bottom Ash Pond	

Figure 6-1. Boron-Chloride Concentration Plot
 Gavin Generating Station
 Cheshire, Ohio

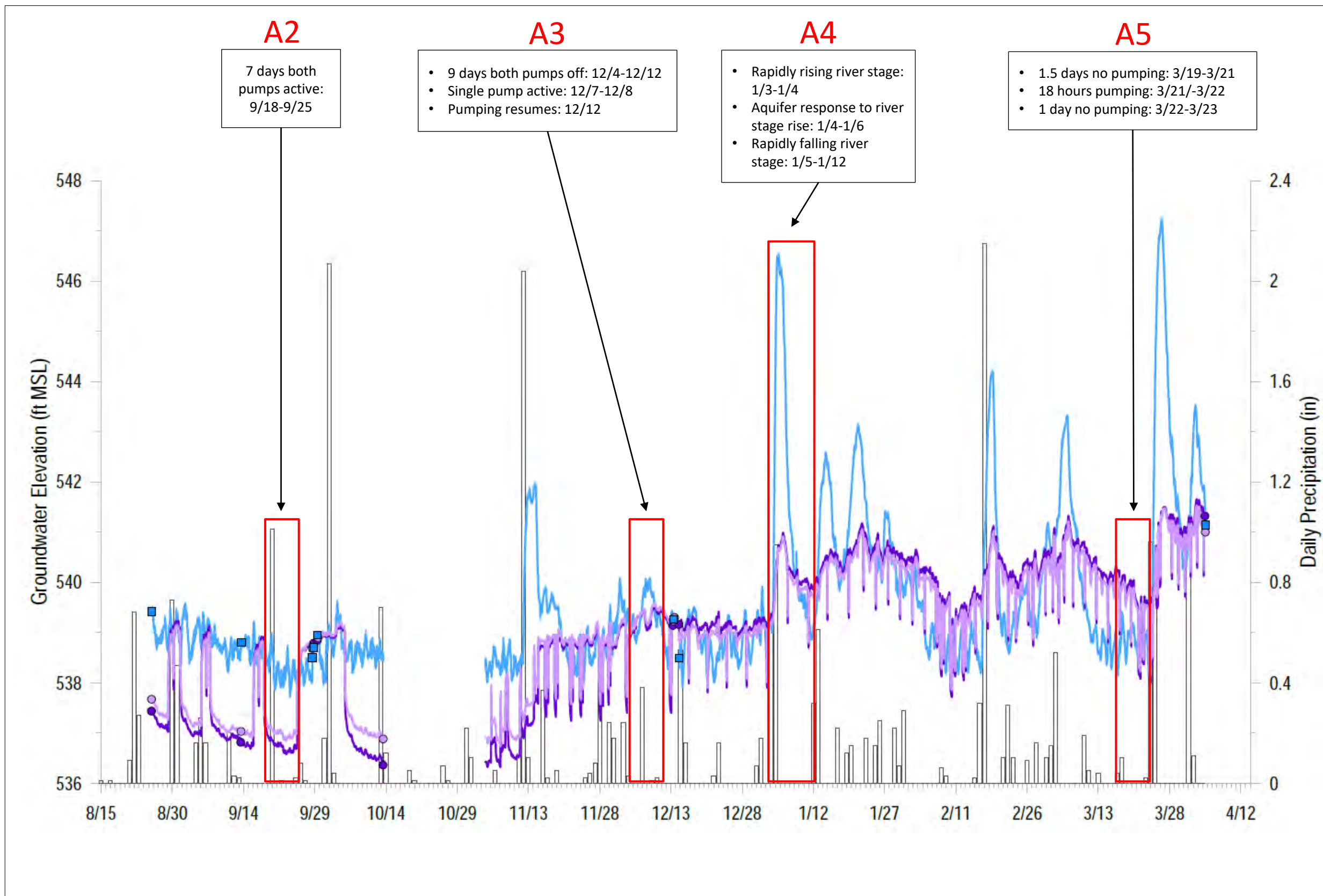




Legend	
● BAC-01	Historical Upgradient Wells
■ MW-1	
▲ MW-6	
● BAC-02	Historical Downgradient Wells
■ BAC-03	
▼ BAC-04	
▲ BAC-05	
● B-0904	Historical Kyger Creek Groundwater
● BAC-06	2020 Southern Boundary Wells
■ BAC-07	
○ BAC-09	2022 Bedrock Wells
■ BAC-11	
▼ BAC-13	
▲ BAC-19	2022 Northwestern Wells
● BAC-21	
■ BAC-22	
▲ BAC-23	2022 Upgradient Well
◆ BAC-08	
● BAC-10	2022 Downgradient Wells
■ BAC-12	
▲ BAC-14	
▼ BAC-16	2022 Southern Boundary Wells
▲ BAC-18	
◆ BAC-17	2022 Kyger Creek Groundwater
● BAC-15	2022 Silt and Clay Well
○ Ohio River	
● Bottom Ash Pond	


Figure 6-2. Boron-Potassium Concentration Plot
 Gavin Generating Station
 Cheshire, Ohio

APPENDIX A



Legend

- A2** Two Pumps Active
- A3** Single Pump Active
- A4** Rapid River Stage Changes and Minimal Pumping
- A5** Prior to Gauging Event on 3/23
- BAC-10 Groundwater Elevation
- BAC-02 Groundwater Elevation
- Ohio River Elevation
- BAC-10 Manual Measurement
- BAC-02 Manual Measurement
- Ohio River Manual Measurement

- Notes:
- 1) River data from on-site stilling well
 - 2) Transducer reading frequency was set to 15min
 - 3) All data is from 2022-23
 - 4) Manual measurements used to calculate groundwater elevations and to assess data quality.
 - 5) Precipitation data obtained from NOAA station for Gallipolis, OH US00333029

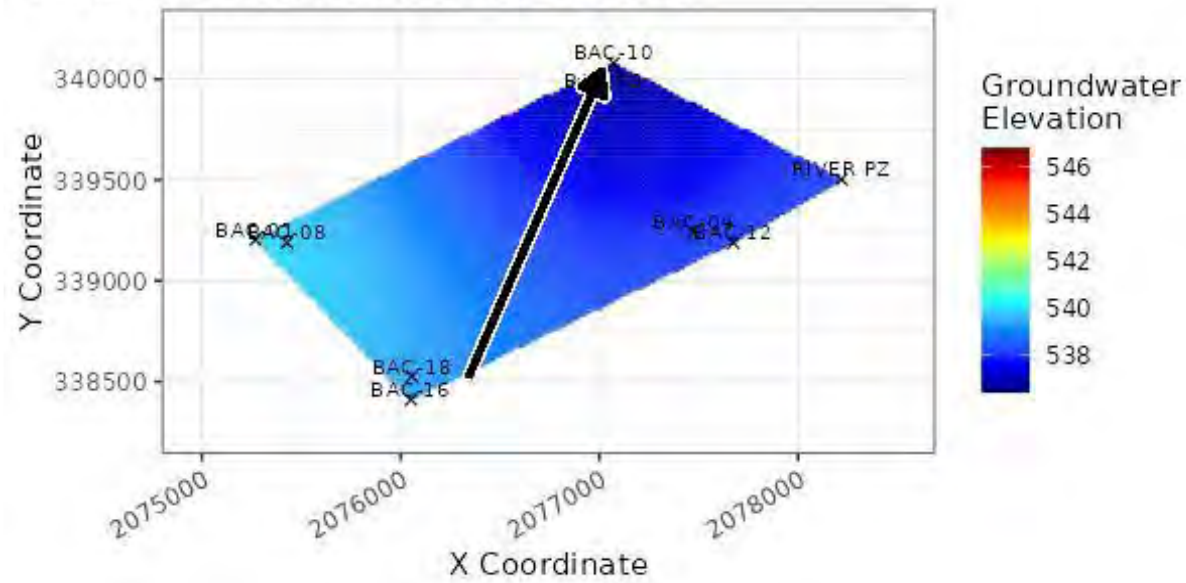
Appendix A1: Bottom Ash Pond Transducer Time-Series, North Couplet

Gavin Power, LLC.
Cheshire, Ohio



Date: 2022-09-23

Gradient: 0.0014 , Theta: 23.8, R²: 0.781

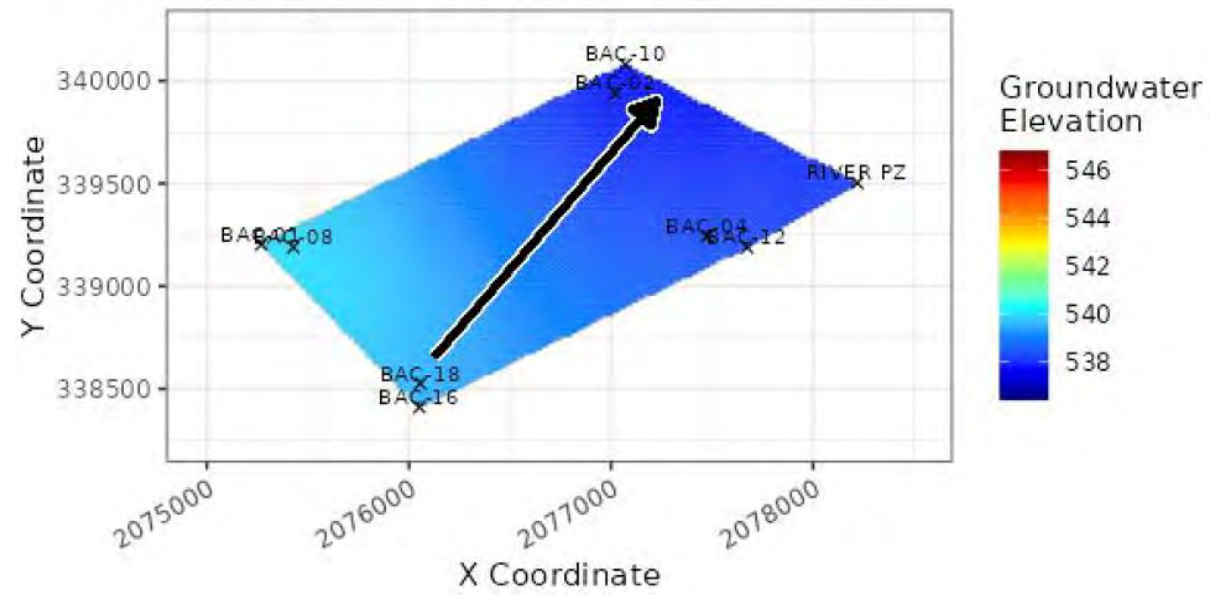


9/18/22-9/24/22: Active Pumping Conditions North of the BAP

During pumping, the predominant groundwater flow direction beneath the BAP is toward the north-northeast toward BAC-02/BAC-10, which lie between the BAP and the pumping wells FW-15 and FW-1101 at the Gavin Plant.

Date: 2022-09-25

Gradient: 0.00096 , Theta: 41.4, R²: 0.906

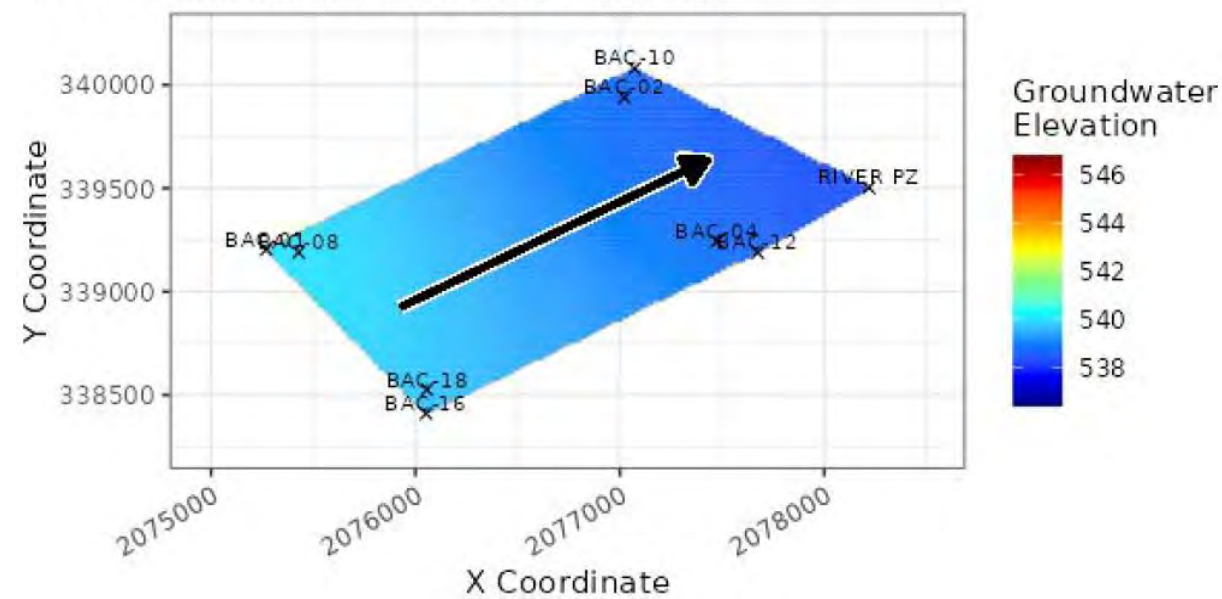


9/25/22: Initial Recovery Following Pumps Being Turned Off

Once the pumps are turned off, the predominant direction of groundwater flow beneath the BAP shifts slightly more toward the northeast, with less of a northern component.

Date: 2022-09-28

Gradient: 0.00065 , Theta: 64.6, R²: 0.988







9/26/22-9/28/22: Recovering Aquifer - Pumps Off for Multiple Days

Once the pumps have been off for multiple days (3 days), the alluvial aquifer is able to recover from pumping drawdown. The predominant direction of groundwater flow beneath the BAP continues to shift eastward toward the Ohio River, reducing the northern component of flow attributable to pumping.



Legend

-  Groundwater flow vector
-  Approximate Location of Bottom Ash Pond Boundary
-  Groundwater Monitoring Locations
-  Surface Water Monitoring Locations

Notes:

- 1) Active pumps are FW-15 and FW-1101.
- 2) Groundwater elevation units are feet.
- 3) Aerial Imagery: ESRI World Imagery Reproduced under license in ArcGIS 10.8
- 4) Groundwater hydraulic gradient and flow direction calculated by fitting a plane to water level measurements from across the site using a R Studio Shiny application. Approach adapted from the EPA On-line Hydraulic Gradient Magnitude and Direction tool.

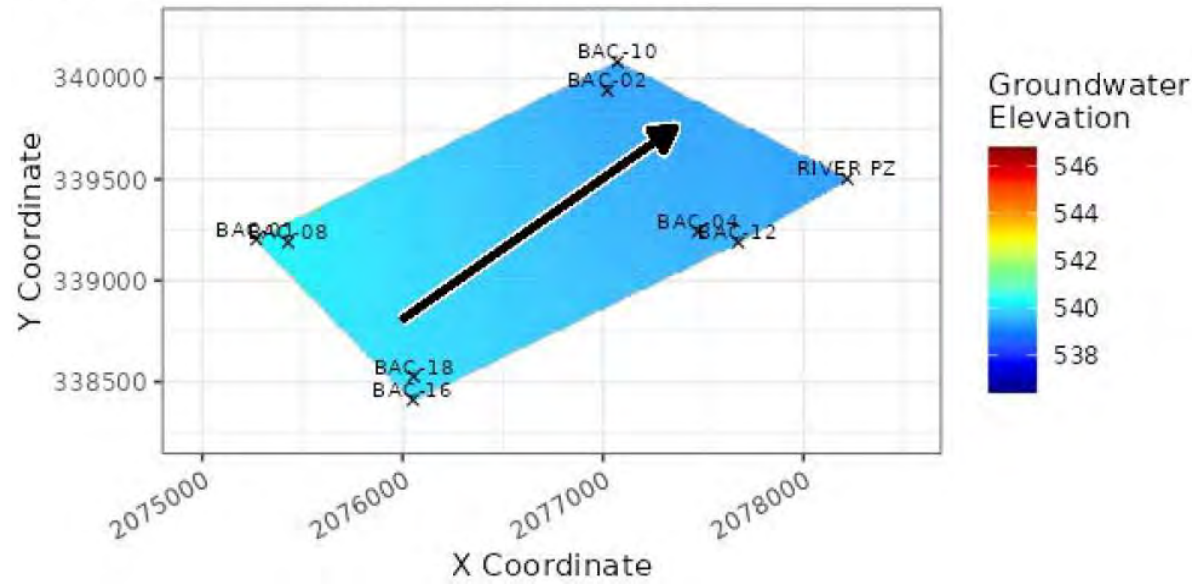
Appendix A2: Groundwater Flow Direction with Two Pumps Active

Gavin Power, LLC.
Cheshire, Ohio



Date: 2022-12-06

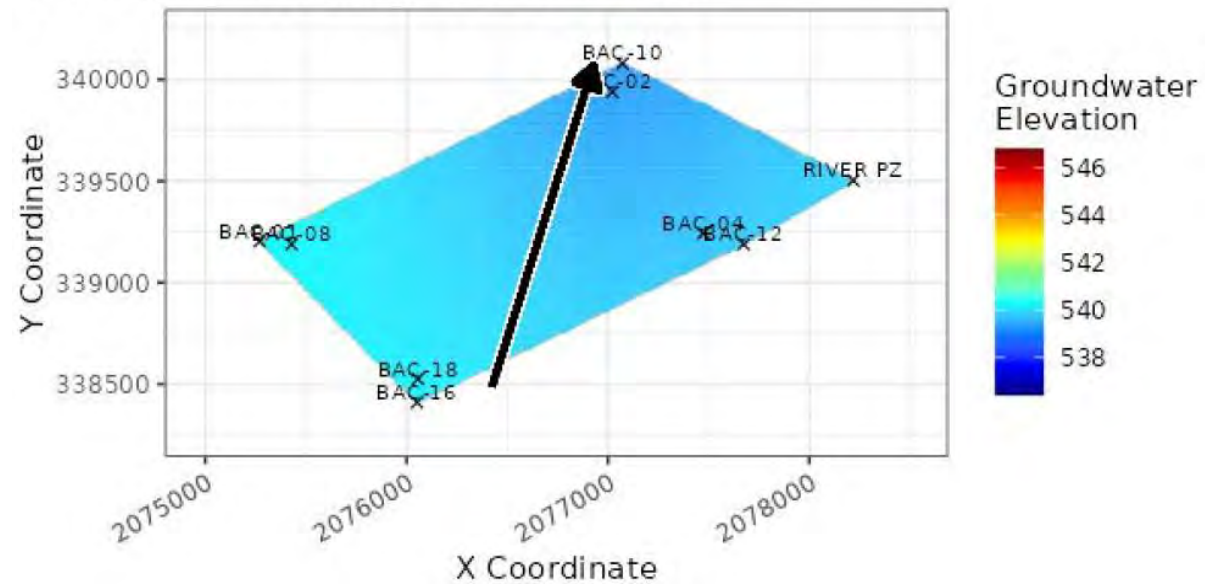
Gradient: 0.00041 , Theta: 55.1, R^2: 0.941



12/4/22-12/6/22: Active Recovery Following Pumps Being Turned Off
 From 12/4 through 12/6, the aquifer is in active recovery from pumping on 12/3. During recovery, groundwater flow directions shift from north to northeast as conditions return to a natural flow direction toward the Ohio River discharge point.

Date: 2022-12-07

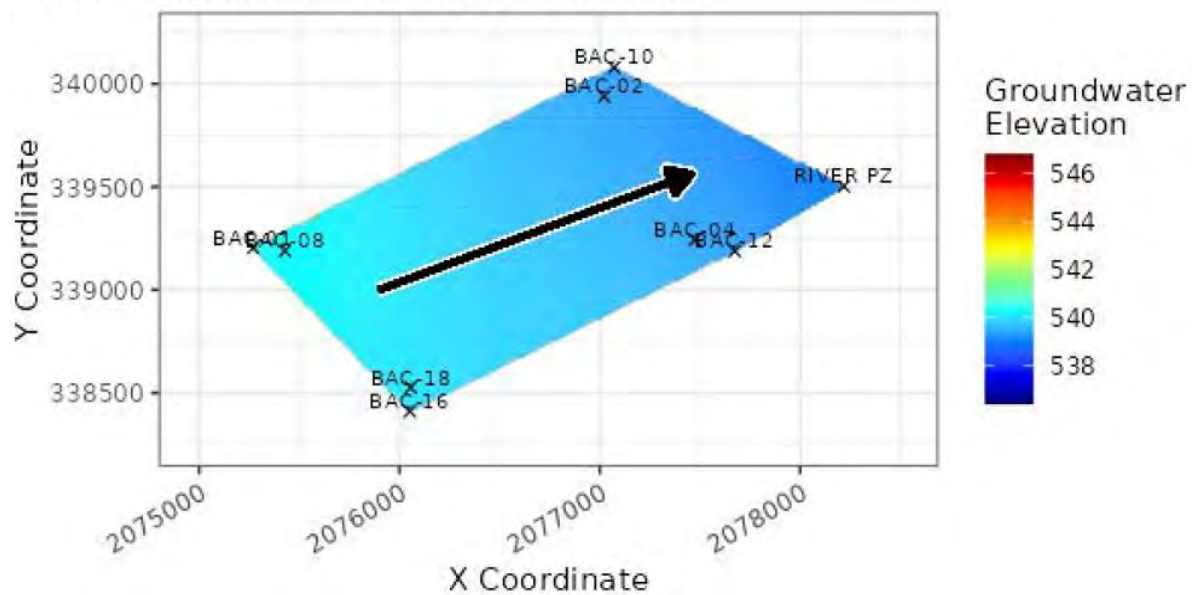
Gradient: 0.00047 , Theta: 17.7, R^2: 0.743



12/7/22-12/8/22: Single Pump Active North of the BAP
 Even with a single pump active, groundwater flow directions are strongly affected and shift to the north. However, gradients are not as steep under the drawdown influence from one pump as compared to when both pumps are on.

Date: 2022-12-11





Gradient: 0.00047 , Theta: 70.2, R^2: 0.963



12/9/22-12/11/22: Recovering Aquifer - Pumps Off for Multiple Days
 Once the pumps have been off for multiple days, the alluvial aquifer is able to recover from pumping drawdown. The predominant direction of groundwater flow beneath the BAP continues to shift eastward toward the Ohio River, reducing the northern component of flow attributable to pumping.



Legend

-  Groundwater flow vector
-  Approximate Location of Bottom Ash Pond Boundary
-  Groundwater Monitoring Locations
-  Surface Water Monitoring Locations

Notes:

- 1) Active pumps are FW-15 and FW-1101.
- 2) Groundwater elevation units are feet.
- 3) Aerial Imagery: ESRI World Imagery Reproduced under license in ArcGIS 10.8
- 4) Groundwater hydraulic gradient and flow direction calculated by fitting a plane to water level measurements from across the site using a R Studio Shiny application. Approach adapted from the EPA On-line Hydraulic Gradient Magnitude and Direction tool.

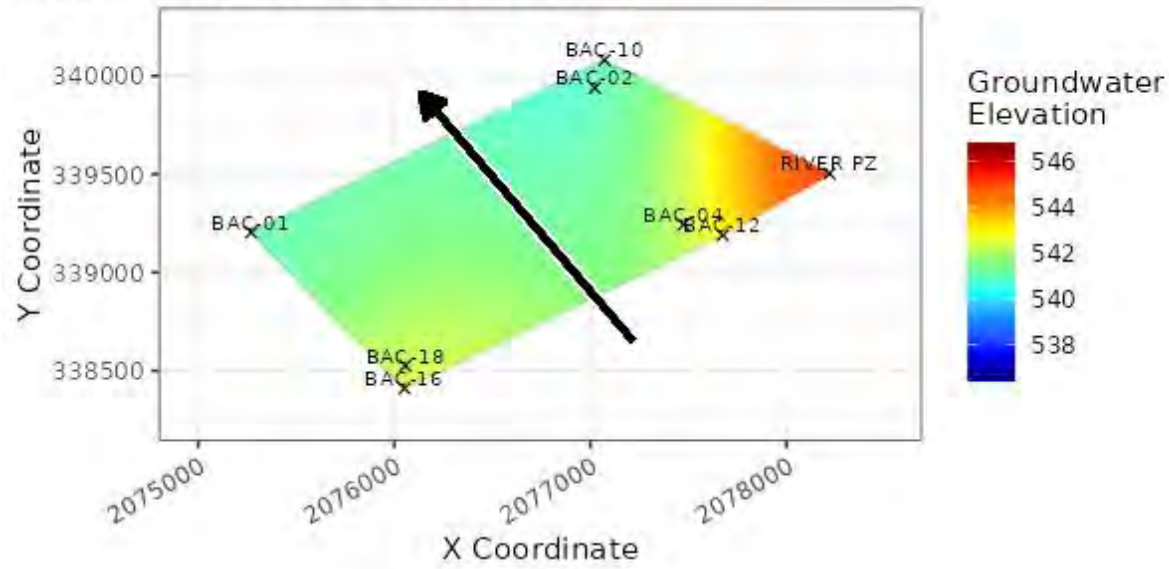
Appendix A3: Groundwater Flow Direction with Single Pump Active

Gavin Power, LLC.
 Cheshire, Ohio



Date: 2023-01-04

Gradient: 0.0023 , Theta: 319, R²: 0.616

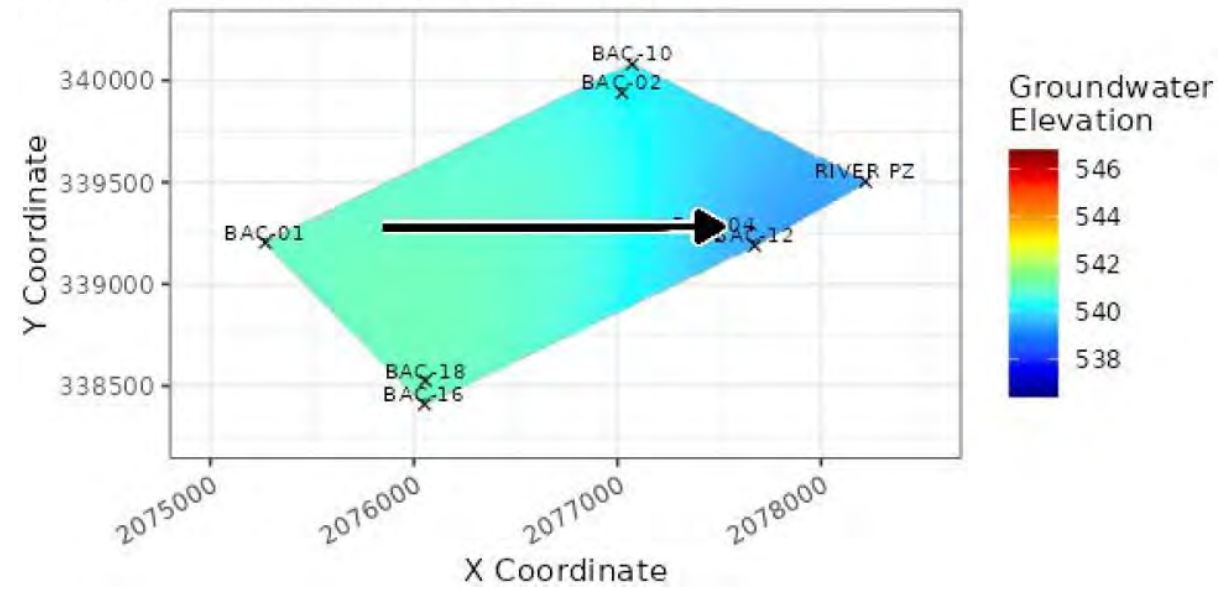


1/3/23-1/4/23: Rapidly Rising River Stage Response

Rapidly rising river stage conditions occurred between 1/3 and 1/4. These conditions caused gradient directions to shift away from the river to the northwest for a short period until the River receded to normal conditions.

Date: 2023-01-12

Gradient: 0.00067 , Theta: 89.9, R²: 0.719



1/5/23-1/12/23: Rapidly Falling River Stage Response

Under rapidly falling river stage conditions, groundwater flow directions shift strongly to the east toward the Ohio River. Minimal pumping took place during this period. The timeframe for the flow direction to transition back to a predominantly easterly direction is influenced by the time since pumping cessation and also the river stage.

Legend

Groundwater flow vector

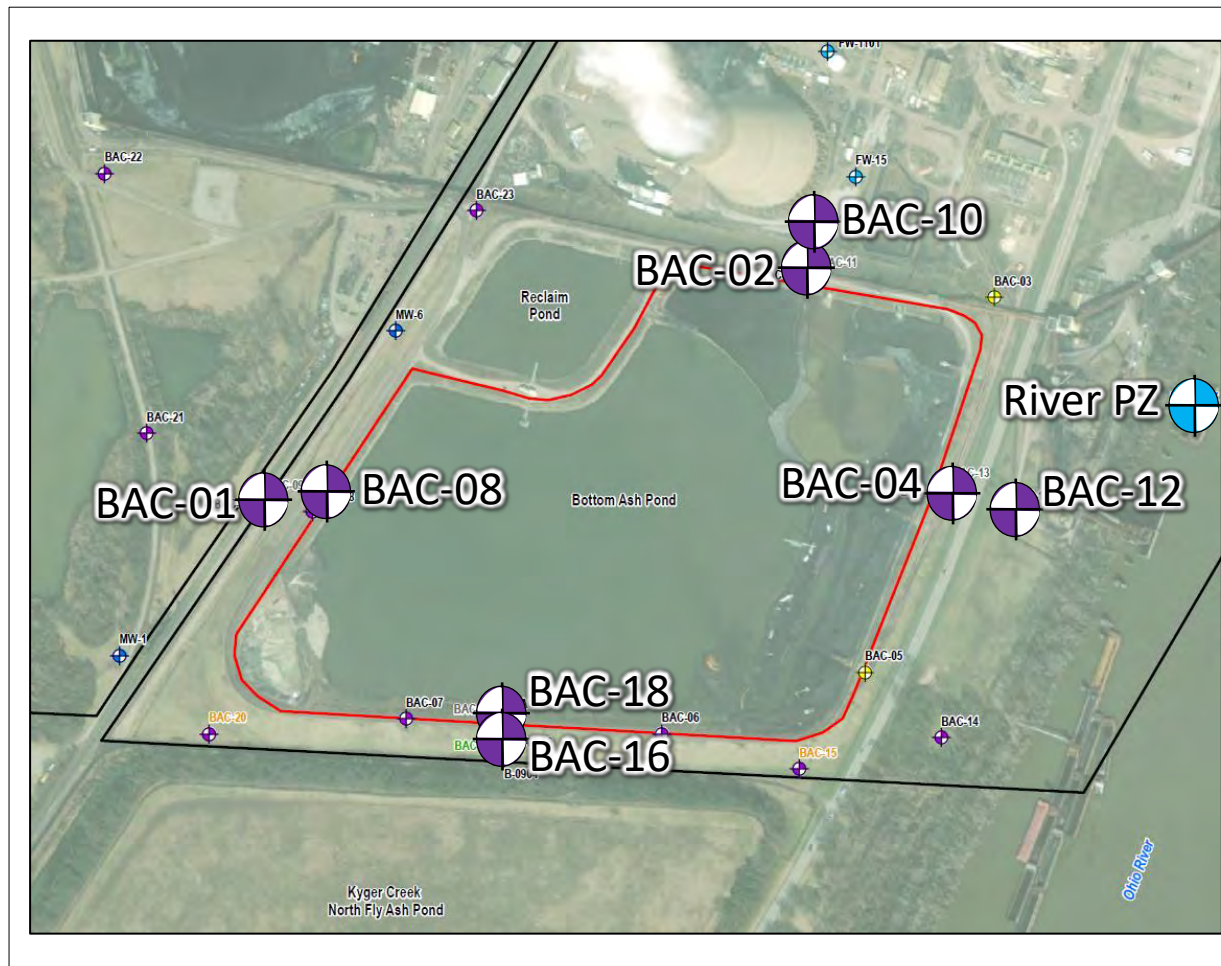
Approximate Location of Bottom Ash Pond Boundary

Groundwater Monitoring Locations

Surface Water Monitoring Locations

Notes:

- 1) Active pumps are FW-15 and FW-1101.
- 2) Groundwater elevation units are feet.
- 3) Aerial Imagery: ESRI World Imagery Reproduced under license in ArcGIS 10.8
- 4) Groundwater hydraulic gradient and flow direction calculated by fitting a plane to water level measurements from across the site using a R Studio Shiny application. Approach adapted from the EPA On-line Hydraulic Gradient Magnitude and Direction tool.



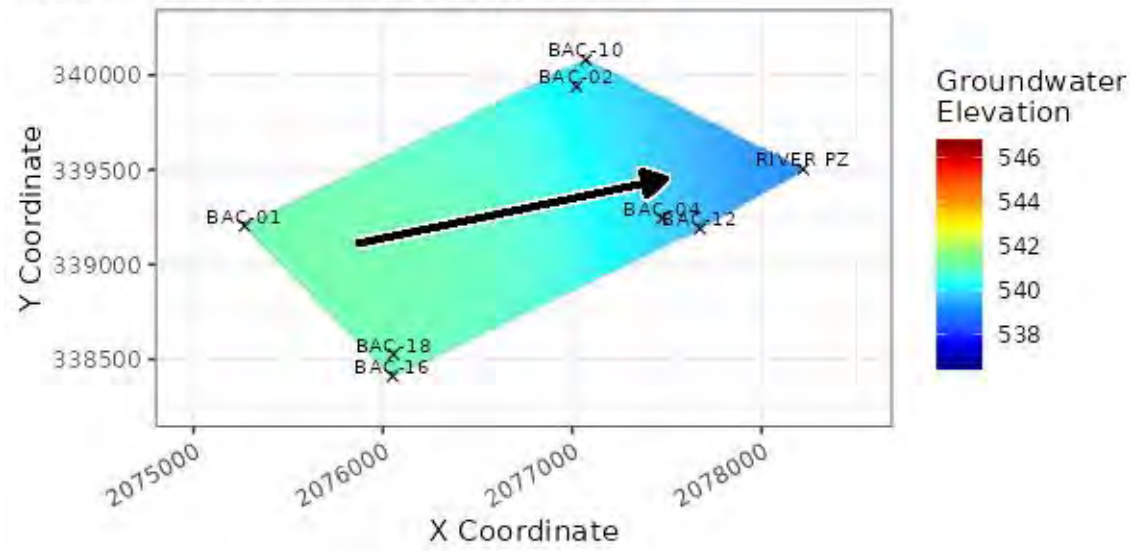
Appendix A4: Groundwater Flow Direction with Rapid River Stage Changes and Minimal Pumping.

Gavin Power, LLC.
Cheshire, Ohio



Date: 2023-03-20

Gradient: 0.00073 , Theta: 78.2, R²: 0.92

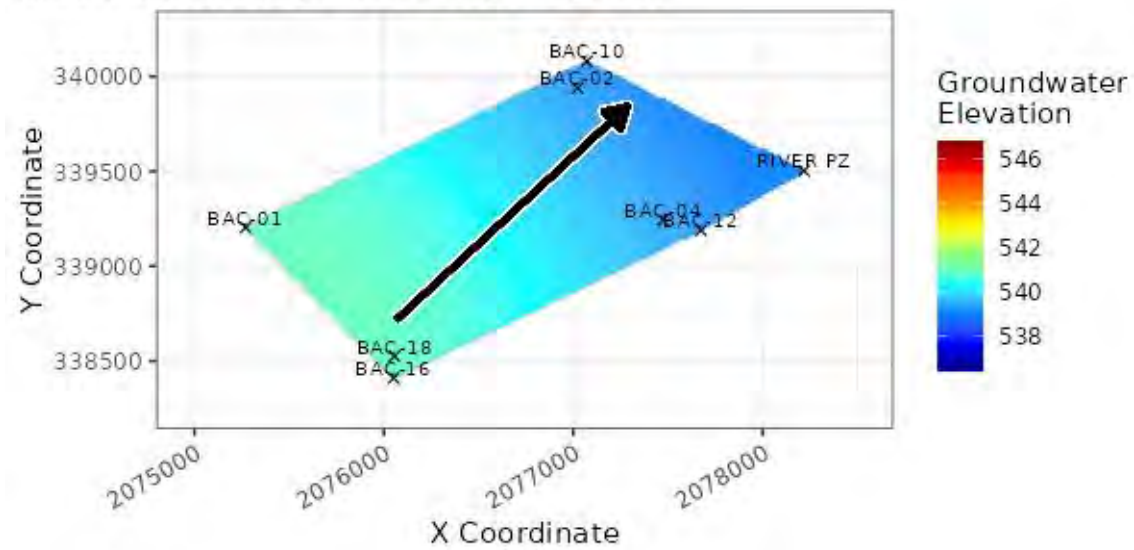


3/19/23-3/21/23: 1.5 days No Pumping

From approximately 3/19 22:00 through 3/21 8:15 there is no pumping and groundwater levels are declining. Average groundwater flow is predominantly to the east towards the Ohio River.

Date: 2023-03-22

Gradient: 0.00092 , Theta: 47.3, R²: 0.963

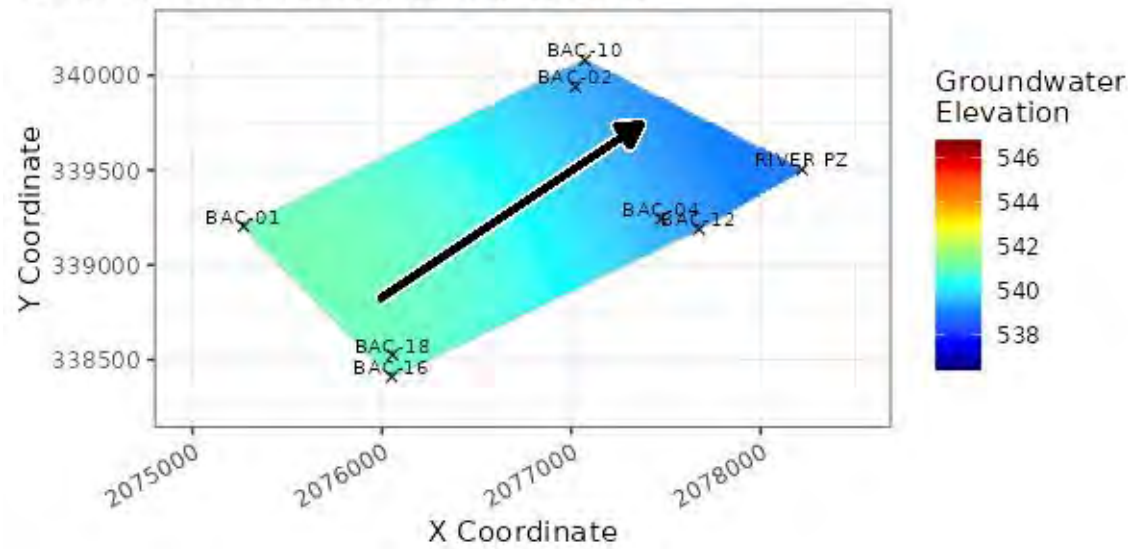


3/21/23-3/22/23: 18 hours Pumping

From approximately 3/21 8:15 through 3/22 14:00 there is pumping from one or both pumps. Average groundwater flow shifts to a more northeasterly direction towards the pumping wells.

Date: 2023-03-23

Gradient: 0.0009 , Theta: 56.3, R²: 0.966







3/22/23-3/23/23: 1 day No Pumping

From approximately 3/22 14:00 through 3/23 14:00 there is no pumping and water levels are relatively stable. The gauging event was completed from approximately 3/23 13:00-14:00. Flow vector represents average gradient for the entire day which is an average of the non-pumping gradient (through 3/23 14:00) and the pumping gradient (from 3/23 14:00 to the end of the day)



Legend

-  Groundwater flow vector
-  Approximate Location of Bottom Ash Pond Boundary
-  Groundwater Monitoring Locations
-  Surface Water Monitoring Locations

Notes:




- 1) Active pumps are FW-15 and FW-1101.
- 2) Groundwater elevation units are feet.
- 3) Aerial Imagery: ESRI World Imagery Reproduced under license in ArcGIS 10.8
- 4) Groundwater hydraulic gradient and flow direction calculated by fitting a plane to water level measurements from across the site using a R Studio Shiny application. Approach adapted from the EPA On-line Hydraulic Gradient Magnitude and Direction tool.

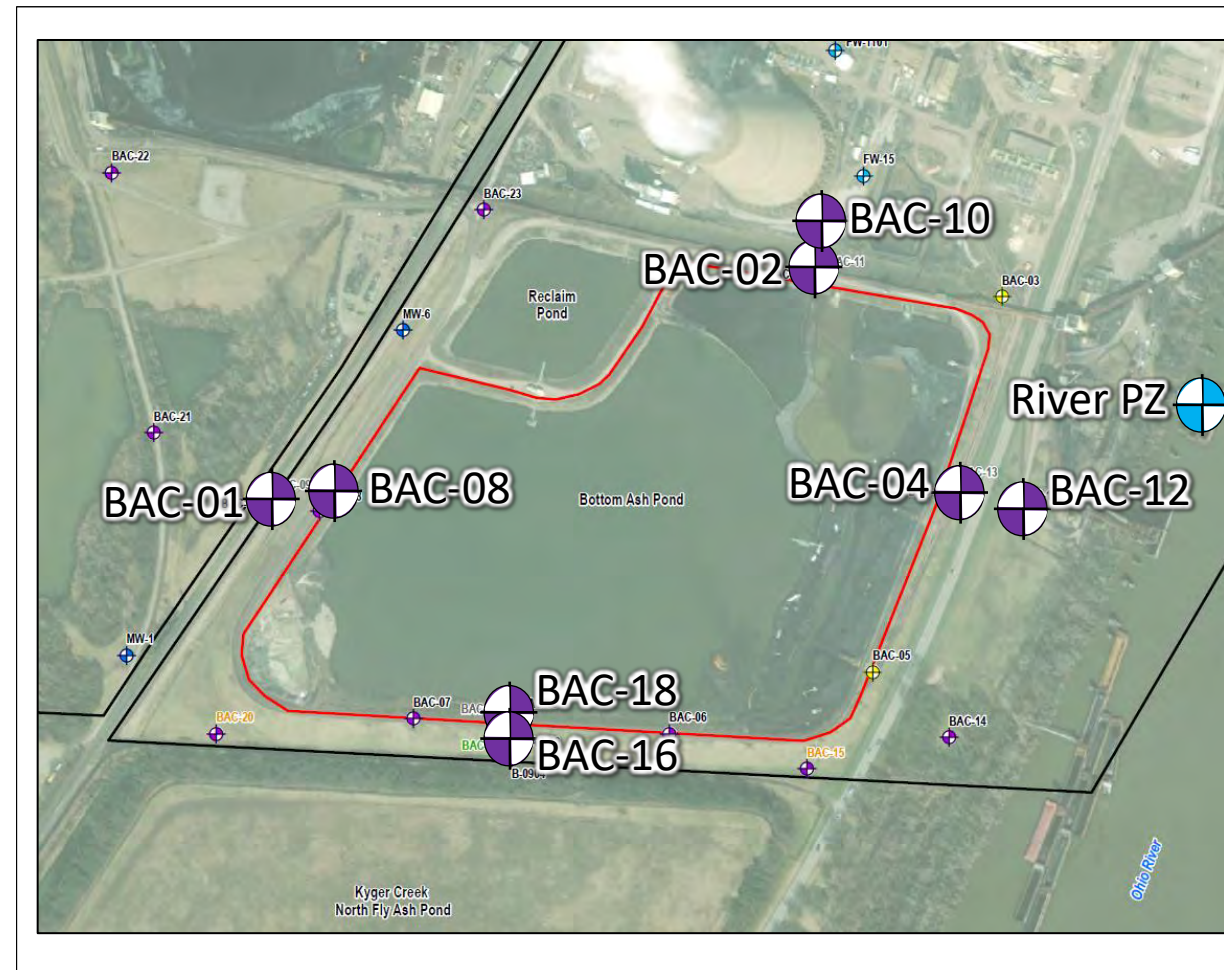
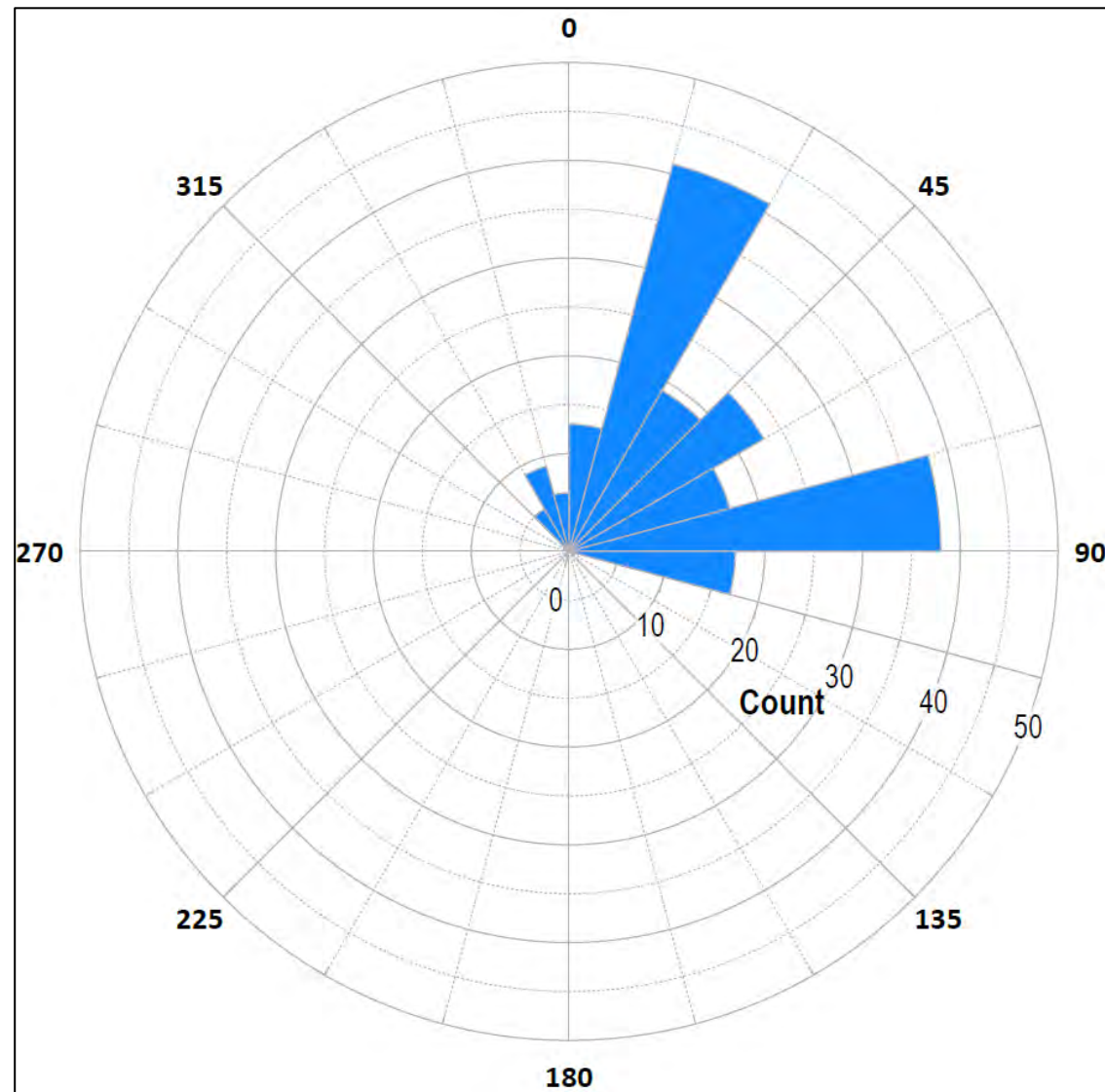
Appendix A5: Prior to Gauging Event

Gavin Power, LLC.
Cheshire, Ohio



Legend

-  Groundwater Monitoring Locations
-  Surface Water Monitoring Locations
-  Frequency of Vector Flow Direction (Days)



Notes:

- 1) Average daily groundwater flow vector from transducer data collected from August 2022 through April 2023. Each daily average is calculated from the average of 24 hourly measurements over the course of each day.
- 2) Groundwater flow vector diagram calculated by fitting a plane to water level measurements from across the site using a R Studio Shiny application. Approach adapted from the EPA On-line Hydraulic Gradient Magnitude and Direction tool.

Appendix A6: Average Daily Groundwater Flow Direction Vector

Gavin Power, LLC.
Cheshire, Ohio



APPENDIX B



OHIO VALLEY ELECTRIC CORPORATION

3932 U. S. Route 23
P. O. Box 468
Piketon, Ohio 45661
740-289-7200

WRITER'S DIRECT DIAL NO:

(740) 289-7259

December 8, 2022

Delivered Electronically

Mr. Marco Deshaies
Division of Surface Water
Ohio Environmental Protection Agency
Southeast District Office
2195 Front Street
Logan, Ohio 43138

Dear Mr. Deshaies:

**Re: Ohio Valley Electric Corporation
Kyger Creek Station- Closed North Fly Ash Pond
Groundwater Semiannual Data Analysis**

Attached are field data (Attachment I) and laboratory analytical data (Attachment II) for the forty seventh set of semiannual samples collected in October, 2022, from groundwater monitoring wells KC-9501, KC-9502, KC-9504, KC-9507, KC-9508 and KC-9509 at the Ohio Valley Electric Corporation's (OVEC's) Kyger Creek Station.

In accordance with the groundwater sampling and analysis plan dated July 5, 1996, for the North Fly Ash Pond Closure Project (hereinafter referred to as "the Plan") and the statistical method notification letter dated October 20, 1999, the analytical results of the semiannual samples were statistically compared to the background data for the four Groundwater Contamination Indicator Parameters (alkalinity, specific conductivity, sulfate, and total dissolved solids) to determine if any significant change in groundwater quality has occurred. The statistical evaluation was performed by using the tolerance interval method for intrawell comparison in accordance with the Plan and notification letter.

An upper tolerance limit was calculated for each of the four parameters at each well using the background data set with a coverage of 95% (i.e., contains 95% of all possible sample measurements) and a tolerance coefficient of 95% (i.e., 95% degree of confidence with which the interval reaches the specified coverage).

The upper tolerance limits were constructed in accordance with "Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Interim Final Guidance" (U.S. EPA, 1989), using a one-sided tolerance factor of $K=3.188$ for $n=8$ found in Table 5 of Appendix B.

A summary of the sampling results as well as the calculated upper tolerance limits can be seen for each well on the spreadsheets included under Attachment III.

In accordance with the Plan, verbal communication of parameters exceeding upper tolerance limits was provided to you via voicemail on December 8, 2022, detailing that the concentrations for the parameter alkalinity exceeded the upper tolerance limit at wells KC-9501, KC-9502 and KC-9507; the concentrations for the parameter sulfate exceeded the upper tolerance limit at wells KC-9501, KC-9502, KC-9507, KC-9508, and KC-9509; the concentration for the parameter conductivity exceeded the upper tolerance limit at well KC-9502; and the concentrations for the parameter total dissolved solids exceeded the upper tolerance limit at wells KC-9501, KC-9502, and KC-9507.

If you have any questions, please contact me at (740) 289-7259.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeremy Galloway". The signature is written in a cursive, flowing style.

Jeremy Galloway
Environmental Specialist

JDG:tlf

Attachments

Attachment I

MONITORING WELL SAMPLING

	KC-9501	KC-9502	KC-9504	KC-9507	KC-9508	KC-9509
DATE	10/25/2022	10/25/2022	10/25/2022	10/25/2022	10/25/2022	10/25/2022
PUMP TIME	5	4	5	6	4	5
FLOW (ml/min)	740	780	840	990	600	1200
VOL. PUMPTIME	3700	3120	4200	5940	2400	6000
TIME	1100	1116	1024	1036	936	1004
TEMPERATURE(C)	14.8	14.9	16.9	17.1	16.4	17.3
COND. (uS/cm)	946	790	776	1615	966	952
pH(S.U.)	7.17	5.63	6.71	6.96	6.83	6.58
TIME	1102	1117	1025	1037	937	1005
TEMPERATURE(C)	14.7	14.7	16.8	17	16.4	17.4
COND. (uS/cm)	962	791	753	1604	970	949
pH(S.U.)	7.17	5.61	6.56	6.96	6.86	6.51
TIME	1103	1118	1026	1038	938	1006
TEMPERATURE(C)	14.60	14.60	16.60	17.00	16.40	17.30
COND. (uS/cm)	963	792	752	1598	971	950
pH(S.U.)	7.16	5.59	6.38	6.97	6.86	6.48
TIME			1027	1039		1007
TEMPERATURE(C)			16.60	16.90		17.30
COND. (uS/cm)			755	1597		950
pH(S.U.)			6.35	6.89		6.48
TIME				1040		
TEMPERATURE(C)				16.90		
COND. (uS/cm)				1598		
pH(S.U.)				6.88		
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Attachment II



Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 223392

Customer: Kyger Creek Plant

Date Reported: 11/10/2022

Customer Sample ID: KC-9501

Customer Description:

Lab Number: 223392-001

Preparation: Dissolved

Date Collected: 10/25/2022 11:04

Date Received: 10/26/2022 11:42

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Chloride	25.2	mg/L	10	0.2	0.1		CRJ	11/02/2022 05:36	EPA 300.1 -1997, Rev. 1.0
Sulfate	260	mg/L	10	2.0	0.3		CRJ	11/02/2022 05:36	EPA 300.1 -1997, Rev. 1.0

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Barium	82.8	µg/L	1	0.20	0.05		GES	11/08/2022 12:14	EPA 200.8-1994, Rev. 5.4
Calcium	129	mg/L	1	0.05	0.02	M1, P3	GES	11/08/2022 12:14	EPA 200.8-1994, Rev. 5.4
Iron	0.729	mg/L	1	0.020	0.006		GES	11/08/2022 12:14	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	11/08/2022 12:14	EPA 200.8-1994, Rev. 5.4
Magnesium	27.1	mg/L	1	0.10	0.02	M1, P3	GES	11/08/2022 12:14	EPA 200.8-1994, Rev. 5.4
Manganese	0.730	mg/L	1	0.0010	0.0002	M1, P3	GES	11/08/2022 12:14	EPA 200.8-1994, Rev. 5.4
Selenium	<0.09	µg/L	1	0.50	0.09	U1	GES	11/08/2022 12:14	EPA 200.8-1994, Rev. 5.4
Sodium	18.7	mg/L	1	0.20	0.05	M1, P3	GES	11/08/2022 12:14	EPA 200.8-1994, Rev. 5.4

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	250	mg/L	1	20	5		MGK	10/28/2022 11:15	SM 2320B-2011
TDS, Filterable Residue	670	mg/L	1	50	20		SDW	10/28/2022 06:25	SM 2540C-2015



Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 223392

Customer: Kyger Creek Plant

Date Reported: 11/10/2022

Customer Sample ID: KC-9502

Customer Description:

Lab Number: 223392-002

Preparation: Dissolved

Date Collected: 10/25/2022 11:19

Date Received: 10/26/2022 11:42

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Chloride	27.0	mg/L	10	0.2	0.1		CRJ	11/02/2022 04:30	EPA 300.1 -1997, Rev. 1.0
Sulfate	355	mg/L	10	2.0	0.3		CRJ	11/02/2022 04:30	EPA 300.1 -1997, Rev. 1.0

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Barium	28.0	µg/L	1	0.20	0.05		GES	11/08/2022 12:45	EPA 200.8-1994, Rev. 5.4
Calcium	74.4	mg/L	1	0.05	0.02		GES	11/08/2022 12:45	EPA 200.8-1994, Rev. 5.4
Iron	0.041	mg/L	1	0.020	0.006		GES	11/08/2022 12:45	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	11/08/2022 12:45	EPA 200.8-1994, Rev. 5.4
Magnesium	24.4	mg/L	1	0.10	0.02		GES	11/08/2022 12:45	EPA 200.8-1994, Rev. 5.4
Manganese	26.0	mg/L	1	0.0010	0.0002		GES	11/08/2022 12:45	EPA 200.8-1994, Rev. 5.4
Selenium	<0.09	µg/L	1	0.50	0.09	U1	GES	11/08/2022 12:45	EPA 200.8-1994, Rev. 5.4
Sodium	23.5	mg/L	1	0.20	0.05		GES	11/08/2022 12:45	EPA 200.8-1994, Rev. 5.4

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	27	mg/L	1	20	5		MGK	10/28/2022 11:15	SM 2320B-2011
TDS, Filterable Residue	590	mg/L	1	50	20		SDW	10/28/2022 06:30	SM 2540C-2015



Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 223392

Customer: Kyger Creek Plant

Date Reported: 11/10/2022

Customer Sample ID: KC-9504

Customer Description:

Lab Number: 223392-003

Preparation: Dissolved

Date Collected: 10/25/2022 10:28

Date Received: 10/26/2022 11:42

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Chloride	86.8	mg/L	10	0.2	0.1		CRJ	11/02/2022 03:57	EPA 300.1 -1997, Rev. 1.0
Sulfate	256	mg/L	10	2.0	0.3		CRJ	11/02/2022 03:57	EPA 300.1 -1997, Rev. 1.0

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Barium	21.3	µg/L	1	0.20	0.05		GES	11/08/2022 12:50	EPA 200.8-1994, Rev. 5.4
Calcium	81.9	mg/L	1	0.05	0.02		GES	11/08/2022 12:50	EPA 200.8-1994, Rev. 5.4
Iron	0.465	mg/L	1	0.020	0.006		GES	11/08/2022 12:50	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	11/08/2022 12:50	EPA 200.8-1994, Rev. 5.4
Magnesium	8.41	mg/L	1	0.10	0.02		GES	11/08/2022 12:50	EPA 200.8-1994, Rev. 5.4
Manganese	0.169	mg/L	1	0.0010	0.0002		GES	11/08/2022 12:50	EPA 200.8-1994, Rev. 5.4
Selenium	<0.09	µg/L	1	0.50	0.09	U1	GES	11/08/2022 12:50	EPA 200.8-1994, Rev. 5.4
Sodium	54.7	mg/L	1	0.20	0.05		GES	11/08/2022 12:50	EPA 200.8-1994, Rev. 5.4

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	13	mg/L	1	20	5	J1	MGK	10/28/2022 11:15	SM 2320B-2011
TDS, Filterable Residue	540	mg/L	1	50	20		SDW	10/28/2022 06:37	SM 2540C-2015



Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 223392

Customer: Kyger Creek Plant

Date Reported: 11/10/2022

Customer Sample ID: KC-9507

Customer Description:

Lab Number: 223392-004

Preparation: Dissolved

Date Collected: 10/25/2022 10:41

Date Received: 10/26/2022 11:42

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Chloride	87.6	mg/L	25	0.5	0.3		CRJ	11/02/2022 03:24	EPA 300.1 -1997, Rev. 1.0
Sulfate	777	mg/L	25	5.0	0.8		CRJ	11/02/2022 03:24	EPA 300.1 -1997, Rev. 1.0

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Barium	32.5	µg/L	1	0.20	0.05		GES	11/08/2022 12:55	EPA 200.8-1994, Rev. 5.4
Calcium	249	mg/L	5	0.3	0.1		GES	11/08/2022 13:00	EPA 200.8-1994, Rev. 5.4
Iron	3.05	mg/L	1	0.020	0.006		GES	11/08/2022 12:55	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	11/08/2022 12:55	EPA 200.8-1994, Rev. 5.4
Magnesium	31.6	mg/L	1	0.10	0.02		GES	11/08/2022 12:55	EPA 200.8-1994, Rev. 5.4
Manganese	3.14	mg/L	1	0.0010	0.0002		GES	11/08/2022 12:55	EPA 200.8-1994, Rev. 5.4
Selenium	<0.09	µg/L	1	0.50	0.09	U1	GES	11/08/2022 12:55	EPA 200.8-1994, Rev. 5.4
Sodium	55.6	mg/L	1	0.20	0.05		GES	11/08/2022 12:55	EPA 200.8-1994, Rev. 5.4

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	83	mg/L	1	20	5		MGK	10/28/2022 11:15	SM 2320B-2011
TDS, Filterable Residue	1340	mg/L	1	50	20		SDW	10/28/2022 06:37	SM 2540C-2015



Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 223392

Customer: Kyger Creek Plant

Date Reported: 11/10/2022

Customer Sample ID: KC-9508

Customer Description:

Lab Number: 223392-005

Preparation: Dissolved

Date Collected: 10/25/2022 09:38

Date Received: 10/26/2022 11:42

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Chloride	33.6	mg/L	10	0.2	0.1		CRJ	11/02/2022 02:18	EPA 300.1 -1997, Rev. 1.0
Sulfate	284	mg/L	10	2.0	0.3		CRJ	11/02/2022 02:18	EPA 300.1 -1997, Rev. 1.0

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Barium	63.1	µg/L	1	0.20	0.05		GES	11/08/2022 13:05	EPA 200.8-1994, Rev. 5.4
Calcium	134	mg/L	1	0.05	0.02		GES	11/08/2022 13:05	EPA 200.8-1994, Rev. 5.4
Iron	5.55	mg/L	1	0.020	0.006		GES	11/08/2022 13:05	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	11/08/2022 13:05	EPA 200.8-1994, Rev. 5.4
Magnesium	21.3	mg/L	1	0.10	0.02		GES	11/08/2022 13:05	EPA 200.8-1994, Rev. 5.4
Manganese	1.81	mg/L	1	0.0010	0.0002		GES	11/08/2022 13:05	EPA 200.8-1994, Rev. 5.4
Selenium	<0.09	µg/L	1	0.50	0.09	U1	GES	11/08/2022 13:05	EPA 200.8-1994, Rev. 5.4
Sodium	16.0	mg/L	1	0.20	0.05		GES	11/08/2022 13:05	EPA 200.8-1994, Rev. 5.4

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	213	mg/L	1	20	5		MGK	10/28/2022 11:15	SM 2320B-2011
TDS, Filterable Residue	690	mg/L	1	50	20		SDW	10/28/2022 06:44	SM 2540C-2015



Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 223392

Customer: Kyger Creek Plant

Date Reported: 11/10/2022

Customer Sample ID: KC-9509

Customer Description:

Lab Number: 223392-006

Preparation: Dissolved

Date Collected: 10/25/2022 10:08

Date Received: 10/26/2022 11:42

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Chloride	45.8	mg/L	10	0.2	0.1		CRJ	11/02/2022 01:45	EPA 300.1 -1997, Rev. 1.0
Sulfate	324	mg/L	10	2.0	0.3		CRJ	11/02/2022 01:45	EPA 300.1 -1997, Rev. 1.0

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Barium	67.5	µg/L	1	0.20	0.05		GES	11/08/2022 13:11	EPA 200.8-1994, Rev. 5.4
Calcium	119	mg/L	1	0.05	0.02		GES	11/08/2022 13:11	EPA 200.8-1994, Rev. 5.4
Iron	3.45	mg/L	1	0.020	0.006		GES	11/08/2022 13:11	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	11/08/2022 13:11	EPA 200.8-1994, Rev. 5.4
Magnesium	22.0	mg/L	1	0.10	0.02		GES	11/08/2022 13:11	EPA 200.8-1994, Rev. 5.4
Manganese	19.0	mg/L	1	0.0010	0.0002		GES	11/08/2022 13:11	EPA 200.8-1994, Rev. 5.4
Selenium	<0.09	µg/L	1	0.50	0.09	U1	GES	11/08/2022 13:11	EPA 200.8-1994, Rev. 5.4
Sodium	17.6	mg/L	1	0.20	0.05		GES	11/08/2022 13:11	EPA 200.8-1994, Rev. 5.4

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	144	mg/L	1	20	5		MGK	10/28/2022 11:15	SM 2320B-2011
TDS, Filterable Residue	680	mg/L	1	50	20		SDW	10/28/2022 06:44	SM 2540C-2015



Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 223392

Customer: Kyger Creek Plant

Date Reported: 11/10/2022

Customer Sample ID: Trip Blank

Customer Description:

Lab Number: 223392-007

Preparation: Dissolved

Date Collected: 10/25/2022 08:00

Date Received: 10/26/2022 11:42

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Chloride	<0.02	mg/L	2	0.04	0.02	U1	CRJ	11/02/2022 00:39	EPA 300.1 -1997, Rev. 1.0
Sulfate	0.18	mg/L	2	0.40	0.06	J1	CRJ	11/02/2022 00:39	EPA 300.1 -1997, Rev. 1.0

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Barium	<0.05	µg/L	1	0.20	0.05	U1	GES	11/08/2022 13:21	EPA 200.8-1994, Rev. 5.4
Calcium	<0.02	mg/L	1	0.05	0.02	U1	GES	11/08/2022 13:21	EPA 200.8-1994, Rev. 5.4
Iron	<0.006	mg/L	1	0.020	0.006	U1	GES	11/08/2022 13:21	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	11/08/2022 13:21	EPA 200.8-1994, Rev. 5.4
Magnesium	<0.02	mg/L	1	0.10	0.02	U1	GES	11/08/2022 13:21	EPA 200.8-1994, Rev. 5.4
Manganese	<0.0002	mg/L	1	0.0010	0.0002	U1	GES	11/08/2022 13:21	EPA 200.8-1994, Rev. 5.4
Selenium	<0.09	µg/L	1	0.50	0.09	U1	GES	11/08/2022 13:21	EPA 200.8-1994, Rev. 5.4
Sodium	<0.05	mg/L	1	0.20	0.05	U1	GES	11/08/2022 13:21	EPA 200.8-1994, Rev. 5.4

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	10/28/2022 11:15	SM 2320B-2011
TDS, Filterable Residue	<20	mg/L	1	50	20	U1	SDW	10/28/2022 06:50	SM 2540C-2015



Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 223392

Customer: Kyger Creek Plant

Date Reported: 11/10/2022

Customer Sample ID: Duplicate

Customer Description:

Lab Number: 223392-008

Preparation: Dissolved

Date Collected: 10/25/2022 11:04

Date Received: 10/26/2022 11:42

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Chloride	25.8	mg/L	10	0.2	0.1		CRJ	11/02/2022 01:12	EPA 300.1 -1997, Rev. 1.0
Sulfate	258	mg/L	10	2.0	0.3		CRJ	11/02/2022 01:12	EPA 300.1 -1997, Rev. 1.0

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Barium	80.9	µg/L	1	0.20	0.05		GES	11/08/2022 14:27	EPA 200.8-1994, Rev. 5.4
Calcium	126	mg/L	1	0.05	0.02		GES	11/08/2022 14:27	EPA 200.8-1994, Rev. 5.4
Iron	0.636	mg/L	1	0.020	0.006		GES	11/08/2022 14:27	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	11/08/2022 14:27	EPA 200.8-1994, Rev. 5.4
Magnesium	25.9	mg/L	1	0.10	0.02		GES	11/08/2022 14:27	EPA 200.8-1994, Rev. 5.4
Manganese	0.747	mg/L	1	0.0010	0.0002		GES	11/08/2022 14:27	EPA 200.8-1994, Rev. 5.4
Selenium	<0.09	µg/L	1	0.50	0.09	U1	GES	11/08/2022 14:27	EPA 200.8-1994, Rev. 5.4
Sodium	19.0	mg/L	1	0.20	0.05		GES	11/08/2022 14:27	EPA 200.8-1994, Rev. 5.4

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	247	mg/L	1	20	5		MGK	10/28/2022 11:15	SM 2320B-2011
TDS, Filterable Residue	670	mg/L	1	50	20		SDW	10/28/2022 06:50	SM 2540C-2015



Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 223392

Customer: Kyger Creek Plant

Date Reported: 11/10/2022

Report Verification

This report and the above data have been confirmed by the following analyst.

Michael Ohlinger, Chemist

Email: msohlinger@aep.com

Phone: 614-836-4184

Audinet: 8-210-4184

THIS TEST REPORT RELATES ONLY TO THE ITEMS TESTED AND SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL OF THE LABORATORY. ALL TEST RESULTS MEET ALL OF THE REQUIREMENTS OF THE ACCREDITING AUTHORITY, UNLESS OTHERWISE NOTED.

Data Qualifier Legend

- M1 - The associated matrix spike (MS) or matrix spike duplicate (MSD) recovery was outside acceptance limits.
- P3 - The precision on the matrix spike duplicate (MSD) was above acceptance limits.
- U1 - Not detected at or above method detection limit (MDL).
- J1 - Concentration estimated. Analyte was detected between the method detection limit and the reporting limit.

Attachment III

OHIO VALLEY ELECTRIC CORPORATION
 KYGER CREEK FLY ASH POND CLOSURE PROJECT
 MONITORING WELL KC-9501
 SAMPLING RESULTS

B A C K D R T O A U N D	Round	Date	Alkalinity	Barium	Calcium	Chloride	Gross Alpha	Gross Beta	Iron	Lead	Magnesium	Manganese	Residue, Filterable, TDS	Selenium	Sodium	Sulfate	Conductivity	Temperature	pH	Well	River
			(total) mg/l	(diss) ug/l	(diss) mg/l	mg/l	pCi/l	pCi/l	(diss) mg/l	(diss) ug/l	(diss) mg/l	(diss) mg/l	(diss) mg/l	(diss) mg/l	(diss) ug/l	(diss) mg/l	mg/l	Field mhos/cm	Field °C	Field S.U.	Elev. ft.
C K D R T O A U N D	1	10/14/97	169	63	118	43	2.3	4.1	0.36	<2	20.7	0.78	545	<5	22.5	196	509	15.6	7.18	51.7	539
	2	01/06/98	179	65	108	41	5.5	6.9	0.3	<2	18.8	0.57	539	<5	21.5	200	585	15.4	7.1	51.4	540
	3	05/22/98	181	68	114	40	1.8	4	0.68	<2	21	0.64	576	<5	22.4	194	815	16.1	7.12	50.9	539
	4	07/21/98	168	63	121	40	2	3	0.61	<2	21.2	0.72	564	<5	23.6	203	760	16.5	7.11	51	539
	5	10/21/98	161	61	115	41	3.7	4	0.6	<2	20.4	0.61	548	<5	21.1	211	761	15.9	6.83	51.7	539
	6	01/13/99	171	64	114	40	1.5	5.1	0.59	<2	21.2	0.56	547	<5	21.8	208	760	15.3	6.71	51.7	540
	7	04/21/99	176	61	109	39	6	5.9	0.54	<2	20.5	0.52	549	<5	20.9	201	811	15.8	6.58	50.7	541
	8	07/27/99	167	64	117	31	5	3.6	0.55	<2	21.3	0.56	562	<5	21.5	207	813	17.9	6.64	51.4	540
	95% Tol. 95% Tol.	Upper Lower	193 N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	593 N/A	N/A N/A	N/A N/A	221 N/A	1095 N/A	N/A N/A	N/A N/A	N/A N/A
S E N N I A L	1	10/13/99	160	61	117	41	5	6.6	0.56	<2	21.8	0.49	538	<5	21.8	222	818	18.4	6.8	52	539
	2	05/04/00	179	67	122	46	2.6	3.2	0.59	<2	21.6	0.66	578	<5	23.2	196	880	16.5	6.2	51.5	538
	3	10/19/00	138	65	116	39	1.3	3.2	0.59	<2	21.5	0.52	568	<5	22	237	818	15.92	6.27	52.25	539
	4	04/25/01	152	--	--	--	--	--	--	--	--	--	600	--	--	214	864	16.37	6.34	51.83	539
	5	10/04/01	149	61	119	--	6	6.2	0.65	<2	22.3	0.53	571	<5	21.6	219	822	16.48	7.26	52.68	538
	6	06/05/02	162	--	--	36	--	--	--	--	--	--	620	--	--	234	814	16.35	7.24	51.50	538
	7	10/31/02	152	71	117	43	4.5	5.3	0.45	<2	20.9	0.63	565	<5	24.8	237	798	15.38	7.30	52.39	538
	8	04/08/03	133	--	--	--	--	--	--	--	--	--	570	--	--	258	826	15.29	7.34	49.50	541
	9	10/09/03	137	69	115	38	0.8	3.4	0.39	<2	20.1	0.61	552	<5	24	235	784	15.24	7.51	52.50	538
	10	05/05/04	153	--	--	--	--	--	--	--	--	--	563	--	--	214	791	15.16	7.43	50.55	540
	11	10/21/04	136	66	118	30	5	5.9	0.2	<2	18.1	0.65	529	<5	23.4	204	791	15.40	7.37	52.45	540
	12	04/26/05	140	--	--	--	--	--	--	--	--	--	517	--	--	207	803	15.20	7.27	49.00	542
	13	10/19/05	132	51	96.6	34	7.9	7.3	0.03	<2	16	0.37	732	<5	25.6	208	759	15.50	7.31	52.00	539
	14	04/18/06	128	--	--	--	--	--	--	--	--	--	489	--	--	198	764	15.40	7.26	51.84	539
	15	10/19/06	126	55	101	38	4.3	4.1	0.09	<10	15.8	0.57	492	<20	19.9	207	734	15.60	7.30	50.40	541
	16	04/27/07	127	--	--	--	--	--	--	--	--	--	541	--	--	192	840	14.60	7.41	50.14	539
	17	11/05/07	143	64	108	--	4.6	2.8	0.03	<5	15.8	0.69	566	<0.5	27.4	193	832	14.60	7.00	51.66	539
	18	04/22/08	160	--	--	--	--	--	--	--	--	--	591	--	--	186	513	14.62	5.87	52.80	539
	19	11/04/08	132	76	116	30.9	1.5	1.09	0.04	<0.05	19.4	0.89	519	<0.5	24.6	192	506	15.10	6.94	52.29	539
	20	04/23/09	132	--	--	30.3	--	--	--	--	--	--	500	--	--	192	762	13.78	7.21	51.22	539
	21	10/21/09	151	55	90.2	31.7	7.2	6.1	0.02	<10	15.2	0.36	499	<0.5	21.1	189	740	16.20	7.33	52.00	539
	22	04/20/10	151	--	--	--	--	--	--	--	--	--	500	--	--	189	759	14.90	7.50	51.85	539
	23	10/15/10	158	63	102	31.5	2.9	3.8	0.17	<10	17.8	0.61	495	<0.5	22.6	195	702	14.80	7.33	52.30	539
	24	06/07/11	164	--	--	--	--	--	--	--	--	--	513	--	--	185	748	14.80	6.72	50.50	539
	25	10/19/11	188	56	94.8	24.6	5.3	7.5	0.38	<10	18.3	0.44	484	<0.5	20.6	168	709	14.00	7.31	51.50	539
	26	04/25/12	204	--	--	20	--	--	--	--	--	--	503	--	--	147	684	14.10	7.35	51.62	539
	27	10/09/12	247	60.7	110	22.1	4.7	2.9	0.39	0.04	21	0.48	492	<0.1	21.5	146	739	13.60	7.08	52.30	539
	28	04/24/13	220	--	--	18.2	--	--	--	--	--	--	508	--	--	128	754	14.60	7.44	52.10	538
	29	10/24/13	218	63.3	114	22.7	1.9	1.2	0.34	0.06	19.9	0.53	508	<0.2	19.9	150	732	14.20	7.06	52.10	539
	30	04/17/14	228	--	--	--	--	--	--	--	--	--	531	--	--	155	781	14.30	7.45	51.10	540
	31	10/28/14	234	67	112	20.6	2.9	4.1	0.47	0.01	21.5	0.53	513	<0.1	20	160	835	14.70	7.03	52.20	538
	32	05/21/15	232	--	--	22.4	--	--	--	--	--	--	522	--	--	172	852	14.40	7.27	51.00	538
	33	10/29/15	235	68.5	126	20.7	4.9	7	0.53	0.02	24.8	0.61	558	<0.03	21	173	845	14.50	7.14	51.40	539
	34	04/21/16	252	--	--	22.9	--	--	--	--	--	--	528	--	--	173	789	15.00	7.27	51.70	539
	35	10/13/16	260	68.6	122	20.9	14.4	4.9	0.43	0.01	23.8	0.57	518	<0.03	20.2	160	887	15.00	7.16	52.90	539
	36	04/27/17	254	--	--	23.5	--	--	--	--	--	--	534	--	--	173	854	14.90	6.86	50.70	540
	37	10/17/17	259	76.4	124	22.2	2.6	8.3	0.56	0.01	24.1	0.64	569	<0.03	19.3	202	909	15.50	7.16	52.10	539
	38	06/06/18	256	--	--	23.7	--	--	--	--	--	--	591	--	--	206	894	14.90	7.18	50.90	540
	39	10/18/18	270	70.7	121	23.4	3	0	0.54	<0.02	23.3	0.59	578	<0.03	17.9	193	977	14.80	7.16	51.00	540
	40	04/22/19	247	--	--	23.8	--	--	--	--	--	--	603	--	--	199	959	14.50	7.11	48.40	541
	41	10/29/19	277	73.3	118	24	1.47	2.54	0.68	<0.05	26	0.49	578	<0.03	19.4	189	856	15.00	6.96	52.30	541
	42	06/12/20	261	--	--	26.2	--	--	--	--	--	--	683	--	--	242	927	15.60	7.23	51.00	536
	43	10/23/20	246	83.4	140	24.3	0.75	0.89	2.4	<0.05	28	0.7	763	<0.03	18.2	232	939	14.30	7.27	52.30	539
	44	04/28/21	244	--	--	26.5	--	--	--	--	--	--	651	--	--	242	997	14.60	7.43	51.70	539
	45	10/19/22	266	80.7	142	26	0.2	1.12	0.79	<0.03	28.4	0.75	660	<0.5	20	242	1007	15.7	7.13	52.6	539
	46	04/22/22	259	--	--	25.9	--	--	--	--	--	--	660	--	--	266	1016	14.7	7.23	50.2	541
	47	10/25/22	250	82.8	129	25.2	0.74	0	0.73	<0.05	27.1	0.73	670	<0.09	18.7	260	946	14.8	7.17	52.9	537

OHIO VALLEY ELECTRIC CORPORATION
 KYGER CREEK FLY ASH POND CLOSURE PROJECT
 MONITORING WELL KC-9502
 SAMPLING RESULTS

B A C K G R O U N D	Round	Date	Alkalinity	Barium	Calcium	Chloride	Gross Alpha	Gross Beta	Iron	Lead	Magnesium	Manganese	Residue, Filterable, TDS	Selenium	Sodium	Sulfate	Conductivity	Temperature	pH	Well	River
			(total) mg/l	(diss) ug/l	(diss) mg/l	mg/l	pCi/l	pCi/l	(diss) mg/l	(diss) ug/l	(diss) mg/l	(diss) mg/l	mg/l	(diss) ug/l	(diss) mg/l	mg/l	Field umhos/cm	Field °C	Field S.U.	Elev. ft.	Elev. ft.
B A C K G R O U N D	1	10/14/97	19	19	59.1	38	1	2.7	3.79	<2	20.9	16.5	464	<5	24.1	233	409	15.7	5.7	51.65	538.6
	2	01/06/98	17	21	56.1	40	4.8	12.8	5.37	3	18.2	11.6	449	<5	24.8	232	455	15.6	5.7	51.37	539.5
	3	05/22/98	19	24	55.6	40	<1	2.7	6.67	<2	19	12.6	494	<5	24.9	238	623	15.9	5.7	50.81	538.8
	4	07/21/98	17	19	59.4	40	<1	2.1	6.85	3	20	13.4	463	<5	25	236	604	16.4	5.5	50.9	539
	5	10/21/98	18	18	58.6	40	<1	2.1	5.54	<2	19	13.3	474	<5	23	232	606	15.9	5.5	51.62	539
	6	01/13/99	15	23	54.3	42	<1	1.5	6.86	2	18.7	11.4	470	<5	23.8	239	594	15.6	5.2	51.66	539.5
	7	04/21/99	15	16	53.5	34	<1	1.7	2.11	3	18	13.1	478	<5	22.1	236	633	16.3	5.2	50.65	541
	8	07/27/99	16	19	58.6	31	1.7	2.3	3.38	4	19.2	14.6	510	<5	24.1	220	634	17.9	5.4	51.36	540
		95% Tol. 95% Tol.	Upper Lower	22 N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	536 N/A	N/A N/A	N/A N/A	252 N/A	847 N/A	N/A N/A	N/A N/A	N/A N/A
S E N S I T I V E	1	10/13/99	18	16	59.7	45	0	5.8	1.64	<2	19.5	16.2	461	<5	23.3	239	640	17	5.5	51.9	538.5
	2	05/04/00	18	19	58.7	58	0.4	1.7	3.85	2	19.9	14.8	509	<5	25.3	251	687	16.5	5.2	51.46	538
	3	10/19/00	20	19	58.4	31	1.1	1.8	4.68	<2	19.7	13.9	509	<5	24.2	241	656	16.02	5.40	52.18	538.8
	4	04/25/01	18	--	--	--	--	--	--	--	--	--	546	--	--	240	593	15.86	5.89	51.67	539
	5	10/04/01	22	18	61.3	--	0	1.8	3.4	2	20	15	483	<5	22.9	237	658	16.29	5.90	52.61	538
	6	06/05/02	22	--	--	40	--	--	--	--	--	--	612	--	--	247	640	15.73	5.81	51.46	538
	7	10/31/02	21	20	61.5	39	0.8	2.1	4.44	<2	20.4	14.4	492	<5	24.5	248	641	15.39	5.91	52.31	538.4
	8	04/08/03	15	--	--	--	--	--	--	--	--	--	513	--	--	275	682	15.32	5.63	49.45	540.7
	9	10/09/03	20	23	62.1	42	0.8	1.1	4.23	<2	21.1	14.8	486	<5	23.2	250	651	15.41	6.22	52.48	538
	10	05/05/04	19	--	--	--	--	--	--	--	--	--	538	--	--	266	685	15.16	6.04	50.50	540
	11	10/21/04	23	19	69.6	33	0.6	0	12.2	<2	21.3	12.1	516	<5	24.9	279	726	15.40	5.86	52.00	540
	12	04/26/05	12	--	--	--	--	--	--	--	--	--	527	--	--	278	703	15.10	5.54	49.40	542
	13	10/19/05	16	15	59.7	32	1.2	2.9	7.28	5	19.7	13	522	<5	27.8	260	693	15.80	5.67	51.94	539
	14	04/18/06	18	--	--	--	--	--	--	--	--	--	483	--	--	274	693	15.20	5.61	51.60	539
	15	10/19/06	15	16	56.3	32.9	1.7	3.2	7.18	<10	17.7	11.6	481	<20	19.2	278	694	15.40	5.57	50.30	541
	16	04/27/07	19	--	--	--	--	--	--	--	--	--	520	--	--	276	738	14.40	5.77	50.12	539
	17	11/05/07	18	7	64.5	--	1.1	0	6.26	<5	19.8	13	538	<0.5	25.3	259	716	14.60	5.81	51.57	539
	18	04/22/08	28	--	--	--	--	--	--	--	--	--	527	--	--	244	641	14.86	7.47	52.76	539
	19	11/04/08	26	<10	62.8	23.4	0.165	0.77	4.36	0.14	19.9	13.9	484	<0.5	24	226	438	15.12	5.91	52.18	539
	20	04/23/09	28	--	--	24.8	--	--	--	--	--	--	469	--	--	240	687	13.77	6.55	51.16	539
	21	10/21/09	27	<20	52.9	26.6	1.1	1.6	4.88	<10	17.3	11.7	484	<0.5	22.5	248	681	15.20	5.75	51.80	538.7
	22	04/20/10	31.5	--	--	--	--	--	--	--	--	--	487	--	--	247	708	14.80	5.96	51.68	539
	23	10/15/10	29.3	<20	60.1	32.2	0	2	5.74	<10	20.2	13.4	470	<0.5	23.9	300	627	14.70	5.91	52.20	539
	24	06/07/11	31.9	--	--	--	--	--	--	--	--	--	471	--	--	249	659	14.60	6.83	50.37	538.8
	25	10/19/11	32.8	<20	55.6	28.3	1.5	6	4.48	<10	18.2	11.8	478	<0.5	22.8	257	652	13.90	5.79	51.40	538.9
	26	04/25/12	31	--	--	23.9	--	--	--	--	--	--	478	--	--	240	616	14.00	5.55	51.58	538.7
	27	10/09/12	26	19	62.7	26.7	0.7	1.5	3.54	0.035	20.1	14.3	462	<0.1	24.7	228	646	13.50	5.03	52.12	538.5
	28	04/24/13	42	--	--	22.8	--	--	--	--	--	--	458	--	--	246	658	14.50	5.99	52.11	538.1
	29	10/24/13	33.8	19	62.1	26.6	0	0.8	4.89	0.144	19	14.2	474	<0.2	22.2	238	613	13.10	5.80	52.00	538.5
	30	04/17/14	33	--	--	--	--	--	--	--	--	--	480	--	--	246	680	14.20	5.84	51.00	540
	31	10/28/14	38.8	20	59	25.2	0.7	2.8	4.5	0.006	19.1	14.5	462	<0.1	23	242	690	14.70	6.50	52.20	538
	32	05/21/15	48.9	--	--	20.6	--	--	--	--	--	--	450	--	--	254	684	14.40	6.04	51.00	538.1
	33	10/29/15	41.1	20	66.4	25.8	1	1.1	2.44	0.016	20.8	18.6	446	<0.03	24.5	249	683	14.50	5.79	51.80	539
	34	04/21/16	45.7	--	--	21.7	--	--	--	--	--	--	473	--	--	261	644	14.80	5.75	51.70	539
	35	10/13/16	39.7	22	67.9	26.3	7.3	1.6	0.09	0.029	21.7	21.4	473	<0.03	23.4	264	761	14.90	5.51	52.80	538.9
	36	04/27/17	62.8	--	--	19.7	--	--	--	--	--	--	446	--	--	239	715	14.70	5.68	50.60	540.2
	37	10/17/17	59.2	20	64.6	23.2	0	10.1	3.28	0.01	20.7	15.1	470	<.03	22.1	259	710	15.30	5.89	52.00	539.1
	38	06/06/18	61	--	--	22.6	--	--	--	--	--	--	482	--	--	102	719	14.80	5.85	50.80	540.3
	39	10/18/18	48.3	22	68.4	27.1	0.6	1.7	0.53	0.03	21.2	20.6	515	0.04	22	275	811	14.10	5.73	50.90	539.8
	40	04/22/19	41.9	--	--	27.3	--	--	--	--	--	--	542	--	--	288	787	14.30	5.59	48.40	541.3
	41	10/29/19	29.7	24	63.1	27.2	0.049	1.13	0.4	<0.05	22.3	21.7	544	0.03	24.1	303	724	14.60	5.52	52.20	540.8
	42	06/12/20	28.4	--	--	27.9	--	--	--	--	--	--	559	--	--	305	730	15.40	5.45	51.00	536.2
	43	10/23/20	24.9	27	74.8	26.1	-0.49	2.46	0.16	<0.05	24.4	25.2	573	0.07	22.7	315	763	14.20	5.52	52.20	538.9
	44	04/28/21	28.8	--	--	27.7	--	--	--	--	--	--	566	--	--	310	997	14.40	5.60	51.70	539.2
	45	10/19/21	31	27	73.6	27.5	0.791	0.83	0.03	<0.3	24.4	24.5	580	<0.5	24	316	796	15.70	5.64	52.60	539
	46	04/22/22	42	--	--	23.5	--	--	--	--	--	--	520	--	--	299	1148	16.70	5.62	50.30	540.9
	47	10/25/22	27	28	74.4	27	-0.37	0.62	0.04	<0.05	24.4	26	590	<0.09	23.5	355	790	14.90	5.63	52.80	537.1

OHIO VALLEY ELECTRIC CORPORATION
 KYGER CREEK FLY ASH POND CLOSURE PROJECT
 MONITORING WELL KC-9504
 SAMPLING RESULTS

B A C K D R T O A U N D	Round	Date	Alkalinity	Barium	Calcium	Chloride	Gross Alpha	Gross Beta	Iron	Lead	Magnesium	Manganese	Residue, Filterable, TDS	Selenium	Sodium	Sulfate	Conductivity	Temperature	pH	Well	River	
			(total) mg/l	(diss) ug/l	(diss) mg/l	mg/l	pCi/l	pCi/l	(diss) mg/l	(diss) ug/l	(diss) mg/l	(diss) mg/l	mg/l	(diss) ug/l	(diss) mg/l	mg/l	Field mhos/cm	Field °C	Field S.U.	Elev. ft.	Elev. ft.	
1	10/14/97	103	58	135	41	1.3	4.6	0.66	<2	17.9	0.85	683	<5	29.9	327	594	16.7	6.98	47.5	539		
2	01/06/98	98	52	135	40	2.8	4.3	0.41	3	15.3	0.7	667	<5	30.6	324	653	16.5	6.86	47.5	540		
3	05/22/98	101	55	139	38	<1	2.4	1.03	<2	16.9	0.83	727	<5	30.5	349	916	16.8	6.86	46.8	539		
4	07/21/98	94	54	145	40	<1	2.4	1.05	<2	16.7	0.8	704	<5	30.8	345	871	17.3	6.89	46.9	539		
5	10/21/98	95	53	150	37	<1	2.2	0.85	3	17.7	0.89	737	<5	30.4	369	915	16.6	6.78	47.9	539		
6	01/13/99	108	58	147	39	<1	2	1.06	2	17.8	0.81	744	<5	31.3	370	942	16.1	6.57	48	540		
7	04/21/99	89	45	138	32	28	29	0.33	<2	17.4	0.69	716	<5	28.6	371	1198	17.1	5.19	46.4	541		
8	07/27/99	118	49	179	35	4.3	5.8	0.85	<2	20.5	0.93	852	<5	32.1	421	1071	18.1	6.29	47.2	540		
95% Tol.	Upper	130	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	908	N/A	N/A	459	1528	N/A	N/A	N/A	N/A	N/A	
95% Tol.	Lower	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
A S N E N U M I A L	1	10/13/99	117	45	184	32	12	15.6	0.91	<2	22.3	1.06	856	<5	32.2	440	1118	17.1	6.37	47.9	539	
2	05/04/00	124	44	186	58	0.8	4.8	1.17	2	22.2	1.05	919	<5	29.2	429	1182	16.4	5.92	48	538		
3	10/19/00	118	40	190	36	5.6	11.6	1.44	<2	24	0.92	928	<5	29.7	467	1161	16.44	6.06	48.75	539		
4	04/25/01	122	--	--	--	--	--	--	--	--	--	1070	--	--	537	968	17.42	6.04	48.25	539		
5	10/04/01	116	35	222	--	2.8	5.1	1.75	<2	27.9	0.91	1010	<5	27.9	527	1105	16.99	5.64	49.01	538		
6	06/05/02	104	--	--	36	--	--	--	--	--	--	1050	--	--	561	1205	16.85	6.83	48.00	538		
7	10/31/02	99	38	203	42	4.3	4	1.69	<2	29.3	1.16	1010	<5	24	559	1203	16.48	6.87	48.70	538		
8	04/08/03	97	--	--	--	--	--	--	--	--	--	1040	--	--	555	1301	16.47	6.92	46.50	541		
9	10/09/03	93	36	198	43	1.9	1	1.81	<2	31.2	1.22	979	<5	23.2	524	1186	16.28	7.40	49.20	538		
10	05/05/04	107	--	--	--	--	--	--	--	--	--	1040	--	--	532	1216	15.50	6.97	46.90	540		
11	10/21/04	82	32	185	38	2.6	1.7	1.93	<2	31.2	0.94	941	<5	23.3	519	1141	16.80	6.89	48.72	540		
12	04/26/05	78	--	--	--	--	--	--	--	--	--	977	--	--	519	1221	16.70	6.97	45.45	542		
13	10/19/05	75	26	175	41	1.8	4.6	2.05	<2	34	1.04	1000	12	25.9	525	1216	17.10	6.97	48.50	539		
14	04/18/06	79	--	--	--	--	--	--	--	--	--	1050	--	--	565	1285	16.80	6.98	48.24	539		
15	10/19/06	70	27	213	47	10.8	4	1.84	<10	33.9	1.06	986	<20	17.7	558	1233	17.20	6.86	47.20	541		
16	04/27/07	69	--	--	--	--	--	--	--	--	--	1050	--	--	585	1350	16.20	7.11	46.65	539		
17	11/05/07	69	29	187	--	1.5	3.7	1.83	<5	32.1	1.27	1020	<0.5	23	503	1258	16.40	7.00	48.29	539		
18	04/22/08	144	--	--	--	--	--	--	--	--	--	1480	--	--	790	1413	17.47	6.83	57.68	539		
19	11/04/08	124	37	286	29.4	2.23	2.97	4.46	<0.05	46	3.37	1430	<0.5	23.1	820	1149	17.44	6.76	48.31	539		
20	04/23/09	127	--	--	34.5	--	--	--	--	--	--	1470	--	--	778	1607	16.15	7.63	47.32	539		
21	10/21/09	129	29	273	33.8	1.5	0	3.38	<10	38.3	2.65	1390	<0.5	21.2	785	1598	17.00	6.83	48.75	539		
22	04/20/10	138	--	--	--	--	--	--	--	--	--	1420	--	--	744	946	16.90	5.85	47.51	539		
23	10/15/10	127	34	277	38	1.9	0.9	4.28	<10	39.6	3.32	1330	<0.5	21.8	775	1432	16.80	6.80	48.23	539		
24	06/07/11	127	--	--	--	--	--	--	--	--	--	1280	--	--	668	1428	16.80	7.03	46.75	539		
25	10/19/11	123	24	207	36.2	2.1	3.5	3.8	<10	28.9	2.96	1180	<0.5	19.1	666	1366	15.80	6.73	48.05	539		
26	04/25/12	117	--	--	37.3	--	--	--	--	--	--	1090	--	--	541	1184	16.50	6.77	48.48	539		
27	10/09/12	111	26.5	208	37.3	3.3	3.3	4.18	0.41	29.6	3.08	957	<0.1	19.4	459	1181	15.60	6.78	49.08	539		
28	04/24/13	111	--	--	39	--	--	--	--	--	--	965	--	--	542	1211	16.50	7.13	48.84	538		
29	10/24/13	97.9	25.9	195	40.5	3	10.6	3.7	0.11	25	2.69	903	<0.2	15.9	452	1119	15.40	6.74	49.10	539		
30	014/17/14	99.7	--	--	--	--	--	--	--	--	--	949	--	--	484	1170	16.20	7.16	48.00	540		
31	10/28/14	89.9	26.6	184	42.4	2	2.3	3.51	0.01	24.3	2.52	898	<0.1	15.8	460	1226	16.60	6.49	49.20	538		
32	05/21/15	94.6	--	--	44.5	--	--	--	--	--	--	896	--	--	481	1500	16.10	6.84	48.10	538		
33	10/29/15	85.1	26.7	192	48.9	4.7	5.1	3.76	0.03	26.7	2.67	784	<0.03	16.6	464	1130	16.30	7.00	48.80	539		
34	04/21/16	92.1	--	--	45.2	--	--	--	--	--	--	795	--	--	428	1013	16.80	6.88	48.70	539		
35	10/13/16	86.6	26.7	166	45.8	16.5	4.6	3.2	0.01	23.7	2.28	757	<0.03	14.7	423	1137	16.50	6.91	49.60	539		
36	04/27/17	12.5	--	--	54.1	--	--	--	--	--	--	295	--	--	103	446	16.50	6.21	47.50	540		
37	10/17/17	21.8	30.2	63.1	52.6	1.5	0.5	0.82	0.04	6.92	0.32	321	<0.3	17.9	128	485	17.10	6.25	49.20	539		
38	06/06/18	36.1	--	--	53.8	--	--	--	--	--	--	330	--	--	102	504	16.70	6.56	47.20	540		
39	10/18/18	14.7	28.9	55.9	63.9	0.9	0	0.82	<0.02	5.9	0.42	312	<0.03	17.7	114	557	14.10	6.12	47.80	540		
40	04/22/19	14.4	--	--	70.2	--	--	--	--	--	--	391	--	--	129	571	17.10	6.27	45.40	541		
41	10/29/19	10	29.4	75.4	85.2	0.8	1.82	0.3	<0.05	7.7	0.15	464	0.04	33	185	643	16.30	6.39	48.90	541		
42	06/12/20	20.7	--	--	79.3	--	--	--	--	--	--	490	--	--	202	550	18.20	6.74	47.50	536		
43	10/23/20	10	26	90.9	80.9	-0.13	2.55	0.18	0.07	8.83	0.27	575	0.03	36.5	226	738	16.00	6.39	49.10	539		
44	04/28/21	10	--	--	86.3	--	--	--	--	--	--	568	--	--	250	837	16.20	6.49	48.50	539		
45	10/19/21	14	23.3	88.2	85.4	0	0.27	1.31	<0.3	9.43	0.46	540	<0.5	52.1	249	882	17.00	6.31	49.20	539		
46	04/22/22	13	--	--	83.4	--	--	--	--	--	--	540	--	--	259	1200	16.30	6.82	47.10	541		
47	10/25/22	13	21.3	81.9	86.8	0.06	0.09	0.47	<0.05	8.41	0.17	540	<0.09	54.7	256	776	16.90	6.71	49.50	537		

OHIO VALLEY ELECTRIC CORPORATION
 KYGER CREEK FLY ASH POND CLOSURE PROJECT
 MONITORING WELL KC-9507
 SAMPLING RESULTS

B A C K G R O U N D	Round	Date	Alkalinity (total) mg/l	Barium (diss) ug/l	Calcium (diss) mg/l	Chloride mg/l	Gross Alpha pCi/l	Gross Beta pCi/l	Iron (diss) mg/l	Lead (diss) ug/l	Magnesium (diss) mg/l	Manganese (diss) mg/l	Residue, Filterable, TDS mg/l	Selenium (diss) ug/l	Sodium (diss) mg/l	Sulfate mg/l	Conductivity Field umhos/cm	Temperature Field C	pH Field S.U.	Well Elev. ft.	River Elev. ft.
	95% Tol	Upper	56	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	713	1895	N/A	N/A	N/A	N/A
	95% Tol	Lower	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S E N S I T I V E	1	10/13/99	39	20	147	33	2.5	1.8	18.6	<2	49.5	4.93	954	<5	27.6	579	1226	17.2	5.36	47.86	538.5
	2	05/04/00	37	19	131	46	1.5	0.5	12.9	<2	43.4	3.72	981	<5	26.1	518	1182	16.9	5.07	48.35	538
	3	10/19/00	33	18	130	26	3.7	1.3	15.6	<2	45.3	4.34	919	<5	24.7	531	1138	16.82	5.28	48.69	538.8
	4	04/25/01	32	--	--	--	--	--	--	--	--	--	967	--	--	536	1309	17.26	5.68	48.17	539
	5	10/04/01	27	20	128	--	0.7	1.7	13.6	<2	41.8	3.57	860	<5	25.6	485	1267	17.75	6.91	48.99	538
	6	06/05/02	25	--	--	34	--	--	--	--	--	--	1110	--	--	563	1124	16.90	5.62	48.00	538
	7	10/31/02	24	24	122	41	0.7	1.9	18.6	<2	41.1	4.32	853	<5	24.6	530	1051	16.70	5.75	48.60	538.4
	8	04/08/03	22	--	--	--	--	--	--	--	--	--	843	--	--	505	1051	16.65	5.67	46.40	540.7
	9	10/09/03	22	21	118	45	0.8	2.6	18.6	<2	38.9	4.06	820	<5	22.9	479	1048	16.49	5.95	48.10	538
	10	05/05/04	22	--	--	--	--	--	--	--	--	--	941	--	--	515	1112	16.56	5.79	46.80	540
	11	10/21/04	21	19	123	34	0.8	2.5	26.4	<2	39.2	5.28	810	<5	24.3	514	1074	16.90	5.67	48.35	540
	12	04/26/05	22	--	--	--	--	--	--	--	--	--	782	--	--	463	1053	16.70	5.62	45.40	542
	13	10/19/05	20	13	96	39	0.7	1.2	17	<2	31.4	3.12	707	<5	25.3	400	961	17.10	5.71	48.35	539
	14	04/18/06	20	--	--	--	--	--	--	--	--	--	755	--	--	448	976	16.90	5.66	48.15	539
	15	10/19/06	20	15	103	36.9	0.7	0.9	27.5	<10	32.7	4.71	724	<20	21.2	445	1015	17.20	5.52	47.28	541
	16	04/27/07	22	--	--	--	--	--	--	--	--	--	808	--	--	463	1072	16.30	5.73	46.64	539
	17	11/05/07	25	17	100	--	2	3	31.4	<5	31.2	5.59	810	<0.5	23.2	396	996	16.50	5.62	48.15	539
	18	04/22/08	31	--	--	--	--	--	--	--	--	--	1120	--	--	649	1121	17.68	6.29	57.67	539
	19	11/04/08	26	22	232	36.6	-0.21	0.84	8.31	<0.05	31.5	1.89	1040	<0.5	16.2	592	894	17.49	6.22	52.49	539
	20	04/23/09	28	--	--	41.5	--	--	--	--	--	--	997	--	--	560	1200	16.30	7.01	47.22	539
	21	10/21/09	28	<20	144	40.5	2.6	0	8.44	<10	18.8	1.65	827	0.5	14.1	492	1060	17.20	5.86	48.80	538.7
	22	04/20/10	24	--	--	--	--	--	--	--	--	--	698	--	--	408	1022	17.00	6.93	47.40	539
23	10/15/10	21.2	21	122	51.6	0.6	0	5.19	<10	14.2	0.937	593	<0.5	13.6	382	770	16.60	6.08	48.10	539	
24	06/07/11	26.7	--	--	--	--	--	--	--	--	--	627	--	--	319	858	16.80	7.07	46.85	538.8	
25	10/19/11	20.2	<20	77.8	40.9	3.1	4.7	1.26	<10	8.66	0.395	433	<0.5	10.6	212	543	15.80	5.81	48.02	538.9	
26	04/25/12	17	--	--	43.7	--	--	--	--	--	--	489	--	--	207	604	16.50	6.10	48.42	538.7	
27	10/09/12	14	21.3	85.4	49	1.4	2.6	0.64	0.03	8.18	0.211	433	<0.1	11.4	171	577	15.60	5.66	48.97	538.5	
28	04/24/13	15	--	--	48.8	--	--	--	--	--	--	402	--	--	168	557	16.40	6.33	48.78	538.1	
29	10/24/13	14.2	24.8	73.7	50.1	0	3.5	1.26	0.09	7.47	0.392	349	<0.2	11.3	142	517	15.40	6.74	49.10	538.5	
30	04/17/14	14.6	--	--	--	--	--	--	--	--	--	393	--	--	135	537	16.10	6.19	48.10	540	
31	10/28/14	25	25.2	60.7	50.8	0	4.7	0.13	0.02	6.46	0.277	343	<0.1	11.5	128	520	16.60	6.56	49.10	538	
32	05/21/15	26.5	--	--	56	--	--	--	--	--	--	353	--	--	136	546	15.90	6.26	48.00	538.1	
33	10/29/15	13.2	26.4	60.8	56.3	0.5	13.1	1.02	0.02	6.17	0.264	348	<0.03	12.8	130	484	16.30	6.13	48.70	539	
34	04/21/16	14.3	--	--	53.9	--	--	--	--	--	--	320	--	--	121	443	16.50	6.01	48.60	539	
35	10/13/16	14.8	29.3	61.6	54.6	0	0	1.22	0.03	6.73	0.382	339	0.04	16.2	133	510	16.40	6.02	49.60	538.9	
36	04/27/17	93.1	--	--	46.5	--	--	--	--	--	--	724	--	--	360	1054	16.50	6.95	46.90	540.2	
37	10/17/17	93.9	25.3	146	46	1.4	3.7	2.61	0.01	21.1	1.79	651	<0.03	13.6	346	970	16.70	6.93	48.70	539.1	
38	06/06/18	102	--	--	49.6	--	--	--	--	--	--	694	--	--	343	1089	16.60	6.93	47.10	540.3	
39	10/18/18	93.8	27.1	141	55.3	4.6	1.2	2.4	<0.02	19.2	1.65	662	<0.03	12.4	319	1121	15.90	6.99	47.80	539.8	
40	04/22/19	87.1	--	--	64.4	--	--	--	--	--	--	825	--	--	383	1230	16.00	6.59	45.50	541.3	
41	10/29/19	89.2	38.4	173	65.6	1.24	1.48	3.36	<0.05	25.1	2.64	911	<>0.03	28	462	1231	16.60	6.99	48.90	540.8	
42	06/12/20	75.5	--	--	71.6	--	--	--	--	--	--	1050	--	--	537	1280	18.10	6.74	47.50	536.2	
43	10/23/20	100	31.3	207	63.5	-0.43	1.16	2.98	<0.05	26.8	2.44	945	<0.03	23.3	479	1350	16.50	6.99	49.10	538.9	
44	04/28/21	87.9	--	--	74.7	--	--	--	--	--	--	1080	--	--	566	1474	15.80	6.99	48.50	539.2	
45	10/19/21	92	32.1	222	73.8	0.45	0.7	3.11	<0.3	29.7	3.08	1120	<0.5	35.3	592	1537	17.80	7.02	49.20	539	
46	04/22/22	91	--	--	90.1	--	--	--	--	--	--	1380	--	--	814	1662	16.60	7.06	47.20	540.9	
47	10/25/22	83	32.5	249	87.6	0	1.16	3.05	<0.05	31.6	3.14	1340	<0.09	55.6	777	1615	17.00	6.96	49.60	537.1	

OHIO VALLEY ELECTRIC CORPORATION
 KYGER CREEK FLY ASH POND CLOSURE PROJECT
 MONITORING WELL KC-9508
 SAMPLING RESULTS

B A C K D R T O A U N D	Round	Date	Alkalinity	Barium	Calcium	Chloride	Gross Alpha	Gross Beta	Iron	Lead	Magnesium	Manganese	Residue, Filterable, TDS	Selenium	Sodium	Sulfate	Conductivity	Temperature	pH	Well	River
			(total) mg/l	(diss) ug/l	(diss) mg/l	mg/l	pCi/l	pCi/l	(diss) mg/l	(diss) ug/l	(diss) mg/l	(diss) mg/l	mg/l	(diss) ug/l	(diss) mg/l	mg/l	Field mhos/cm	Field °C	Field S.U.	Elev. ft.	Elev. ft.
	1	10/14/97	237	99	132	21	5.6	8.6	1.07	<2	20	1.24	558	<5	14.7	190	512	15	6.94	23.5	539
	2	01/06/98	244	90	124	21	5.5	9.1	1.17	<2	17.1	0.92	568	<5	15.3	196	588	14.9	6.85	23.4	540
	3	05/22/98	236	99	133	22	2.5	4.7	2.15	<2	19.6	0.88	607	<5	15.7	203	840	15.1	6.91	22.7	539
	4	07/21/98	230	98	146	21	3.1	3.8	2.35	<2	20.7	0.97	598	<5	15.8	208	805	15.4	6.81	22.8	539
	5	10/21/98	210	101	144	23	3.3	3.9	2.32	<2	20	0.89	621	<5	14.9	245	819	15.1	6.83	23.5	539
	6	01/13/99	233	98	136	21	3.5	5.2	2.28	<2	19.7	0.86	600	<5	15.3	221	824	14.9	6.4	23.6	540
	7	04/21/99	224	101	138	20	5	5.7	1.99	<2	19.2	0.78	608	<5	15.5	230	975	16.1	6.33	22.4	541
	8	07/27/99	228	102	151	23	1.2	3.4	2.08	<2	20.7	0.79	659	<5	16.2	235	893	16.5	6.44	23.2	540
	95% Tol.	Upper	263	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	702	N/A	N/A	279	1275	N/A	N/A	N/A	N/A
	95% Tol.	Lower	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S E N N E M U A L	1	10/13/99	228	104	155	23	2.6	3.2	2.22	<2	20.8	0.78	631	<5	16.7	247	904	15.3	6.56	23.7	539
	2	05/04/00	221	104	158	32	0	2.3	2.29	<2	21.2	0.79	660	<5	16.8	247	969	15.3	5.93	23.9	538
	3	10/19/00	238	108	156	23	5.9	4	2.08	<2	21.8	0.94	645	<5	16.5	253	980	15.33	5.96	24.03	539
	4	04/25/01	229	--	--	--	--	--	--	--	--	--	691	--	--	264	729	15.14	5.97	23.58	539
	5	10/04/01	244	111	171	--	4	4.4	2.58	<2	22.6	1.1	681	<5	16.9	273	974	15.34	6.96	24.27	538
	6	06/05/02	233	--	--	24	--	--	--	--	--	--	754	--	--	283	962	15.25	6.98	23.46	538
	7	10/31/02	233	116	172	26	3.4	6.7	2.95	<2	24.4	0.95	736	<5	18.1	315	1002	14.79	7.01	24.31	538
	8	04/08/03	224	--	--	--	--	--	--	--	--	--	807	--	--	357	1087	14.81	6.89	24.80	541
	9	10/09/03	227	99	193	24	1.3	4.2	3.23	<2	27.2	1.04	827	<5	19.8	370	996	15.10	7.24	24.30	538
	10	05/05/04	228	--	--	--	--	--	--	--	--	--	896	--	--	380	1157	14.78	7.14	22.40	540
	11	10/21/04	227	78	216	13	3.3	5	4.08	<2	27.2	1.09	841	<5	20.9	372	1148	15.00	6.93	24.00	540
	12	04/26/05	229	--	--	--	--	--	--	--	--	--	803	--	--	351	1103	15.00	6.91	21.00	542
	13	10/19/05	231	60	171	22	1.9	3.3	4.02	<2	24.3	0.98	778	<5	20.5	320	1064	15.10	6.96	23.77	539
	14	04/18/06	228	--	--	--	--	--	--	--	--	--	761	--	--	332	1056	15.30	6.89	23.52	539
	15	10/19/06	226	68	194	23.4	0	0.5	3.94	<10	25.6	0.95	759	<20	18.1	325	1050	15.30	6.88	22.04	541
	16	04/27/07	231	--	--	--	--	--	--	--	--	--	795	--	--	314	1134	14.30	6.99	22.25	539
	17	11/05/07	164	65	178	--	2	0.5	3.82	<5	24.8	1.09	882	<0.5	20.9	326	1112	14.40	6.93	23.68	539
	18	04/22/08	207	--	--	--	--	--	--	--	--	--	794	--	--	320	852	14.80	7.16	25.83	539
	19	11/04/08	199	74	200	23.3	2.99	1.2	4.24	<0.05	28.5	1.43	820	<0.5	20.5	337	751	15.30	7.11	24.49	539
	20	04/23/09	231	--	--	30.2	--	--	--	--	--	--	806	--	--	334	1078	14.10	7.49	22.68	539
	21	10/21/09	229	68	165	27.4	0.7	3.2	4.2	<10	24.4	0.94	774	<0.5	24.8	326	1083	15.20	6.96	24.00	539
	22	04/20/10	230	--	--	--	--	--	--	--	--	--	815	--	--	340	1005	14.90	7.02	23.20	539
	23	10/15/10	235	71	169	29.2	0	2.1	4.59	<10	26.3	1	742	<0.5	20.9	395	970	15.00	6.93	23.60	539
	24	06/07/11	241	--	--	--	--	--	--	--	--	--	738	--	--	288	1019	14.90	7.36	22.37	539
	25	10/19/11	234	71	165	27.4	3.1	5	4.2	<10	25.4	0.98	796	<0.5	21.6	336	1037	14.20	6.75	23.01	539
	26	04/25/12	242	--	--	26.5	--	--	--	--	--	--	834	--	--	330	1020	15.00	6.89	23.70	539
	27	10/09/12	229	75.5	194	27.3	3.5	3.5	5.33	0.04	29.9	1.06	838	<0.1	25	336	1112	14.20	6.72	23.91	539
	28	04/24/13	237	--	--	27.7	--	--	--	--	--	--	825	--	--	399	1161	15.40	7.09	23.90	538
	29	10/24/13	223	70.9	189	29.8	1	2.3	5.41	0.08	27.1	1	830	<0.2	21.7	346	1109	14.80	6.59	23.70	539
	30	04/17/14	225	--	--	--	--	--	--	--	--	--	844	--	--	346	1131	15.10	7.04	23.20	540
	31	10/28/14	223	64.7	178	28.7	2.3	4.1	5.34	0.01	25.7	1.04	836	<0.1	21.3	364	1195	16.00	6.65	23.90	538
	32	05/21/15	216	--	--	--	--	--	--	--	--	--	847	--	--	394	1231	15.30	6.76	22.10	538
	33	10/29/15	213	67	208	32.7	1.9	2.5	6.5	0.02	30.5	1.3	800	<0.03	25.4	384	1184	15.80	6.71	23.50	539
	34	04/21/16	215	--	--	30.7	--	--	--	--	--	--	868	--	--	391	1106	16.50	6.85	23.80	539
	35	10/13/16	234	67	192	31.8	2.5	2	5.95	0.01	27.6	1.31	866	<0.03	21.9	420	1296	16.20	6.84	24.30	539
	36	04/27/17	210	--	--	31.9	--	--	--	--	--	--	834	--	--	381	1188	16.45	6.75	22.30	540
	37	10/17/17	237	57.1	176	30.4	3	0.4	5.79	0.01	26.2	1.19	788	<0.03	20.4	370	1135	17.30	6.83	24.00	539
	38	06/06/18	225	--	--	30.7	--	--	--	--	--	--	777	--	--	342	1122	16.00	6.85	22.70	540
	39	10/18/18	237	55.9	162	29.7	3.4	1.4	5.32	0.06	22.7	1.19	391	<0.03	17.8	317	1208	15.70	6.84	22.90	540
	40	04/22/19	215	--	--	31	--	--	--	--	--	--	810	--	--	352	1163	16.90	6.96	20.30	541
	41	10/29/19	208	65.2	164	33	-0.66	2.83	6.51	<0.05	25.5	1.46	838	0.03	19.9	362	1061	17.40	6.82	23.90	541
	42	06/12/20	228	--	--	31.1	--	--	--	--	--	--	793	--	--	338	1071	18.10	7.00	22.70	536
	43	10/23/20	221	61.4	168	29.5	0.84	2.56	6.49	<0.05	24.2	1.73	783	<0.03	17.7	311	1198	17.60	6.98	23.80	539
	44	04/28/21	208	--	--	30.7	--	--	--	--	--	--	735	--	--	297	1050	16.90	6.89	23.30	539
	45	10/19/21	217	56	149	30.3	0.39	1.67	5.74	<0.3	21.9	1.68	680	<0.5	17.6	283	1068	17.60	6.90	24.10	539
	46	04/22/22	224	--	--	31.8	--	--	--	--	--	--	670	--	--	295	1216	17.00	7.12	22.40	541
	47	10/25/22	213	63.1	134	33.6	-0.13	0.44	5.55	<0.05	21.3	1.81	690	<0.09	16	284	966	16.40	6.83	24.40	537

OHIO VALLEY ELECTRIC CORPORATION
 KYGER CREEK FLY ASH POND CLOSURE PROJECT
 MONITORING WELL KC-9509
 SAMPLING RESULTS

B A C K D R O A U N D	Round	Date	Alkalinity	Barium	Calcium	Chloride	Gross Alpha	Gross Beta	Iron	Lead	Magnesium	Manganese	Residue, Filterable, TPS	Selenium	Sodium	Sulfate	Conductivity	Temperature	pH	Well	River
			(total) mg/l	(diss) ug/l	(diss) mg/l	mg/l	pCi/l	pCi/l	(diss) mg/l	(diss) ug/l	(diss) mg/l	(diss) mg/l	mg/l	(diss) ug/l	(diss) mg/l	mg/l	mhos/cm	°C	Field S.U.	Field ft.	Field ft.
	1	10/14/97	195	51	133	18	<1	2.7	2.65	<2	22.4	0.87	603	<5	17.2	241	485	14.9	6.62	23.8	539
	2	01/06/98	201	45	122	24	1.5	3.1	1.58	2	19.3	0.48	605	<5	17.4	235	597	14.9	6.59	23.7	540
	3	05/22/98	210	47	128	21	<1	2.2	2.41	<2	20.4	0.58	642	<5	16.4	225	832	15.1	6.65	23	539
	4	07/21/98	201	47	143	21	<1	2.8	2.6	<2	22.3	0.63	621	<5	17.2	245	814	15.4	6.36	23.1	539
	5	10/21/98	230	45	141	23	1.6	3	2.19	<2	21.4	0.59	618	<5	15.7	220	820	15	6.48	23.8	539
	6	01/13/99	206	48	135	21	<1	2.5	2.39	<2	21.2	0.56	624	<5	16.6	261	827	14.9	5.87	24	540
	7	04/21/99	212	45	133	24	3.2	2.4	1.56	4	19.7	0.44	589	<5	15.6	235	857	15.3	6.14	22.8	541
	8	07/27/99	207	45	144	16	4.3	4.1	1.76	<2	21.3	0.47	646	<5	16.1	244	869	16.1	6.14	23.6	540
	95% Tol.	Upper	241	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	680	N/A	N/A	279	1213	N/A	N/A	N/A	N/A
	95% Tol.	Lower	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
A S S E N S I V E	1	10/13/99	204	48	147	21	0.5	2	3.3	<2	21.9	0.62	622	<5	17.5	255	885	15.2	6.27	23.9	539
	2	05/04/00	197	59	152	30	0	0.3	4.75	2	22.3	0.81	694	<5	18.2	278	959	15.3	5.65	23.6	538
	3	10/19/00	201	55	168	15	2.2	1.8	2.34	<2	25.2	0.62	736	<5	18.9	326	1017	15.21	5.76	24.45	539
	4	04/25/01	200	--	--	--	--	--	--	--	--	--	831	--	--	383	787	15.14	5.50	23.83	539
	5	10/04/01	206	63	175	--	2.3	3.3	2.48	<2	25	0.68	734	<5	19.1	324	1027	15.32	6.75	24.62	538
	6	06/05/02	190	--	--	23	--	--	--	--	--	--	793	--	--	348	992	15.21	6.69	23.75	538
	7	10/31/02	162	74	164	24	0	2.1	4.35	<2	27.7	1.08	803	<5	23.3	395	1040	14.75	6.56	24.70	538
	8	04/08/03	151	--	--	--	--	--	--	--	--	--	894	--	--	457	1136	14.85	6.40	22.10	541
	9	10/09/03	149	59	178	25	1.3	4.6	1.32	<2	30.1	1.07	864	<5	22	443	1020	15.05	6.78	24.60	538
	10	05/05/04	151	--	--	--	--	--	--	--	--	--	876	--	--	426	1101	14.89	6.58	22.68	540
	11	10/21/04	149	65	184	18	1.6	4.3	4.14	<2	28.3	2.48	849	<5	22.1	436	1127	14.90	6.21	23.23	540
	12	04/26/05	162	--	--	--	--	--	--	--	--	--	863	--	--	420	1129	15.00	6.31	21.90	542
	13	10/19/05	152	49	165	22	1.5	4.3	2.45	3	28.2	5.36	846	<5	24.1	430	1093	15.10	6.48	24.15	539
	14	04/18/06	165	--	--	--	--	--	--	--	--	--	841	--	--	410	1050	15.40	6.52	24.05	539
	15	10/19/06	155	53	172	25.1	0.7	3.9	1.83	<10	25.1	8.99	761	<20	17.9	394	1023	15.20	6.47	22.36	541
	16	04/27/07	158	--	--	--	--	--	--	--	--	--	830	--	--	381	1131	14.40	6.71	22.60	539
	17	11/05/07	180	51	170	--	3	5.6	2.52	<5	26.6	8.58	896	<0.5	22.5	398	1173	14.40	6.61	24.00	539
	18	04/22/08	164	--	--	--	--	--	--	--	--	--	745	--	--	328	794	14.95	6.63	26.16	539
	19	11/04/08	167	59	145	21.8	1.67	1.61	3.61	<0.05	23.3	9	664	<0.5	18.4	263	622	15.26	6.84	23.94	539
	20	04/23/09	167	--	--	25.5	--	--	--	--	--	--	693	--	--	304	921	14.09	7.51	22.98	539
	21	10/21/09	162	54	127	25.1	1.2	3.7	5.24	<10	22.6	10.2	742	<0.5	19.8	351	994	15.20	6.44	24.50	539
	22	04/20/10	170	--	--	--	--	--	--	--	--	--	781	--	--	349	1069	15.00	6.59	23.49	539
	23	10/15/10	177	58	162	34.1	4.9	2.9	2.82	<10	28.7	10.1	825	<0.5	22.8	451	1032	15.00	6.66	24.18	539
	24	06/07/11	184	--	--	--	--	--	--	--	--	--	834	--	--	361	1058	14.80	7.11	22.85	539
	25	10/19/11	177	44	156	27.8	4.4	6.2	2.29	<10	27	10	868	<0.5	23	432	1069	14.20	6.38	23.60	539
	26	04/25/12	207	--	--	27	--	--	--	--	--	--	861	--	--	391	1013	14.80	6.47	23.25	539
	27	10/09/12	147	63.1	63.6	25.3	3	3.1	3.16	0.1	20.2	14.8	923	<0.1	25.3	430	1160	14.20	6.22	24.42	539
	28	04/24/13	176	--	--	26.5	--	--	--	--	--	--	900	--	--	471	1188	15.40	6.71	24.35	538
	29	10/24/13	137	72.6	158	26.5	2.3	0	6.76	0.51	27.8	22.5	832	<0.2	22.8	401	1069	15.00	6.22	24.90	539
	30	04/17/14	131	--	--	--	--	--	--	--	--	--	922	--	--	454	1173	15.40	6.59	23.70	540
	31	10/28/14	118	63.6	155	29.4	2.2	0	2.21	0.01	28.2	29.1	915	<0.1	24.7	473	1260	16.10	6.44	24.30	538
	32	05/21/15	143	--	--	31.7	--	--	--	--	--	--	918	--	--	478	1262	15.40	6.63	23.40	538
	33	10/29/15	112	49.6	166	32	6.1	0	2.55	0.02	31.1	33.8	886	<0.03	26.5	497	1204	15.70	6.13	23.80	539
	34	04/21/16	109	--	--	31.9	--	--	--	--	--	--	877	--	--	499	950	16.60	6.15	24.20	539
	35	10/13/16	113	62	134	29.2	3.1	2.7	7.04	0.01	26	36.2	779	<0.03	23.5	460	1126	16.50	6.11	24.69	539
	36	04/27/17	110	-	-	32.2	-	-	-	-	-	-	854	-	-	463	1155	16.44	6.19	22.80	540
	37	10/17/17	134	41.8	157	31.3	2.8	0	1.72	0.01	29	30.6	828	<0.03	23.7	464	1043	17.30	6.83	24.00	539
	38	06/06/18	168	-	-	32.7	-	-	-	-	-	-	824	-	-	414	1119	16.00	6.50	23.10	540
	39	10/18/18	150	49.5	147	33.4	1.5	5.1	2.38	0.21	25.7	26.2	828	<0.03	20.9	405	1212	16.10	6.43	23.30	540
	40	04/22/19	162	-	-	33	-	-	-	-	-	-	812	-	-	375	1103	17.20	6.68	20.70	541
	41	10/29/19	126	49.4	132	40.1	0.93	2.53	1.95	<0.05	26.1	30.1	804	<0.03	21.9	402	1045	17.10	6.70	24.90	541
	42	06/12/20	126	-	-	38.3	-	-	-	-	-	-	768	-	-	373	1068	17.20	6.93	23.20	536
	43	10/23/20	136	54.9	132	37.3	-0.19	1.53	3.53	<0.05	23.6	26.7	783	<0.03	18.8	330	1172	16.70	6.70	24.20	539
	44	04/28/21	158	-	-	35.6	-	-	-	-	-	-	720	-	-	324	1034	16.40	6.80	23.70	539
	45	10/19/21	148	62.2	117	40.8	0	0.86	6.45	<0.3	21.2	23.7	660	<0.5	18.9	296	1063	16.90	6.73	24.60	539
	46	04/22/22	144	-	-	44	-	-	-	-	-	-	670	-	-	325	980	16.60	6.82	22.90	541
	47	10/25/22	144	67.5	119	45.8	0.6	1.02	3.45	<0.05	22	19	680	<0.09	17.6	324	952	17.40	6.51	24.80	537

APPENDIX C



State of Ohio Environmental Protection Agency

Southeast District Office

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Logan, Ohio 43138-9031
(614) 385-8501
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George V. Voinovich
Governor

To: Dan Messerly through Bruce Goff, DSW-SEDO

From: David ^{DH}Hunt through Mike ^{MP}Preston, DDAGW-SEDO

Subject: Ohio Valley Electric Corporation - Ground Water Quality Results for May 1998
(DDAGW #: 07/22/98-04-3-05-0 3757)

Date: August 28, 1998

Introduction

The Ohio Valley Electric Corporation (OVEC) site is located in Gallia County, Ohio on State Route 7 approximately five miles north of Gallipolis, Ohio. There are two fly ash ponds at the OVEC site: the north and the south ponds. The PTI for closure plan is only for the closure of the north pond, while the south pond will continue to be used for fly ash disposal. The PTI was approved without OVEC having to address DDAGW's comments on the proposed ground water monitoring plan. The geology of interest beneath the OVEC site consists of unconsolidated sand and gravel formations of the Ohio River Valley Aquifer. There are two industrial, nonpotable well fields up river and down river of the north and south ponds. The industrial well fields and the Ohio River are the major influence of the ground water flow patterns at the OVEC site.

There are ten ground water monitoring wells at the closure site (KC-9501 through KC-9510) However, only wells KC-9501, KC-9502, KC-9504, KC-9507, KC-9508 and KC-9509 have been selected by OVEC for ground water monitoring purposes. Dedicated bladder pumps have been installed in these six wells for sampling purposes. The ground water monitoring package submitted on July 10, 1998 included ground water data for these six wells. The package also included water level data for fourteen wells present at the site. The six wells are proposed to be sampled quarterly for two years. No up gradient well was sampled, which is necessary to determine if an intrawell statistical approach is appropriate. DDAGW has commented on this before, but OVEC maintains that they will implement the ground water monitoring program in the approved PTI, which does not include a background well being monitored.

In a previous IOC to DSW, DDAGW outlined that based upon a comparison of shallow wells verses deep wells it appears that the water quality at the OVEC site is being impacted. Please refer to the January 1998 IOC for further information on the November sampling results.

The following are DDAGW's comments on the ground water monitoring data results in the July 1998 submittal for the OVEC site.

Observations

1. Since no background well was sampled, DDAGW has made several comparisons with the ground water quality results to evaluate whether the north fly ash pond has impacted ground water. These comparisons include shallow wells to deep wells, the wells on site to two ambient stations within the Ohio River Valley Aquifer, and the two well clusters monitoring the north fly ash pond to the cluster on the southern side of the south fly ash pond. The following are several observations about the water quality.
 - a. The shallow wells tend to have lower pH and alkalinity than the deeper wells at two of the three locations. The shallow wells KC-9502 and KC-9507 show pH ranging between 5.61 to 5.75, while the deeper well at the respective clusters, KC-9501 and KC-9504, showed pH near 7.0. Alkalinity in the deeper well 9501 was 181 ug/l, while the shallower well 9502 was at 19 ug/l.
 - b. Shallow wells 9502 and 9507 have higher concentrations of manganese, and iron versus the deep wells 9501 and 9504. Well 9501 has a manganese concentration of 0.64 mg/l while the shallow well at the same cluster has a manganese concentration of 12.6 mg/l. Iron is 1.03 mg/l in the deep well (9504) but is 16.8 mg/l in shallow well (9507).
 - c. In addition to the iron and manganese, 9507 (shallow well) has slightly higher concentrations of magnesium (Mg), TDS and sulfate (SO₄) when compared to the deep well, 9504.
 - d. The water quality for the cluster 9508 and 9509 was very similar for all parameters.
 - e. There has been fairly good consistency in water quality between the three ground water sampling events that have been performed to date, with the following exceptions: well 9502 is showing an increasing trend of iron (3.79 in 10/97 to 6.67 in 5/98); conductivity in well 9507 dropped from 850 in 10/97 and 868 in 1/98 down to 499 in 5/98; 9508 is showing a slight increase in iron between the three events while manganese is slightly decreasing.
 - f. Shallow wells 9502 and 9507 are close to being directly down gradient of the north fly ash pond while 9508 is located side gradient, or southward, of the south fly ash pond. Since there is no real difference between the deep and shallow wells at the 9508/09 location it stands to reason that the differences in water quality between shallow and deep at the other two locations may be related to a release from the north fly ash pond. Alkalinity, barium, calcium and pH are higher in the shallow well 9508 than found in 9502 and 9507. Iron and manganese are much

higher in 9502 and 9507 verses 9508. TDS, sulfate, and magnesium are higher in 9507 than found at 9508.

- g. DDAGW maintains two ground water ambient stations within the Ohio River Valley Aquifer near the OVEC site. The Middleport Well #4 and the Gallia Rural Water #4 stations are located near the OVEC site. Water quality from July 1998 at these two ambient locations was compared to the water quality being found at the OVEC site. Magnesium, barium, sodium, calcium and chloride are all similar in concentration in the ambient wells as found at the OVEC site. However, iron and manganese levels are much higher (1 to 2 orders of magnitude higher) in all of the wells (shallow and deep) at the OVEC site when compared to the ambient water quality. Interestingly, the OVEC deep wells show very similar alkalinity to the ambient wells.

Comments

1. No water level map was submitted with the three water quality reports. A potentiometric map should be submitted with the water quality data report.
2. In the June 25, 1997 memo on the ground water quality SAP, DDAGW recommended the inclusion of the background well KC-9506 in the initial two year sampling. As noted, this is particularly important in determining if an intrawell statistical approach is the best method for evaluating whether a release has occurred. Given the water quality from the first three quarters of monitoring, it appears that there are differences in water quality between the shallow and deep wells in two of the three clusters. Other differences in water quality were also evaluated above. These differences in water quality may be reflective of a release to ground water from the north pond. If a release has occurred at the OVEC site, then intrawell statistics cannot be used to evaluate a release. In order for OVEC to effectively demonstrate that no release has occurred and that intrawell comparison is appropriate, DDAGW continues to recommend that KC-9506 be included in the sampling effort.
3. Based on the water quality data and the submitted water level depth data, DDAGW continues to recommend that another monitoring well cluster be installed between the clusters 9501/9502 and 9504/9507 on the east side of the north fly ash pond. OVEC declined to install this well cluster in 1997 given that OEPA approved the PTI without this well as a component of the proposed ground water monitoring program. If OVEC will not install this monitoring well as part of detection monitoring program, then the cluster would likely be installed during assessment activities. Based on the review of the water quality data it is likely that assessment activities will be necessary.

Conclusion

DDAGW has completed its review of the July 1998 Ground Water Quality Report for the North Pond closure at the OVEC site in Gallia County. DDAGW made several observations

concerning the water quality data generated to date. Based on the water quality data it appears that there is a difference in water quality between the shallow and deep portions of the Ohio River Valley Aquifer on the down gradient side of the site. This may be an indication of a release from the north or south ponds. Should you have any further questions regarding this review or the site in general, please contact me.

cc: Scott Sutcliffe, DDAGW-CO

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DDAGW #: 07/22/98-04-3-05-0 3757



Gallia Co, OIB00005*DD

Ohio Valley Electric Corp Kyger creek

Interoffice Memo

To: Marco Deshaies DSW, SEDO.
From: Steve Lowry through Steve Williams DDAGW, SEDO.
Date: February 7, 2017
RE: Ohio Valley Electric Corporation (OVEC), Kyger Creek Station, North Fly Ash Pond Closure Project, Internal Technical Review, Ground Water Program, Gallia County, OIB00005*PD
Subject: Review of the December 2015, May 2016 and December 2016 North Fly Ash Pond Closure Project Semi-annual groundwater sampling results.

INTRODUCTION

The DDAGW has reviewed the December 14, 2015, May 25, 2016 and the December 2, 2016 dated submittals containing the semiannual groundwater sampling and statistical analysis results from the North Fly Ash Pond Closure Project. These reports include data from the corresponding October 2015, April 2016 and October 2016 sampling events.

Groundwater monitoring of the North Fly Ash Pond is required as part of a January 15, 1997 PTI. Groundwater monitoring at the site began in October of 1997. The North Pond is closed and located immediately north of the adjacent and open South Fly Ash Pond. The North Fly Ash Pond was first used in the 1950's.

The statistical evaluations of groundwater quality contained in the above noted submittals indicate that the upper tolerance limits for the following parameters were exceeded at the following wells:

Alkalinity at wells KC-9501 and KC-9502, exceeded during all three sampling events.

Sulfate at wells KC-9508 and KC-9509, exceeded during all three sampling events, and at well KC-9502 during both 2016 events and KC-9504 during the October 2015 event.

TDS at wells KC-9508 and KC-9509, exceeded during all three sampling events.

Conductivity at well KC-9508 exceeded during the October 2016 sampling event.

Statistical exceedances have been declared by the facility for at least one parameter per sampling event since the beginning of the statistical evaluations, in October of 1999. As with past submittals, OVEC contends that "these statistical exceedances are due to natural variation and not associated with the North Fly Ash Closure Project".

The PTI does not include any provisions for further investigations related to the statistical increases, or for an assessment of the groundwater quality.

BACKGROUND

The facility has been conducting semi-annual groundwater monitoring at the North Fly Ash Pond since 1997. The PTI "Groundwater Sampling and Analysis Plan" is a rather brief document. The plan outlines sampling protocols and parameters and requires a statistical analysis of the four indicator parameters and a requirement to notify Ohio EPA of any statistically significant increases within 15 days of receipt of the analysis. As noted above, the plan does not contain any requirements for additional investigations or for the implementation of a groundwater assessment.

Per the PTI, during the spring sampling event, the statistical parameters of Alkalinity, Specific Conductance, Sulfate and TDS are collected and analyzed. During each fall sampling event, the above four parameters and an additional 12 water quality parameters are collected. The above three noted submittals contain the field parameters for the six sampled wells, total water depth measurements, river stage measurements, the laboratory data sheets for the sampled parameters, and a table that shows the sampling results for each parameter and the intra-well 95% confidence interval value for each of the statistical parameters.

Groundwater flow maps were not included in the submitted documents. The groundwater flow direction at the site is difficult to accurately determine due to the limited number of water level measurements included in the submittals. The lack of a submitted water level from an upgradient well also hinders evaluation of groundwater flow directions. Additionally, clarification may be necessary as water level data appears to be reported as a depth to water, from the top of the monitoring well inner casing, as opposed to mean sea level.

The North Fly Ash Pond is monitored by six wells which represent three well clusters, each monitoring two separate units. These wells are screened in sand and gravel deposits associated with the Ohio River. The wells range in depth from approximately 34 feet to 94 feet below grade. The well screens of each well cluster are separated by a distance of approximately two to five feet. The well clusters (shallow listed first) are grouped as follows: KC-9502/KC-9501, KC-9507/KC-9504, and KC-9509/KC-9508. Groundwater monitoring was not initiated at the North Fly Ash Pond until approximately 40 years after waste placement was initiated.

Wells KC-9509/KC-9508 are located primarily downgradient of the South Fly Ash Pond. These wells show the most significant impact to groundwater. The shallow well KC-9509 is showing statistically significant increases in conductivity, TDS and sulfate. Conductivity has increased from 485 umohs/cm in 1997 to 1,126 umoh/cm in 2016. TDS has increased from 603 mg/l to 779 mg/l and sulfate has increased from 241 mg/l to 460 mg/l over the same time period. The deeper well KC-9508 is showing

statistically significant increases in TDS and sulfate along with a visually increasing trend in conductivity since 2010. TDS in well KC-9508 has increased from 558 mg/l in 1997 to 866 mg/l in 2016, sulfate has increased from 190 mg/l in 2010 to 420 mg/l in 2016 and conductivity has increased from 512 umohs/cm in 1997 to 1,296 umoh/cm over the same time period.

Wells KC-9501/9502, located at the northernmost portion of the North Fly Ash Pond, has shown a statistically significant increase in alkalinity in both wells. Alkalinity in well KC-9501 has increased from 169 mg/l to 260 mg/l, and well KC-9502 from 19 mg/l to 45.7 mg/l over the 1997 to 2016 time period.

Wells KC 9507/9504 located downgradient of the North Fly Ash Pond reveals mostly decreasing trends in all statistically evaluated parameters, with the exception of deep well KC-9504, which has a statistically increasing trend for sulfate. The sulfate concentration in well KC-9504 started out at a concentration of 327 mg/l in 1997 and is currently at 423 mg/l. The sulfate concentration in this well was as high as 820 mg/l in 2008. The trend for sulfate in this well has been decreasing since 2008. TDS in this well is currently at a concentration of 757 mg/l with a past high of 1480 mg/l in 2008.

For comparison purposes, un-impacted groundwater from Ohio River sand and gravel deposits, from the Proctorville Wellfield (Lawrence County), reveal the following average concentrations: Alkalinity 58.2 mg/l, Conductivity 320.1 umhos/cm, TDS 195.7 mg/l and Sulfate 46.1 mg/l.

The sampling of additional existing groundwater monitoring wells, such as background well KC-9506 and possibly the KC-9505/9503 cluster may provide additional information regarding groundwater quality, flow directions and the extent of impacted ground water in the area of the North Fly Ash Pond. The installation of additional appropriately placed downgradient wells would also allow for a more meaningful evaluation of groundwater quality and flow directions in the area of the North Fly Ash Pond.

As shown in the December 14, 2015, the May 25, 2016 and the December 2, 2016 dated submittals titled "North Fly Ash Pond Closure Project, Groundwater Semiannual Data Analysis" the drinking water health standard was exceeded in all six monitoring wells for the parameter manganese. DDAGW will conduct a detailed review of potential receptors in the area. However, a preliminary review shows no private wells or public well fields immediately down gradient of the Kyger Creek Station, North Fly Ash Pond Closure Project.

RECOMMENDATIONS

1. The DDAGW has reviewed the December 14, 2015, the May 25, 2016 and the December 2, 2016 dated submittals titled "North Fly Ash Pond Closure Project,

Groundwater Semiannual Data Analysis". In these documents OVEC has presented the results of a statistical analysis of groundwater and concluded that the nine statistical exceedances are due to "natural variation and not associated with the North Fly Ash Pond Closure Project". The DDAGW does not concur with OVEC's statement that "these statistical exceedances are due to natural variation and are not associated with the North Fly Ash Closure Project". OVEC has not undertaken any known field activities to demonstrate that the statistically elevated concentrations of sulfate, TDS, Conductivity or Alkalinity are not the result of the operation of the North Fly Ash Pond. The DDAGW recommends that an assessment of groundwater quality be conducted at the North Fly Ash Pond.

To better evaluate the declared statistical exceedances, the DDAGW recommends that OVEC make improvements to the groundwater monitoring system for the North Fly Ash Pond and then conduct an assessment of groundwater quality as outlined in Attachment "G" of Guidance Document GD0303.010 titled "Ground Water Monitoring Program Plan Requirements for Wastewater Facilities".

2. The DDAGW recommends the following improvements be made to the groundwater monitoring network at the North Fly Ash Pond:
 - a. That water level measurements and groundwater sampling results from background well KC-9506 be included in all future submittals. This sampling data point would represent background water quality for the North Fly Ash Pond and allow for a more meaningful evaluation of groundwater quality.
 - b. That water level measurements from well KC-9510, KC-9503 and KC-9505 also be included in all future submittals.
 - c. That OVEC evaluate the usefulness of including wells KC9503 and KC-9505 into the groundwater monitoring network.
 - d. That the 10 groundwater monitoring wells installed in the area of the North Fly Ash Pond (KC-9501 to KC-9510) be resurveyed to ensure that the collected water level measurements accurately reflect site conditions.
 - e. That future submittals include ground water flow maps derived from the above noted monitoring wells and that the water level measurements are recorded in reference to mean sea level.
 - f. That upon determining current groundwater flow directions in the area of the North Fly Ash Pond, OVEC evaluate the adequacy of the current groundwater monitoring network. At this time the installation of an additional shallow groundwater monitoring well between existing wells KC9502 and KC-9507 appears to be appropriate.

Conclusion

The DDAGW has reviewed the December 14, 2015, May 25, 2016 and the December 2, 2016 dated submittals titled North Fly Ash Pond Closure Project submittals. The DDAGW has recommended that OVEC make improvements to the groundwater monitoring network at the North Fly Ash Pond and that an assessment of groundwater quality be conducted.

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APPENDIX D

GAVIN BOTTOM ASH POND SECOND
SEMIANNUAL SAMPLING EVENT OF 2023
ALTERNATE SOURCE DEMONSTRATION
REPORT



Gavin Bottom Ash Pond

Second Semiannual Sampling Event of
2023 Alternate Source Demonstration
Report

PREPARED FOR

Gavin Power, LLC

DATE

31 January 2024

REFERENCE

0679646

Gavin Bottom Ash Pond

Second Semiannual Sampling Event of 2023 Alternate Source Demonstration Report

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ACRONYMS AND ABBREVIATIONS

Name	Description
AEP	American Electric Power Service Corporation
ASD	Alternate Source Demonstration
ATSDR	Agency for Toxic Substances and Disease Registry
BAC	Bottom Ash Complex
BAP	Bottom Ash Pond
CCR	Coal Combustion Residuals
CFR	Code of Federal Regulations
CSM	Conceptual Site Model
ERM	Environmental Resources Management
Gavin	Gavin Power, LLC
K	Hydraulic Conductivity
H2	Second Semiannual
mg/L	milligrams per liter
NFAP	North Fly Ash Pond
ODNR	Ohio Department of Natural Resources
OEPA	Ohio Environmental Protection Agency
ORSANCO	Ohio River Valley Water Sanitation Commission
OVEC	Ohio Valley Electric Corporation
Plant	General James M. Gavin Power Plant
SFAP	South Fly Ash Pond
SSI	Statistically significant increase
TCLP	Toxicity Characteristic Leaching Procedure
TDS	Total Dissolved Solids
uS/cm	microsiemens per centimeter
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 Bottom Ash Pond (BAP) CCR Surface Impoundment at the General James M. Gavin Power Plant (Plant). 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 BAP in accordance with 40 CFR § 257.94. Statistically significant increases (SSIs) over background concentrations were detected in downgradient monitoring wells for Appendix III constituents for the second semiannual (H2) groundwater sampling event of 2023 and are explained in this Alternate Source Demonstration (ASD) Report. The second semiannual groundwater sampling event of 2023 was performed from September 27, 2023 to October 3, 2023. Review of data for quality assurance and statistical comparison was completed on December 5, 2023. Consistent with the 90-day requirement of 40 CFR § 257.94(e)(1) this ASD Report is included with the annual groundwater monitoring and corrective action report required under CFR § 257.90(e), which is due January 31, 2024.

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.

This ASD Report addresses each of these lines of evidence for the SSIs detected in groundwater collected from downgradient compliance wells at the BAP. The groundwater monitoring program and ASD have been prepared utilizing accepted practices incorporating both site specific and regional information. In 2022, the USEPA provided feedback on the groundwater monitoring program at the BAP (USEPA 2022) and Gavin formally responded to the concerns (Gavin 2022). In consideration of this feedback, Gavin installed additional monitoring wells and conducted supplemental characterization at the BAP to refine the conceptual site model (CSM). Findings and updates were originally provided in the 2022 Annual Groundwater Monitoring and Corrective Action Report (ERM 2023a), and are also discussed below.

Some of the matters addressed herein 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 response to the Final Decision, 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. We note that USEPA's findings and determinations in the Final Decision are the subject of pending litigation.

1.2 BACKGROUND

The Plant is a coal-fired generating station located in Gallia County in Cheshire, Ohio (Figure 1-1), and is bounded to the east by the Ohio River. The BAP is one of three CCR units at the Plant that are subject to regulation under the CCR Rule and is located adjacent to and immediately south of the main Plant area (Figure 1-2). Adjacent to the BAP is the smaller Reclaim Pond (Figure 1-3) which, along with the BAP, make up the Bottom Ash Complex (BAC) that has operated since 1974. The Reclaim Pond was not designed to retain an accumulation of CCR; did not and does not receive any significant amount of CCR; and did not and does not treat, store, or dispose of CCR. Therefore, it is not subject to the CCR Rule.

The certified groundwater monitoring well network (ERM 2021a) consists of three upgradient monitoring wells (BAC-01, MW-1, and MW-6) along the western perimeter of the BAP, two upgradient monitoring wells (BAC-06 and BAC-07) along the southern perimeter, and four downgradient monitoring wells (BAC-02, BAC-03, BAC-04, and BAC-05) positioned along the northern and eastern perimeter of the BAP (Figure 1-3). These wells are herein referred to as "network" wells for the purposes of this report.

Consistent with the CCR Rule and the Groundwater Monitoring Plan developed for Gavin (ERM 2017), an interwell prediction limit approach was used to identify potential impacts to groundwater. Upper prediction limits, and a lower prediction limit specifically for pH, were established based on the upgradient groundwater data. The 2017 Annual Groundwater Monitoring and Corrective Action Report was prepared to document the status of the groundwater monitoring program for the BAP (ERM 2018a) and included results from eight sampling events performed from August 2016 to July 2017. The 2017 report and each subsequent Annual Groundwater Monitoring and Corrective Action Report have included comparisons of the sampling results obtained from downgradient wells during each semiannual detection monitoring event with the upper and lower prediction limits calculated based on the initial eight background samples taken from upgradient wells. ASD reports (ERM 2018b; ERM 2019; ERM 2020; ERM 2021b; ERM 2022; ERM 2023) were prepared to address SSIs that were identified during the initial and subsequent reporting periods.

Sixteen additional monitoring wells were installed in key areas around the BAP in 2022 (Figure 1-3). These wells have not yet been added to the certified network; however, background sampling has been completed since October 2022.

1.3 GEOLOGY

Observation of bedrock cores collected around the BAP in 2022 (ERM 2023) indicates the uppermost bedrock layers are claystone/siltstone (interpreted to be the Round Knob) and an underlying sandstone stratum (interpreted to be the Cow Run). A sharp contact exists between the bedrock units and the overlying coarser-grained glacial sands and gravels. These coarser sediments, consisting primarily of medium to coarse sands and gravel, are buried by the younger, finer-grained unit, which exists as a laterally extensive layer of clays and silts. This younger, finer-grained unit (referred to as the separation layer), exists between the base of the BAP and the coarser sediments below (the uppermost aquifer). Some fine-grained sands are also observed within the separation layer, though they are primarily intermixed within the clay and silt matrix and generally found at depth, closer to the alluvial aquifer.

1.4 SITE HYDROLOGY AND HYDROGEOLOGY

The uppermost aquifer beneath the BAP area is approximately 20 to 40 feet thick and consists primarily of the coarser-grained sands and gravels described in section 1.3, though some fine sand is also present. Also referred to as the alluvial aquifer, the uppermost aquifer is confined by the clay and silt separation layer above and by the siltstone/claystone bedrock unit below (Figure 1-4). The Ohio River acts as a hydraulic boundary condition to the east that is dynamic in nature due to fluctuations in river stage. Two water supply wells operated by the Plant (FW-15 and FW-1101) exist approximately 400 to 700 feet north of the BAP (Figure 1-3). These wells have 20-to-30-foot screens established within the alluvial aquifer and have a significant combined influence on groundwater flow at the BAP, which is discussed further in Sections 3 through 5. The use of the wells is variable in both duration and frequency and is dependent on Plant needs; however, when in use, the pumping rates are consistent at 550 and 650 gallons per minute for FW-1101 and FW-15, respectively. Two additional water supply wells (FW-17 and FW-1102) exist approximately 0.4

to 0.5 miles further north and are not expected to have a significant influence on groundwater at the BAP due to their distance from the BAP and infrequency of their use. A wetland area exists to the west of the BAP, which contains naturally occurring ponds and wetland vegetation.

Five undisturbed Shelby tube samples of the clay and silt separation layer (mentioned above, located between the uppermost aquifer and the bedrock unit below) were collected from a barge within the BAP in 2020 for laboratory grain size distribution and permeameter testing (ERM 2021c). The samples ranged from 0.9% to 32.3% sand and 67.7% to 99.1% silt and clay. The permeameter testing of these samples yielded hydraulic conductivity values (K values) ranging from 1.44×10^{-8} cm/sec to 1.18×10^{-7} cm/sec. Thus, even the samples with a higher amount of sand yielded very low K values. These data are direct evidence that the separation layer beneath the BAP acts as an aquitard to downward migration of water stored in the BAP.

1.5 2023 H2 GROUNDWATER SAMPLING EVENT

The data from the second semiannual groundwater sampling event from 2023 were compared to the upper and lower prediction limits for the respective parameters, and SSIs for Appendix III analytes were identified. Table 1-1 summarizes occurrences of SSIs from the September and October 2023 sampling event.

TABLE 1-1: SSIS IN GROUNDWATER BENEATH THE BAP

Analyte	Monitoring Well			
	BAC-02	BAC-03	BAC-04	BAC-05
Boron	X	X	X	X
Calcium	X	φ	φ	φ
Chloride	X	X	X	X
Fluoride	X	φ	φ	φ
pH	φ	X	X	X
Sulfate	X	X	X	X
Total Dissolved Solids	X	φ	φ	X

Notes: φ = No SSI; X = SSI; BAP = Bottom Ash Pond; SSI = statistically significant increase.

This ASD Report identifies the regional discharge of bedrock groundwater as the source of calcium, chloride, fluoride, and total dissolved solids (TDS), and the Kyger Creek NFAP is identified as the source of boron, sulfate, and low pH. Supporting information and additional discussion of each of the lines of evidence are presented in subsequent sections of this ASD Report.

2. DESCRIPTION OF ALTERNATE SOURCES

Identified alternate sources for the Appendix III constituents that are observed at the BAP include:

- Regional Brine – Naturally occurring brine originating from bedrock (i.e., Cow Run Sandstone) as observed in shallow groundwater in and around Gavin. Identified as the alternate source of calcium, chloride, fluoride, and TDS.
- Kyger Creek Generating Station Closed North Fly Ash Pond – CCR-impacted groundwater migrating from the Closed North Fly Ash Pond. Identified as the alternate source for boron, low pH, and sulfate.

Additional influence on groundwater quality at the BAP is observed from mixing of the alternate sources and upgradient alluvial aquifer groundwater from west of the BAP and/or surface water from the Ohio River.

A summary of each of these alternate sources and influences 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 chloride, fluoride, 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 as a result 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 (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 to groundwater at the Plant. Evidence of brine impacts near the Plant includes specific conductivity measurements at several monitoring wells upgradient of the Fly Ash Reservoir that are consistently greater than 10,000 $\mu\text{S}/\text{cm}$ and reach as high as 39,000 $\mu\text{S}/\text{cm}$. A brine signature was also observed in supplemental BAP monitoring well BAC-11 during sampling in September 2023. This signature included a specific conductivity field measurement of 39,301 $\mu\text{S}/\text{cm}$, TDS of 38,000 mg/L, and chloride levels of 33,000 mg/L. For reference, the approximate specific conductivity of seawater is 50,000 $\mu\text{S}/\text{cm}$ (USGS 2019).

The background groundwater data set is discussed further in Section 4.

2.2 KYGER CREEK NORTH FLY ASH POND

The Kyger Creek Generating Station is located along the Ohio River in Gallia County, south of and adjacent to the Plant (Figure 2-1). The Kyger Creek Fly Ash Pond complex consists of the 110-acre NFAP (closed) and 60-acre South Fly Ash Pond (SFAP). The construction history and groundwater monitoring results of these ponds are summarized in the first ASD Report (ERM 2018b). According

to the approved Ohio Environmental Protection Agency (OEPA) Permit-to-Install (PTI), construction activities to close the NFAP were initiated in March 1998 and concluded in October 2000 (OVEC 2017). Semiannual groundwater sampling for PTI compliance at the NFAP has been performed since October 1997 and currently includes sampling of six monitoring wells (OEPA 1996). Per the PTI, samples are collected semiannually for:

- Groundwater Contamination Indicator Parameters – alkalinity, specific conductivity, sulfate, and total dissolved solids; and
- Groundwater Quality Parameters – barium, calcium, chloride, iron, lead, magnesium, manganese, selenium, sodium, gross alpha and gross beta, and pH.

Groundwater monitoring for federal CCR compliance is performed at the SFAP only.

The closed Kyger Creek NFAP is located less than 300 feet south of the Gavin BAP, and the units share an approximately 2,000-foot-long border (Figure 2-1). Gavin's network wells BAC-06 and BAC-07 were installed in 2020 at the top of the south berm along this boundary and screened within the alluvial aquifer. Six supplemental monitoring wells were installed along the south berm between the BAP and the Kyger Creek NFAP in 2022 to better understand the hydraulic relationship between the BAP and the NFAP and groundwater quality along the boundary. These supplemental wells include alluvial aquifer wells BAC-16 and BAC-18, separation layer wells BAC-15 and BAC-20, bedrock well BAC-19, and separation layer and alluvial aquifer well BAC-17.

The Kyger Creek NFAP has a higher potential to impact groundwater than the BAP because the Kyger Creek NFAP contains fly ash (approximately 1.7 million cubic yards), which when compared to bottom ash, has a greater potential to leach CCR constituents due to higher concentrations of CCR constituents and increased surface area due to smaller particle size (Cox et al. 1978; OEPA 1996; Jones et al. 2012), as described further in Section 7. The NFAP also contains approximately 900,000 cubic yards of boiler slag and boiler slag fines used to construct the NFAP berm and as cover material (OEPA 1996).

2.3 UPGRADIENT ALLUVIAL AQUIFER GROUNDWATER

Groundwater from upgradient of the BAP is observed at upgradient monitoring locations west of the BAP, including network wells MW-1, MW-6 and BAC-01, and supplemental wells BAC-08, BAC-21, BAC-22, and BAC-23. The upgradient status of these locations is confirmed by potentiometric surface maps which consistently show higher potentiometric elevations west of the BAP than in wells north, south, or east of the BAP. Potentiometric surface maps are presented and discussed further in Section 3. Groundwater from west of the BAP flows through the alluvial aquifer beneath the BAP where it ultimately mixes with groundwater migrating from Kyger Creek, groundwater discharging from bedrock, and surface water from the Ohio River.

2.4 OHIO RIVER

The Ohio River extends approximately 981 river miles from Pittsburgh, Pennsylvania to Cairo, Illinois and drains approximately 205,000 square miles (ORSANCO 2018). The Ohio River is located approximately 700 feet east of the BAP, and the alluvial aquifer beneath the BAP is hydraulically connected to the River.

While the Ohio River is not considered a source of impacts to groundwater under the BAP, the mixing of Ohio River surface water with groundwater does influence groundwater quality at the BAP through interaction of groundwater and river water (see Section 3). Surface water from the Ohio River enters the alluvial aquifer and interacts with groundwater beneath the BAP, driven by induced infiltration caused by pumping of the onsite water supply wells and during periods of rapidly rising and high river stage conditions (i.e., flooding). When the Ohio River floods, water from the River mixes with groundwater within the alluvial aquifer (ERM 2018b) beneath the BAP. The quality of the Ohio River water that mixes with groundwater is discussed in Section 4.

3. HYDRAULIC CONNECTIONS TO THE ALTERNATE SOURCES

Explanations of the hydraulic connections between potential alternate sources and the downgradient wells of the BAP were previously provided in the first ASD Report for the BAP (ERM 2018b). An updated summary of each of these connections is provided below.

3.1 EVALUATION OF ONSITE PUMPING

To better understand the role of pumping on the dynamic flow field beneath the BAP, transducers were deployed in several alluvial wells around the BAP, and continuous long-term, high-resolution potentiometric elevation data were collected from January through November 2023. Transducer data were evaluated to identify pumping signatures (drawdown curves) for the on-site water supply wells, and these signatures were used to approximate the frequency and duration of pumping. The pumping of the on-site water supply wells is variable in both duration and frequency and is dependent on Plant needs. Therefore, usage from month to month and year to year may be slightly different which has the potential to affect overall groundwater flow dynamics for various time periods.

An evaluation to approximate the percentage of days and hours of pumping during the 2023 monitoring periods was performed by reviewing transducer data collected from nearby monitoring well BAC-10 to identify pumping periods. Review of the 2023 data included estimation of the number of hours of pumping and interpretation of pumping at individual well FW-1101, which has a smaller pumping signature. The results of this 2023 evaluation indicate that pumping at one or both of these wells occurred on approximately 85% of days in 2023 (approximately 309 of 365 days) and approximately 44% of the total time (approximately 3,826 total hours). This total pump duration includes a one-month period (all of December 2023) when both supply wells were inactive. In comparison, pumping at FW-15 and/or FW-1101 in 2022 occurred on approximately 72% of days (79 of 109 days), and active pumping conditions occurred for approximately 47% of the time (approximately 1,236 total hours). This indicates that pumping conditions were relatively consistent in frequency and duration between the 2022 and 2023 monitoring periods.

3.2 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 flow of groundwater within these aquifers is primarily driven by the gravitational force on groundwater (differences in hydraulic head) within the bedrock.

At the BAP, groundwater discharges upward from shallow fractured bedrock into the overlying alluvial aquifer under certain hydraulic conditions. This upward discharge of groundwater from the bedrock aquifer to the overlying alluvial aquifer is attributable to the following three primary drivers:

- Hydraulic pressure (head) in the bedrock aquifer compared to the alluvial aquifer driven by elevation and recharge at the adjacent ridges;

- Areas of high hydraulic conductivity related to the interconnected fracture network within the bedrock; and
- Active pumping conditions related to operation of the two water supply wells directly north of the BAP (FW-15 and FW-1101).

3.2.1 HYDRAULIC CONDUCTIVITY

Groundwater flow within bedrock occurs primarily via flow through the network of interconnected and saturated fractures, which provides a much higher effective porosity (fracture/secondary porosity) than does the bedrock aquifer matrix (primary porosity). This is due to the effective pore size of the fractures (the ratio of volume of open fractures to the bulk volume of the bedrock matrix) as compared to the miniscule pore sizes between sedimentary grains making up the bedrock matrix. Consequently, the fracture network provides a flow system with significantly higher hydraulic conductivity than the overall bedrock matrix porosity.

This network of fractures is highly heterogeneous, varying greatly in connectivity and conductivity from location to location. The fracture network is also anisotropic, which means the hydraulic conductivity varies in magnitude and direction at a particular location. As such, the occurrence of fracture interconnectivity and saturation varies greatly at a regional scale. In the Ohio River Valley, stress relief fracturing in bedrock provides a structural framework for bedrock overlain by coarse glacial outwash alluvial deposits to be hydraulically interconnected. The degree of stress fracturing is generally greatest in bedrock directly underlying the alluvial valley bottom, driving enhanced transmissivity of the fracture network in these areas (USGS 1981). Such is the case of the BAP area, where the Ohio River acts as a major regional groundwater discharge boundary, driving shallow brines towards the surface due to differences in hydraulic head. In addition, the depth of brine is shallower along the Ohio River than in the surrounding ridges due to flow from areas of recharge to areas of discharge (USGS 1997).

Heterogeneity and anisotropy of the fracture network is clearly observed in the bedrock wells installed around the BAP. Hydraulic conductivity was measured to be 4.17×10^{-2} cm/sec at bedrock well BAC-11 where observations of significant fractures were made during drilling and geophysical logging. This high hydraulic conductivity value (K value) in BAC-11 is similar to K values measured in the alluvial aquifer. Conversely, substantially lower K values were measured at bedrock wells BAC-09 (1.23×10^{-6} cm/sec) and BAC-19 (2.65×10^{-8} cm/sec), where fewer fractures were observed. This difference in hydraulic conductivity values between wells screened within the same bedrock unit exemplifies the effect of fracture network connectivity on hydraulic conductivity and helps to explain why some portions of the alluvial aquifer can be impacted by regional discharge (i.e., near BAC-02) while other areas may not be substantially influenced (i.e., near BAC-01 and BAC-18).

3.2.2 INFLUENCE OF PUMPING CONDITIONS

As water is removed from the alluvial aquifer via pumping, it reduces the pressure that water within the aquifer exerts on the surrounding system. As described in the 2022 H2 Alternate Source Demonstration Report (ERM 2023), upward vertical gradients between the bedrock aquifer and the alluvial aquifer were observed. For example, the July to September 2022 data showed this

relationship was more pronounced at couplet pairs BAC-02/BAC-11 and BAC-04/BAC-13 to the north and east and was less pronounced at couplet pairs BAC-01/BAC-09 and BAC-18/BAC-19 on the western and southern sides of the BAP where the effects of pumping are less noticeable (i.e., less drawdown) due to their greater distance from the water supply wells and the relatively low hydraulic conductivity of the bedrock wells. When the water supply wells are actively pumping, the pressure head in the alluvial aquifer is diminished in the vicinity of the water supply wells (Figure 3-1), allowing for a stronger upward migration of groundwater from bedrock to the alluvial aquifer.

3.3 HYDRAULIC CONNECTION TO KYGER CREEK NORTH FLY ASH POND

Groundwater flow directions around the BAP are heavily influenced by pumping of Gavin water supply wells FW-15 and FW-1101. Based on 2023 transducer data from monitoring wells around the BAP, the alluvial aquifer continued to have an immediate response to pumping, similar to observations in 2022, regardless of whether one or both wells are active.

The 2023 transducer data were evaluated to analyze the effects of pumping on horizontal hydraulic gradients and flow directions in the alluvial aquifer beneath the BAP. Horizontal gradients were calculated for each day from January 1, 2023, through November 7, 2023, using an R tool that calculates the best fit of a 2D plane to the potentiometric elevations based on the geometry of a given well-network. The approach was adapted from the EPA On-line Hydraulic Gradient Magnitude and Direction tool (USEPA 2021). The tool output is an overall flow vector frequency and direction for the transducer network. The diagrams in Figure 3-2 summarize the frequency and direction of groundwater flow. During the January 1, 2023, to June 30, 2023, time period groundwater flow was predominantly east-northeast, and during the July 1, 2023, to November 7, 2023, time period, groundwater flow was predominantly north-northeast. These findings confirm the following key points:

- Due to the prevailing northeasterly groundwater flow direction, the Kyger Creek NFAP is not situated upgradient of the monitoring wells located along the western and northwestern areas of the Gavin BAP;
- Monitoring wells on the south side of the BAP are located downgradient of the Kyger Creek NFAP and upgradient of the BAP;
- During all groundwater flow conditions (pumping and non-pumping), the Kyger Creek NFAP is hydraulically upgradient of the monitoring wells along the southern and southeastern areas of the BAP; and
- During pumping conditions, the Kyger Creek NFAP is hydraulically upgradient of the monitoring wells along the southern, eastern, and northeastern areas of the BAP.

It is evident that the Kyger Creek NFAP is hydraulically connected to the downgradient BAP monitoring wells based on the prevalent northeasterly direction of groundwater flow and the presence of the same alluvial aquifer beneath both the Kyger Creek NFAP and the BAP. Pumping activity of water supply wells FW-15 and FW-1101 creates a clear and nearly immediate influence on groundwater flow directions around the BAP, shifting groundwater flow northward, especially across the eastern half of the BAP. This shift in localized groundwater flow directions orients the

Kyger Creek NFAP as upgradient to a larger area of the BAP and results in an increased hydraulic connection between the Kyger Creek NFAP and the aquifer beneath the BAP.

4. CONSTITUENTS ARE PRESENT AT THE ALTERNATE SOURCES OR ALONG THE FLOW PATHWAYS

Groundwater quality at the BAP is influenced by multiple sources, as described in Sections 2 and 3. The Kyger Creek NFAP is identified as the source of boron, low pH, and sulfate. Regional brine is identified as the source of calcium, chloride, fluoride and TDS in BAP downgradient groundwater. The mixing of upgradient alluvial groundwater and water from the Ohio River also affects groundwater chemistry downgradient of the BAP. A summary of the constituents present at these sources is provided below.

4.1 REGIONAL BRINE

Regional brine is present in the area of the Plant and locally in bedrock under the BAP. Supplemental monitoring wells BAC-09, BAC-11, BAC-13, and BAC-19, which were installed in the Cow Run Sandstone at the BAP in 2022, all have chemical signatures indicating the presence of brine. The ranges for calcium, chloride, fluoride and TDS in bedrock groundwater and downgradient alluvial groundwater (BAC-02, BAC-03, BAC-04 and BAC-05) at the BAP is presented in Table 4-1.

TABLE 4-1: COMPARISON OF BEDROCK GROUNDWATER TO DOWNGRADIENT BAP GROUNDWATER

Analyte	Units	Bedrock Groundwater at BAP	Downgradient Alluvial Groundwater at BAP
Calcium	mg/L	91-2,600	79-140
Chloride	mg/L	920-33,000	38-63
Fluoride	mg/L	0.56-1.6	0.064-0.23
TDS	mg/L	1,500-38,000	440-800

Notes: BAP = Bottom Ash Pond; mg/L = milligrams per liter; TDS = total dissolved solids. Results from samples collected in September and October 2023.

Cross section view figures for calcium (Figure 4-1a and 4-1b), chloride (Figure 4-2a and 4-2b), TDS (Figure 4-3a and 4-3b), and fluoride (Figures 4-4a and 4-4b) depict the distribution of concentrations for these four constituents within bedrock and the alluvial aquifer around the area of the BAP. Concentrations of calcium, chloride, fluoride and TDS are generally one to two orders of magnitude higher in bedrock than in the overlying alluvial aquifer, consistent with a regional brine signature. Therefore, the higher concentrations of calcium, chloride, fluoride, and TDS in the bedrock groundwater and the observed upward hydraulic gradients indicate the SSIs are attributable to the discharge of groundwater from bedrock to the overlying alluvial aquifer.

4.2 KYGER CREEK NORTH FLY ASH POND

4.2.1 BORON

Figure 4-5 depicts the distribution of boron concentrations across the BAP monitoring well network and the general horizontal flow path of boron from the northern boundary of the Kyger Creek

NFAP. This plume is consistent with the average observed daily groundwater flow vector as depicted on Figure 4-5, which is predominantly towards the north and/or northeast. The vector diagram summarizes transducer data collected from July 1, 2023, through November 7, 2023.

Boron concentrations and the approximated extent of boron impacts along the two primary flow directions (northeast and northward) from the Kyger Creek NFAP are also presented in cross section views (Figures 4-6a and 4-6b), as summarized by the following points:

- Monitoring well B-0904 is situated on Kyger Creek property downgradient of the Kyger Creek NFAP and upgradient of the BAP. Monitoring well B-0904 has historically had a higher boron concentration than any BAP well.
- BAC-17 was installed in 2022 as a replicant monitoring point for B-0904 (located on Kyger Creek property and no longer accessible for sampling). BAC-17 is located downgradient of the Kyger Creek NFAP and upgradient of the BAP, and is screened in both the separation layer and into the underlying alluvial aquifer, mirroring the well screen of B-0904. The concentration of boron in BAC-17 was 4.0 mg/L in October 2023, a higher concentration than was observed in any downgradient well at the BAP in H2 2023. This concentration is consistent with the range historically observed at B-0904 of 3.7-4.2 mg/L boron.
- The highest boron concentrations in BAP downgradient wells were measured at wells BAC-04 and BAC-05, which are located nearest to and downgradient from the Kyger Creek NFAP.
- Concentrations of boron decrease with distance downgradient from the Kyger Creek NFAP, along the northeastern flow path (i.e., from BAC-05 to BAC-03).
- Monitoring wells BAC-06 and BAC-07 demonstrated slightly lower concentrations than measured in groundwater from monitoring well BAC-17 (and historically monitoring well B-0904), likely due to the slightly deeper position of the well screens within the aquifer combined with the mixing of water discharged from the underlying bedrock aquifer into the alluvial aquifer (Figure 4-5).

Correspondence obtained from the OEPA regarding Kyger Creek NFAP concluded that groundwater below the NFAP appears to be impacted by a release from the Kyger Creek NFAP and that an assessment of groundwater should be conducted (Appendix A and Appendix B). Although groundwater around the Kyger Creek NFAP is not sampled for boron, the Kyger Creek SFAP data suggest that boron is present in groundwater below both Kyger Creek fly ash ponds. Table 4-2 summarizes boron analytical results from two groundwater sampling events conducted in March and October 2022 at monitoring wells downgradient of the Kyger Creek SFAP (AGES 2023). The highest concentrations were observed on the northeastern and southeastern boundaries of the SFAP. The northeastern boundary was interpreted to be downgradient from the Kyger Creek NFAP in 2020 (AGES 2021).

TABLE 4-2: KYGER CREEK SFAP BORON 2022 RESULTS

Analyte	Units	Maximum	Average
Boron	mg/L	16	8.1

Notes: mg/L = milligrams per liter; SFAP = South Fly Ash Pond.



The average concentration of boron (8.1 mg/L) in the Kyger Creek SFAP for 2022 is substantially higher than the maximum concentration of boron measured in groundwater beneath the BAP (2.5 mg/L) in fall 2023 from network wells. The Kyger Creek SFAP and the now-closed NFAP both contain fly ash generated at the Kyger Creek Generating Station. As such, it is reasonable to expect that the chemical characteristics of the fly ash are similar in both units. Given the elevated boron concentrations in groundwater downgradient of the Kyger Creek SFAP and considering that both units are unlined, elevated concentrations of boron in groundwater downgradient of the Kyger Creek NFAP would be expected. Thus, this evidence supports the conclusion that boron is present in groundwater at the Kyger Creek Generating Station.

4.2.2 SULFATE

Figure 4-7 depicts the distribution of sulfate concentrations across the BAP monitoring well network and includes results from four Kyger Creek NFAP monitoring wells screened in the alluvial aquifer. Figure 4-7 also depicts the general horizontal flow path of sulfate from the northern boundary of the Kyger Creek NFAP under pumping conditions, along with the approximated extent of sulfate impacts from the Kyger Creek NFAP and around the BAP. This plume is consistent with the average observed daily groundwater flow vector as depicted on Figure 4-7, which is predominantly towards the northeast.

According to the December 2023 Kyger Creek Generating Station Closed North Fly Ash Pond Groundwater Semiannual Data Analysis (OVEC 2023), sulfate is present in wells surrounding the NFAP at concentrations exceeding those observed in groundwater around the BAP. In October 2023, sulfate was present in monitoring well KC-9507 (located to the southeast of NFAP) at 876 mg/L and monitoring well KC-9502 (located to the northeast of the NFAP adjacent to the Gavin property boundary) at 363 mg/L. Toxicity Characteristic Leaching Procedure (TCLP) data included with the Permit to Install for the Ohio Valley Electric-Kyger Creek Plant North Fly Ash Pond Closure Project indicate that fly ash produced at Kyger Creek and placed in the NFAP leaches water with sulfate concentrations of 559 mg/L (OEPA 1996).

4.2.3 PH

The pH of groundwater emanating from the Kyger Creek NFAP was previously measured in well B-0904 and was historically slightly acidic (ERM 2018b). Acidic pH results of 5.58 and 5.73 were measured at B-0904 replicant well BAC-17 and Kyger Creek well KC-9502 (located at the northeast corner of Kyger Creek property) in October 2023, respectively (OVEC 2023; Appendix A). The low pH at KC-9502 has been observed since 1997 (Appendix A) and was identified by OEPA in 1998 (OEPA 1998; Appendix B). Table 4-3 summarizes the pH data in groundwater in sources around the BAP.

TABLE 4-3: GROUNDWATER AND SURFACE WATER PH VALUES

Location	pH (SU)
Kyger Creek NFAP: Upgradient BAP Groundwater (KC-9502; 25 October 2023)	5.73
Kyger Creek NFAP: Upgradient BAP Groundwater (B-0904; March 2020)	5.26
BAP: Upgradient Groundwater – Northwest (BAC-01, MW-1, and MW-6; September and October 2023)	6.84-7.14
BAP: Upgradient Groundwater – South (BAC-06, BAC-07, and BAC-17; September and October 2023)	5.58-6.62
BAP: Downgradient Groundwater (BAC-02 through BAC-05; September and October 2023)	5.89-6.64
BAP: Bedrock Groundwater (BAC-09, BAC-11, BAC-13, and BAC-19; September and October 2023)	7.09-7.72
Ohio River (November 2023)	6.93

Notes: BAP = Bottom Ash Pond; NFAP = North Fly Ash Pond; SU = Standard pH Units.

The fall 2023 results remain consistent with previous ASD Reports for the BAP (ERM 2018b; ERM 2019; ERM 2020; ERM 2021b; ERM 2022; ERM 2023). As shown in Figure 4-8, the distribution of pH and the northward flow direction demonstrate that low pH groundwater flows on-site from the Kyger Creek NFAP, where it mixes with upgradient alluvial groundwater, bedrock discharge, and water from the Ohio River, resulting in the intermediate pH observed in groundwater downgradient of the BAP. Monitoring wells BAC-06 and BAC-07 are not similarly impacted by acidic groundwater migrating from Kyger Creek, as evidenced by their higher pH. This is attributable to the well screens of BAC-06 and BAC-07 being substantially deeper than the well screens at B-0904 and BAC-17, lending to more influence by the regional discharge of groundwater from bedrock to the alluvial aquifer, as described further in Section 6.

5. LINKAGES OF CONSTITUENT CONCENTRATIONS AND DISTRIBUTIONS BETWEEN ALTERNATE SOURCES AND DOWNGRAIDENT WELLS

5.1 REGIONAL BRINE

As discussed in Section 4.1, the concentrations of calcium, chloride, fluoride and TDS are significantly higher in bedrock groundwater compared to alluvial groundwater, in particular at bedrock monitoring wells BAC-09 and BAC-11. Table 5-1 demonstrates that the concentration of calcium, chloride, fluoride, and TDS range from 13 to 673 times higher in bedrock compared to alluvial groundwater. Brine impacted bedrock groundwater is the alternate source of calcium, chloride, fluoride, and TDS. As described in Section 3.1, groundwater discharges from bedrock upward into the overlying alluvial aquifer (uppermost aquifer) under certain hydraulic conditions. The prevalence of pumping conditions in 2023 (active pumping on approximately 85% of days and during approximately 44% of the total 2023 monitoring period) increased upward hydraulic gradients from bedrock into the alluvial aquifer. The presence of higher concentrations of calcium, chloride, fluoride, and TDS establishes bedrock groundwater as the source, and the presence of upward hydraulic gradients is the linkage (i.e., the means to migrate) between the alternate source and downgradient wells.

TABLE 5-1: RATIO OF BEDROCK GROUNDWATER TO DOWNGRAIDENT BAP GROUNDWATER FOR REGIONAL BRINE

Analyte	Units	Maximum Brine-Impacted Groundwater in Bedrock Beneath BAP (As measured at BAC-09/ BAC-11)	Average Downgradient Well at BAP	Bedrock to Alluvial Aquifer Ratio
Calcium	mg/L	2,600	98	27:1
Chloride	mg/L	33,000	49	673:1
Fluoride	mg/L	1.6	0.12	13:1
TDS	mg/L	38,000	530	72:1

Notes: BAP = Bottom Ash Pond; mg/L = milligrams per liter; TDS = total dissolved solids. Results from samples collected in September and October 2023.

5.2 KYGER CREEK NORTH FLY ASH POND

As described in Section 3.3, the average direction of groundwater flow in the alluvial aquifer is generally to the north and northeast from the Kyger Creek NFAP across the eastern side of the BAP towards the water supply wells. Figures 4-5 and 4-7 show the linkage for boron and sulfate between the alternate source and the downgradient monitoring wells. Figure 4-8 shows the linkage for low pH groundwater between the alternate source and the downgradient monitoring wells.

5.2.1 BORON AND SULFATE

The maximum boron concentration measured in onsite groundwater monitoring wells at the BAP was 4.0 mg/L at BAC-17 (Figure 4-5). The average boron concentration observed at the SFAP in 2022 was 8.1 mg/L, with a maximum boron concentration reported to be 16 mg/L. Groundwater at the Kyger Creek NFAP is not analyzed for boron, but it is expected to have similar concentrations due to the materials placed there. The maximum sulfate concentration measured in upgradient onsite groundwater monitoring wells along the southern boundary of the BAP was 230 mg/L at BAC-06 in fall 2023, while the maximum sulfate concentrations observed at the NFAP in fall 2023 were 363 mg/L in well KC-9502 located in the northeast corner of the NFAP and 876 mg/L in well KC-9507 located in the southeast corner of the NFAP (Figure 4-7). The ratio of the maximum Kyger Creek concentrations to the maximum downgradient BAP well is provided in Table 5-2. These ratios, and the predominance of pumping-influenced flow directions to the northeast, demonstrate the linkage between boron and sulfate observed in downgradient BAP wells and Kyger Creek, the alternate source.

TABLE 5-2: RATIO OF KYGER CREEK GROUNDWATER TO DOWNGRADIENT BAP GROUNDWATER FOR BORON/SULFATE

Analyte	Units	Maximum Concentration		Ratio: Kyger Creek to Downgradient BAP
		Kyger Creek NFAP/SFAP (2022/2023)	Downgradient BAP Well (BAC-02/BAC-04)	
Boron	mg/L	16	2.5	6:1
Sulfate	mg/L	876	310	2.8:1

Notes: BAP = Bottom Ash Pond; mg/L = milligrams per liter.

Results from Gavin samples collected in September and October 2023, Kyger Creek NFAP samples collected in October 2023, and Kyger Creek SFAP samples collected in 2022.

5.2.2 PH

Table 5-3 summarizes the range of pH values measured at the Kyger Creek NFAP, the BAP and the Ohio River. The observed pH SSIs at the BAP were below the lower prediction limit of 6.63, which was derived based on background data from MW-1, BAC-01 and MW-6. BAP background groundwater, BAP bedrock groundwater and water from the Ohio River all have relatively neutral pH. Groundwater migrating from Kyger Creek NFAP has an acidic pH, as confirmed by the October 2023 pH measurement of 5.73 at monitoring well KC-9502, which is located approximately 150 feet south of the BAP. As discussed in Section 4.2.3, the low pH at KC-9502 has been observed since 1997 and was identified by OEPA in 1998 (Appendix B). As discussed in Section 3, groundwater migrating northward from the Kyger Creek NFAP mixes with upgradient groundwater migrating from the west and can mix with Ohio River water during high river stage conditions. This mixing of neutral and acidic waters causes groundwater at the downgradient BAP wells to become slightly acidic. These observations demonstrate the linkage between low pH groundwater observed in downgradient BAP wells and low pH groundwater from the Kyger Creek NFAP, the alternate source.

TABLE 5-3: COMPARISON OF BEDROCK, KYGER CREEK NFAP, AND DOWNGRADIANT BAP GROUNDWATER FOR PH

Analyte	Units	Lowest Measured		Upgradient Wells West of BAP	Bedrock Wells	Ohio River	Downgradient BAP Wells (Mixing Area)
		Onsite BAP Well (BAC-17)	Kyger Creek NFAP (KC-9502)				
pH	SU	5.58	5.73	6.84 – 7.14	7.09 – 7.72	6.93	5.89 – 6.64

Notes: BAP = Bottom Ash Pond; NFAP = North Fly Ash Pond; SU = Standard pH Units.

Results from Gavin samples collected in September and October 2023, Kyger Creek samples collected in October 2023, and Ohio River sample collected November 2023.

6. THE BAP IS NOT SUPPORTED AS THE SOURCE

6.1 EVALUATION OF POTENTIAL GROUNDWATER MOUNDING AT THE BAP

Programmable electronic data loggers equipped with a pressure-sensitive water level transducer were installed at four alluvial aquifer monitoring well transects (eight monitoring wells) at the southern, western, northern, and eastern boundaries of the BAP to evaluate the potential for groundwater mounding. These monitoring well couplets were chosen based on their proximity to one another, and to the BAP. Each well couplet included a well on top of the berm directly adjacent to the BAP, and the other at the exterior base of the berm, which allowed for the evaluation of hydraulic heads and resulting hydraulic gradients between each couplet. A signature of mounding would be identified by consistently higher potentiometric elevations at the well located at the top of the berm (closer to the BAP) compared to its counterpart at the base of the berm (further from the BAP). The four well couplet pairs included the following:

- BAC-01 (base of berm) and BAC-08 (top of berm), installed at the western boundary of the BAP;
- BAC-10 (base of berm) and BAC-02 (top of berm), installed at the northern boundary of the BAP;
- BAC-12 (base of berm) and BAC-04 (top of berm), installed at the eastern boundary of the BAP; and
- BAC-16 (base of berm) and BAC-18 (top of berm), installed at the southern boundary of the BAP.

Figure 6-1 shows the potentiometric elevation measured at BAC-01 is consistently higher than the potentiometric elevation measured at BAC-08 from August 2022 through January 2023. Although the transducer at BAC-08 was removed for repair in January 2023 and subsequently redeployed elsewhere, manual measurements made in March and April 2023 show the potentiometric elevation at BAC-01 is consistently higher than the potentiometric elevation at BAC-08. These observations are not consistent with mounding at the western boundary of the BAP.

Figure 6-2 shows the hydraulic relationship between BAC-10 and BAC-02 is largely controlled by the operation of the pumping wells located north of the BAP. Well BAC-10 is located closer to the pumping wells and typically has a lower potentiometric surface during times of pumping. This signature is consistent with greater drawdown at BAC-10 because it is closer to the water supply wells than BAC-02 and is not a result of mounding at the northern boundary at the BAP.

Figure 6-3 shows the potentiometric elevation measured at BAC-12 is consistently very similar to or higher than the potentiometric elevation measured at BAC-04 from August 2022 through November 2023. These observations are not consistent with mounding at the eastern boundary of the BAP.

Figure 6-4 shows the potentiometric elevation measured at BAC-16 is consistently very similar to or higher than the potentiometric elevation measured at BAC-18 from August 2022 through November 2023. These observations are not consistent with mounding at the southern boundary of the BAP.

6.2 OBSERVED BORON CONCENTRATIONS

Surface water samples at the BAP and Reclaim Pond were collected during each groundwater sampling event between 2016 and 2022. Prior to dewatering of the BAP, boron was consistently detected in surface water at 0.50 mg/L or lower, except for one event in 2019 when boron was measured at 1.30 mg/L. Table 6-1 compares the boron concentrations measured in surface water and monitoring wells. Based on this data, the boron concentration in the BAP surface water is too low to be the source of boron to the downgradient BAP wells. In contrast, groundwater flowing towards the BAP from under the Kyger Creek NFAP has consistently had a boron concentration higher than what is detected in downgradient groundwater. The average concentration at B-0904 from March 2018 to March 2020 was 3.95 mg/L, and BAC-17 had an average boron concentration of 3.98 mg/L from October 2022 to October 2023, making the NFAP the most likely source.

Boron in the environment typically exists as boric acid or the borate ion. Both species are water-soluble and are not sensitive to redox conditions. Although adsorption/desorption reactions occur, adsorption is strongest in slightly-to-moderately basic conditions (pH 7.5-10), which are not observed in groundwater around the BAP (ATSDR 2010). Therefore, it is not likely that oxidizing conditions present in surface water would impact boron concentrations in the BAP, nor is it likely that adsorption/desorption processes are significantly impacting the concentrations of boron in groundwater surrounding the BAP. Boron is expected to act as a conservative tracer due to its high solubility and mobility in water.

TABLE 6-1: BAP BORON RESULTS

Analyte	Units	Bottom Ash Pond ^a	Reclaim Pond ^a	Downgradient BAP Wells ^b
Boron	mg/L	0.44	0.51	2.0

^a Average sample results from February 2018 to October 2022.

^b Average sample results from September and October 2023.

6.3 LEACHING DATA

Based on leaching testing performed on bottom ash from the BAP, the CCR material present in the BAP does not yield concentrations of Appendix III parameters above background (or below background in the case of pH). Therefore, the BAP does not constitute a source of impact to groundwater.

Gavin collected composite bottom ash samples annually from the BAP. These samples were extracted by modified TCLP following method ASTM D3987 to evaluate the leaching potential of bottom ash material from the BAP. A summary of the results is included in Table 6-2, including minimum, maximum, and average leachate concentrations for the bottom ash samples from 2016 to 2023. Table 6-2 also includes applicable LPL and UPL values derived for the BAP Appendix III parameters, as well as the average of nine samples collected from monitoring well BAC-21, located west of the BAP to represent groundwater quality hydraulically upgradient and distant from the BAP.

TABLE 6-2: BAP TCLP RESULTS

Appendix III Parameter	Units	App III LPL	App III UPL	BAC-21 (Avg)	Gavin Modified TCLP			
					n	Min	Max	Avg
Fluoride	mg/L	-	0.161	0.08	8	<0.01	0.059	0.053
Chloride	mg/L	-	24.7	72	8	0.174	0.91	0.621
Sulfate	mg/L	-	140	131	8	2.1	42	10
TDS	mg/L	-	505	538	8	<10.0	56	29
pH	SU	6.63	7.22	6.84	8	6.5	9.7	8.02
Calcium	mg/L	-	129	130	4	3	12	6.1
Boron	mg/L	-	0.177	0.36	4	<0.1	<0.1	<0.1

Notes: n = number of samples available from 2016 to 2023; < = not detected at the listed reporting limit; SU = standard units.

These results indicate that the Appendix III parameters do not leach from Gavin bottom ash at concentrations above the Appendix III UPLs. We note that the pH SSI is for pH levels lower than the LPL, so the fact that the average pH level in the TCLP results is not only above the LPL but also above the UPL is further indication that the BAP is not the source of the low pH SSI. Leaching results are generally lower than background groundwater observed west of the BAP. Accordingly, concentrations observed in downgradient wells must be caused by a source other than the BAP.

6.4 CHEMICAL FINGERPRINTS

The geochemical fingerprints of surface water from the BAP, upgradient groundwater west of the BAP, groundwater flowing from the Kyger Creek NFAP, and surface water from the Ohio River were evaluated using the concentrations of parameters that are not expected to sorb strongly or participate in redox reactions. Boron, chloride, and potassium were chosen for these comparisons due to their higher water solubility, limited redox chemistry, and presence in groundwater around the BAP. Boron-chloride and boron-potassium plots are shown in Figure 6-5 and Figure 6-6, respectively.

The samples presented on the concentration plots were collected from 2016 through 2023. The primary observations based on the concentration plots (Figures 6-5 and 6-6) are the following:

- Multiple samples collected from a single location (e.g., the Ohio River or Well BAC-01) tended to be tightly clustered, indicating that the chemical signatures of individual locations were consistent over time.
- Monitoring wells collected from a similar environment (i.e., upgradient wells located west of the BAP) tended to have similar concentrations and plot near each other.
- Groundwater from BAP upgradient wells MW-1, BAC-01, and MW-6 has a unique signature with relatively low boron, chloride, and potassium. The Ohio River has similar concentrations of boron and chloride, but generally has a higher concentration of potassium.
- Groundwater migrating from the Kyger Creek NFAP is captured by monitoring wells B-0904 and BAC-17, which was installed to replace B-0904. Concentrations of boron, chloride, and potassium at these wells are similar. These wells are characterized by high boron and low chloride and potassium.

- Groundwater from BAP downgradient wells BAC-02, BAC-03, BAC-04, and BAC-05 has a signature similar to groundwater migrating onto Gavin from the Kyger Creek NFAP (B-0904 and BAC-17). BAC-05, which is located closest to the Kyger Creek NFAP, plots closest to the Kyger Creek NFAP groundwater, followed by BAC-04, BAC-03, and BAC-02, respectively. This is consistent with their distance from the Kyger Creek NFAP. Groundwater at these wells is characterized by high boron, with elevated chloride and potassium relative to Kyger Creek groundwater due to the influence of bedrock groundwater. Supplemental monitoring wells BAC-12 and BAC-14 have chemical fingerprints consistent with other BAP downgradient wells.
- Groundwater from monitoring wells BAC-06 and BAC-07 shows a distinct signature with similar concentrations of chloride and potassium to Kyger Creek NFAP groundwater, with lower but still elevated concentrations of boron. These wells are screened at a deeper interval than B-0904 and BAC-17, indicating that the boron plume flowing from the Kyger Creek NFAP is primarily located in the upper part of the alluvial aquifer.
- Groundwater from supplemental bedrock wells BAC-09, BAC-11, BAC-13, and BAC-19 has a unique signature with moderate concentrations of boron (comparable to those observed at some upgradient locations) and very high chloride. Chloride concentrations are up to three orders of magnitude higher in bedrock groundwater than in alluvial background groundwater, which is consistent with the interpretation of brine influencing Cow Run groundwater quality.
- Groundwater from supplemental upgradient monitoring wells located farther to west/northwest (BAC-21, BAC-22, and BAC-23) has a signature similar to the network upgradient wells, (MW-1, BAC-01 and MW-6) but with slightly more boron and potassium.
- Groundwater from supplemental separation layer monitoring well BAC-15 has a distinct signature characterized by moderate boron and potassium and very low chloride. This well has limited connectivity to surrounding groundwater due to the low hydraulic conductivity of the separation layer.
- BAP surface water through 2023 had a signature distinct from downgradient groundwater, characterized by moderate boron and chloride, with potassium concentrations higher than both upgradient and downgradient groundwater.

Based on the data summarized above and the chemical fingerprints of the groundwater at issue, the BAP 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

Regional groundwater flow regimes through fractured bedrock upgradient of the BAP 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 feet per year and 31 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 BAP monitoring program.

The discharge of brines 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). At the site, upward gradients between bedrock and alluvial wells near the Ohio River have been observed, and locations with the strongest observed upward gradients generally have high hydraulic conductivities, which supports the conclusion that bedrock and alluvial aquifers are hydraulically connected on-site. Additionally, the influence of pumping conditions further contributes to upward vertical gradients, as described in previous sections. Total dissolved solids concentrations observed in bedrock wells around the BAP 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, therefore, and lead to the conclusion that regional brines are discharging under the BAP and mixing with alluvial groundwater underneath the BAP.

7.2 KYGER CREEK NORTH FLY ASH POND

The Kyger Creek NFAP was constructed in 1955 on a native soil base and without an engineered liner system to capture and contain leachate. The unit was used to manage fly ash until it was drained and closed from 1998 to 2000. However, despite closure, ash is still present within the Kyger Creek NFAP (AEP 1994). The NFAP was not capped with a low permeability barrier at the land surface, and therefore no barrier exists to prevent infiltration of precipitation, subsequent migration of water through highly leachable CCR materials in the subsurface and resulting recharge of sulfate and boron-impacted water to the alluvial aquifer. Approximately 900,000 cubic yards of boiler slag and boiler slag fines were also used as surface fill and as material to build berms. Both materials yielded low pH samples during leachability testing (OEPA 1996).

Groundwater in the alluvial aquifer flows from the Kyger Creek NFAP in a northeasterly direction toward the BAP. Given the six decades that this unit has contained fly ash and the alluvial aquifer groundwater velocity estimates of 130 to 200 feet per year, ample time has passed for groundwater to migrate from the Kyger Creek NFAP beneath the BAP. The following evidence therefore supports that the Kyger Creek NFAP is the alternate source of boron, sulfate, and low pH:

- The low concentration of boron in water from the BAP compared to the higher concentrations of boron in groundwater beneath the BAP (Section 4 and Section 6).
- Analytical results from groundwater samples collected for the Kyger Creek NFAP and SFAP suggest boron and sulfate are present in Kyger Creek groundwater and groundwater has an acidic pH. Given the similarity in construction and types of CCR managed, it is reasonable to interpret Kyger Creek SFAP groundwater results for boron are also representative of Kyger Creek NFAP groundwater quality (Section 4).
- TCLP data indicates that material placed in the Kyger Creek NFAP leaches high sulfate and low pH, while bottom ash from the BAP leaches low sulfate, low boron, and near-neutral pH.
- The chemical fingerprinting evidence suggests groundwater from Kyger Creek mixes with upgradient groundwater from west of the BAP, groundwater discharging from the bedrock, and water from the Ohio River water under the eastern portion of the BAP (Section 6).
- The OEPA has concluded that groundwater appears to be impacted by a release (i.e., elevated conductivity, sulfate, TDS, and low pH) from the Kyger Creek NFAP (Appendix A and Appendix B).

A comparison of the materials managed in the BAP provides evidence that the BAP is not the source of boron and that the Kyger Creek NFAP is a more likely source of boron. The Kyger Creek NFAP has contained fly ash since 1955, while the BAP has been used primarily for the management of bottom ash since 1974. Bottom ash and fly ash have different physical and chemical properties; laboratory investigations have demonstrated elements (including Appendix III constituents) have a much greater potential to leach from fly ash compared to bottom ash (Cox et al. 1978; Jones et al. 2012). The higher concentrations of boron observed in Kyger Creek SFAP groundwater compared to the lower concentration of boron observed in groundwater downgradient of the BAP are consistent with the known leaching properties of fly ash and bottom ash. Boron, therefore, is more likely to leach from the Kyger Creek SFAP/NFAP than the BAP based on the historical use of each unit. These observations support the conclusion that the Kyger Creek NFAP, and not the BAP, is the source of boron in groundwater under the BAP. Thus, the data supporting these conclusions are historically consistent with hydrogeologic conditions and findings of the BAP monitoring program.

8. CONCLUSIONS

The SSIs identified in this ASD Report are based on results from downgradient BAP monitoring well samples collected in September and October 2023. Review of data for quality assurance and statistical comparison was completed on December 5, 2023. In response to the SSIs, this ASD Report was prepared within the required 90-day period in accordance with 40 CFR § 257.94(e)(2).

SSIs in the downgradient BAP monitoring wells have been determined to result from alternate sources based on analysis of the gathered data: discharge of regional brine present in bedrock and the Kyger Creek Power Plant NFAP. Table 8-1 summarizes the six lines of evidence for each of the SSIs.

In conclusion, the BAP is not the source of the SSIs associated with the second semiannual sampling event groundwater results for 2023. Thus, Gavin will continue detection monitoring at the BAP in accordance with 40 CFR § 257.94(e)(2).

TABLE 8-1: BAP 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 BAP	Data Are Historically Consistent with Hydrogeologic Conditions
Boron	BAC-02 BAC-03 BAC-04 BAC-05	Kyger Creek NFAP	X	X	X	X	X
Calcium	BAC-02	Regional Brine	X	X	X	X	X
Chloride	BAC-02 BAC-03 BAC-04 BAC-05	Regional Brine	X	X	X	X	X
Fluoride	BAC-02	Regional Brine	X	X	X	X	X
pH	BAC-03 BAC-04 BAC-05	Kyger Creek NFAP	X	X	X	X	X
Sulfate	BAC-02 BAC-03 BAC-04 BAC-05	Kyger Creek NFAP	X	X	X	X	X
TDS	BAC-02 BAC-05	Regional Brine	X	X	X	X	X

Notes: BAP = Bottom Ash Pond; NFAP = North Fly Ash Pond; SSI = statistically significant increase; TDS = total dissolved solids; USEPA = United States Environmental Protection Agency.

PROFESSIONAL ENGINEER CERTIFICATION

I hereby certify that I, or an agent under my review, have prepared this Alternate Source Demonstration Report for the Bottom Ash Pond 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: 1/31/24

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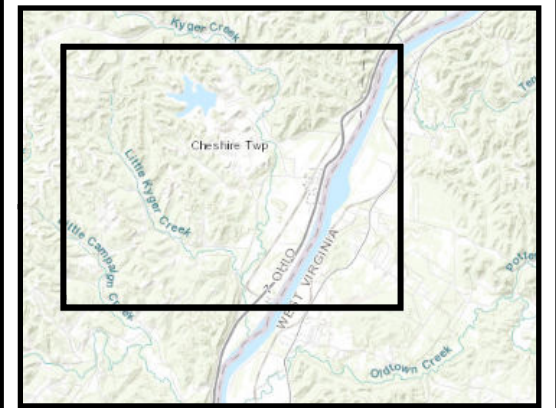
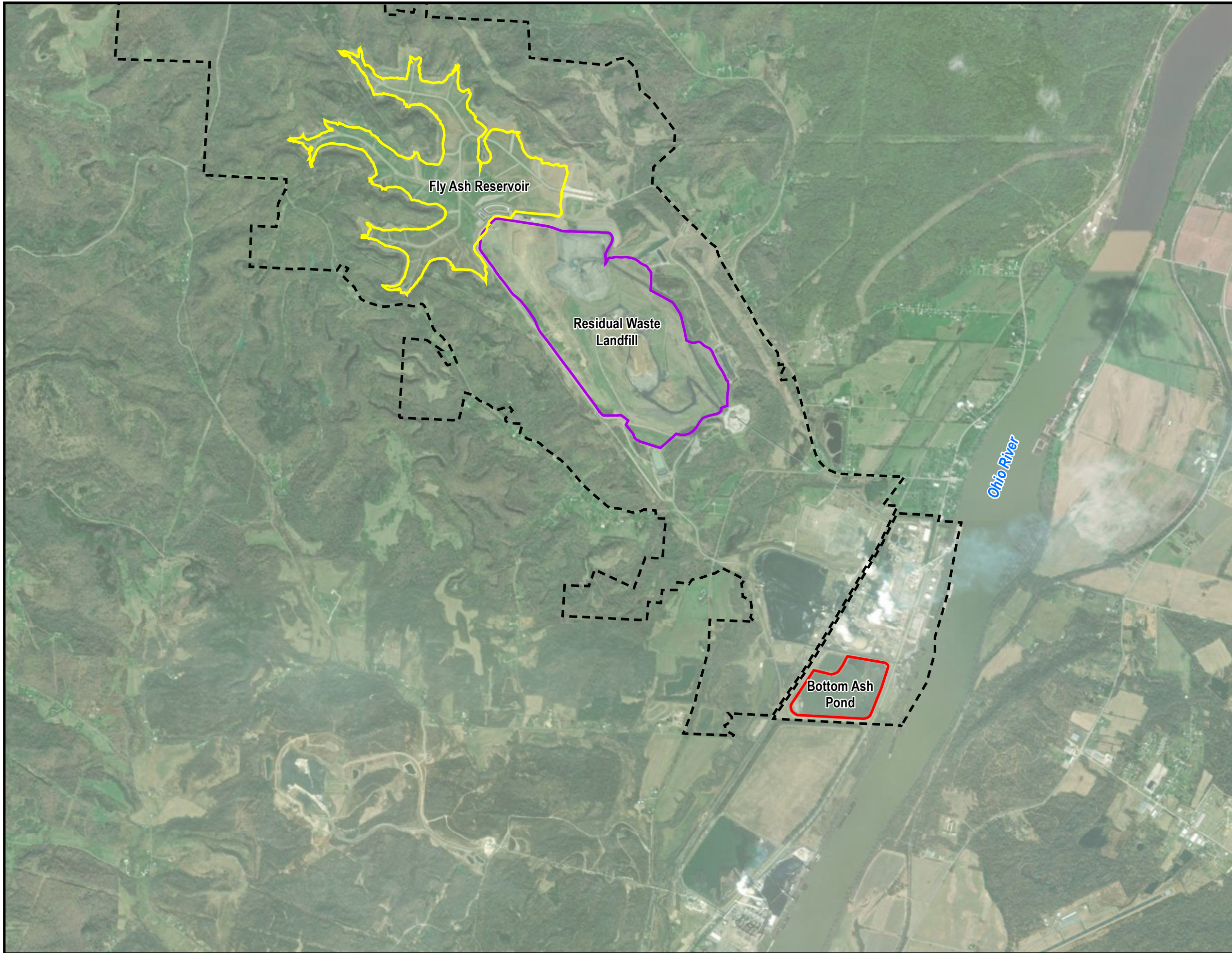
FIGURES



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



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- Legend**
- FlyAshReservoir
 - ResidWasteLandfill
 - Bottom Ash Pond
 - Property Boundary

NOTES:
 1. Aerial Imagery: ESRI World Imagery
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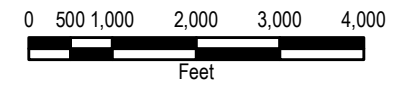
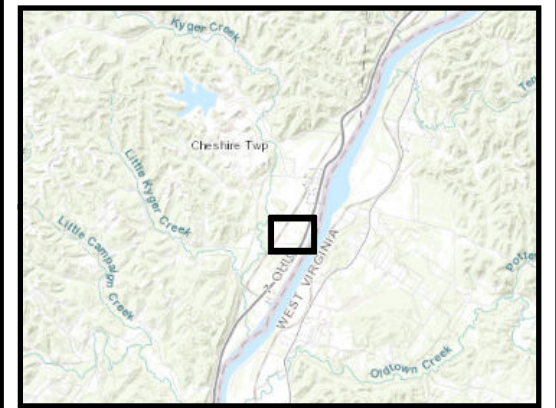


Figure 1-2: Bottom Ash Pond Location
 Gavin Generating Station
 Cheshire, Ohio



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Legend

- 2022 Monitoring Well (Not in Federal Program)
- Federal Upgradient Monitoring Well
- Federal Downgradient Monitoring Well
- Water Supply Well
- Piezometer
- BAC** Alluvium Well
- BAC Silt and Clay/Alluvium Well
- BAC Silt and Clay Well
- BAC Bedrock Well
- Approximate location of Bottom Ash Pond boundary
- Gavin Property Boundary

NOTES:

1. Aerial Imagery: ESRI World Imagery
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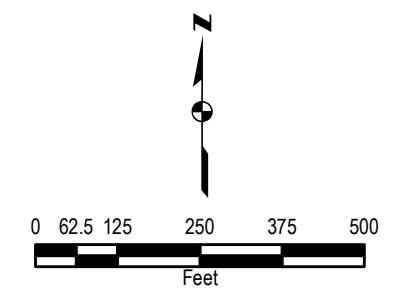
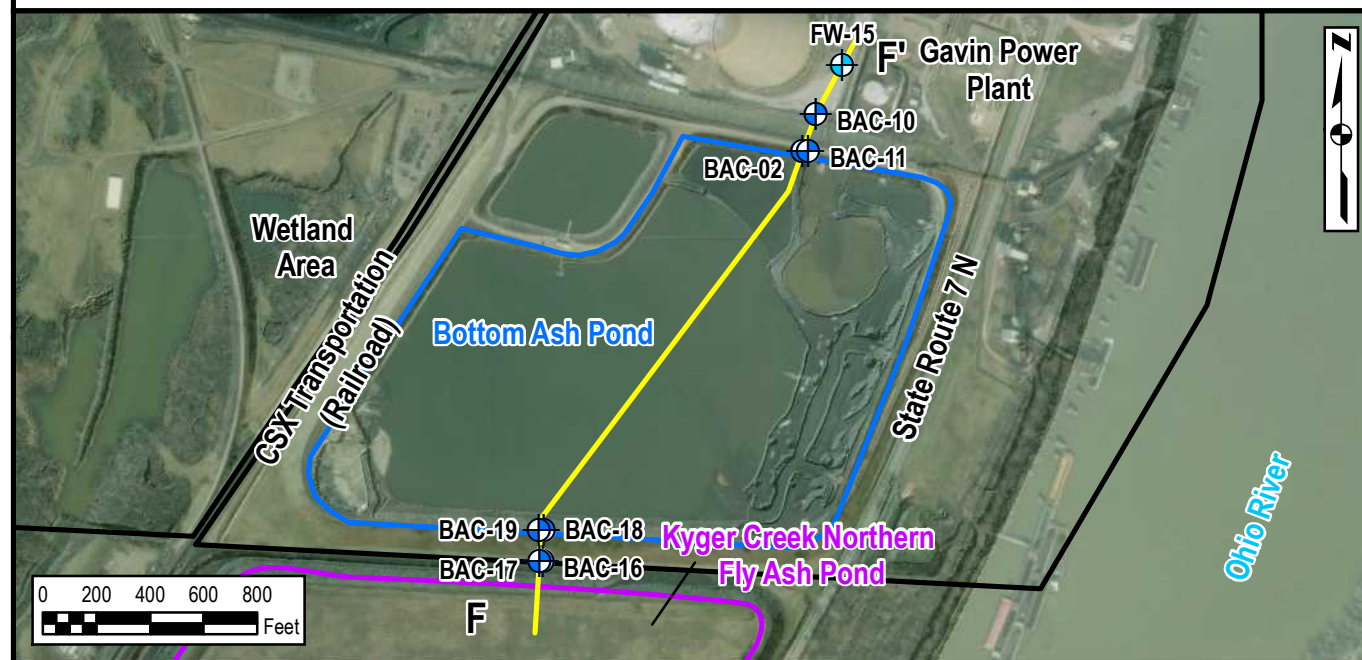
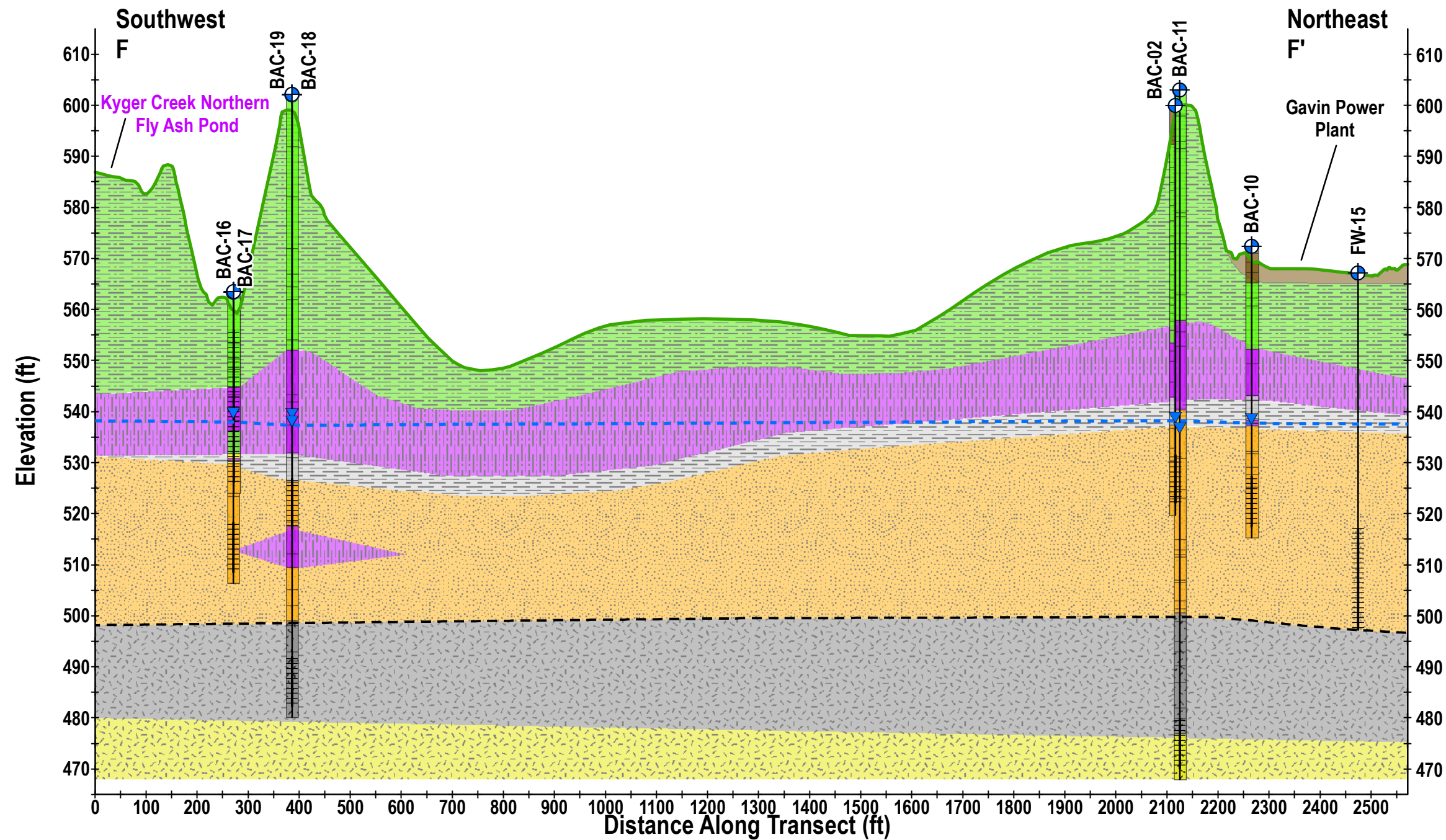


Figure 1-3: Bottom Ash Pond Monitoring Well Network
 Gavin Generating Station
 Cheshire, Ohio



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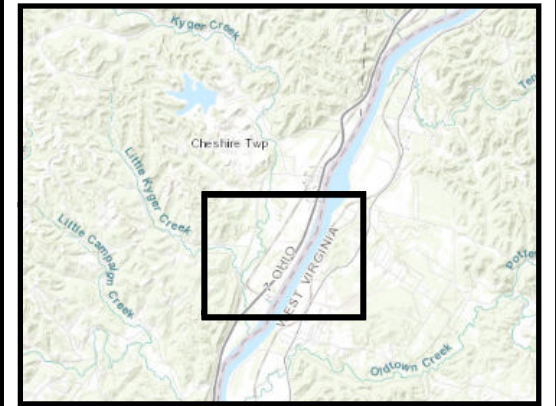
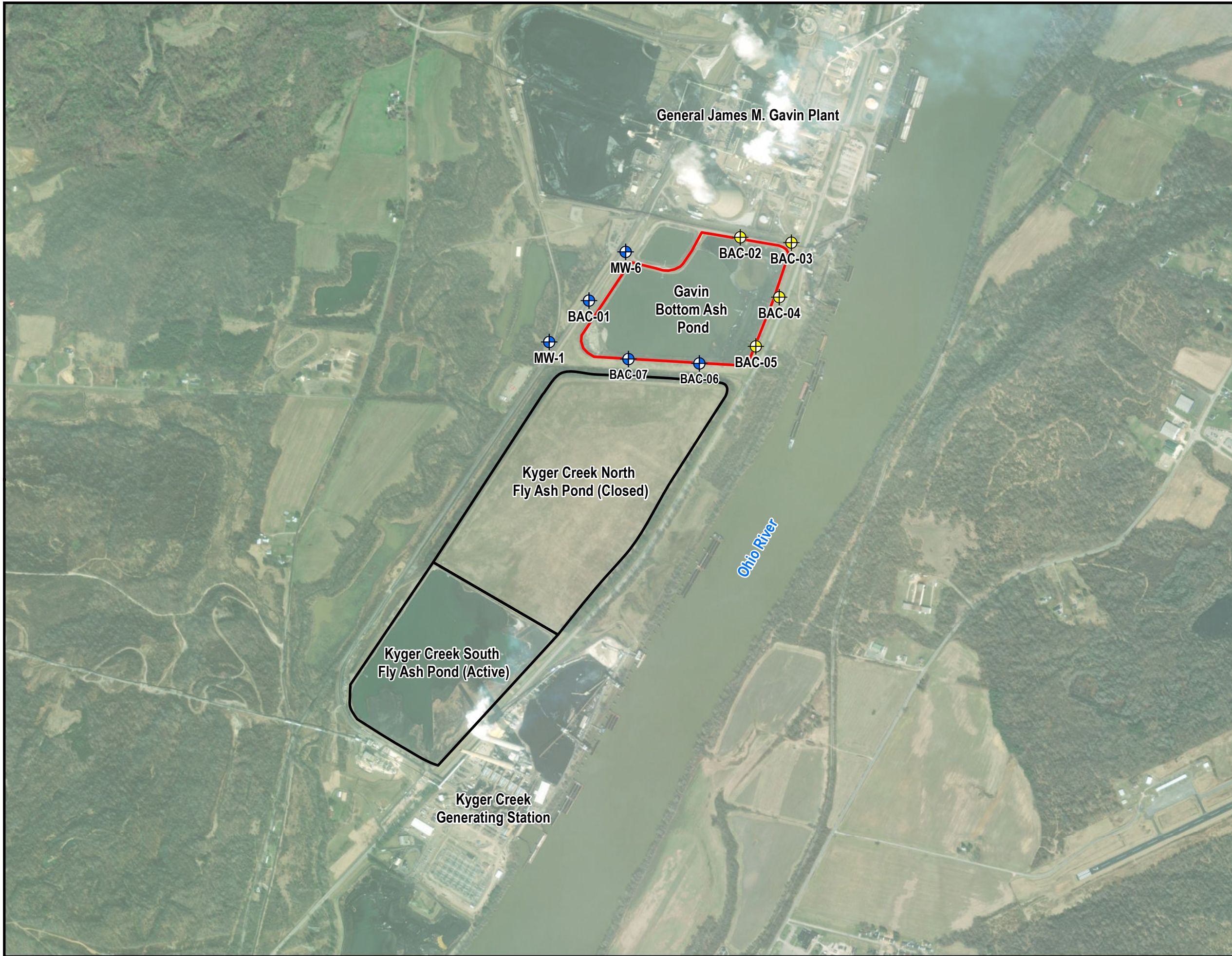
- Water Supply Well
- Monitoring Well
- Potentiometric Elevation (September 2023)
- Potentiometric Surface
- Surface Profile
- Approximate Bedrock Surface
- Total Depth
- Well Screen
- Transect
- Site Boundary
- Bottom Ash Pond Boundary
- Kyger Creek Northern Fly Ash Pond

- Generalized Lithology**
- Road Material
 - Clay and Silt
 - Sandy Clay and Silt
 - Sand and Clay
 - Sand and Gravel
 - Sand
 - Claystone/Siltstone
 - Sandstone
- Separation Layer: Clay and Silt, Sandy Clay and Silt
- Alluvial Aquifer: Sand and Gravel, Sand
- Bedrock Units: Claystone/Siltstone, Sandstone





Figure 1-4: Bottom Ash Pond Cross Section

Gavin Power, LLC
Cheshire, Ohio

- NOTE:**
1. Potentiometric elevations from September 2023.
 2. Surface profile from OGRIP LiDAR 2020.
 3. Elevation is exaggerated 10X.
 4. Boring surface elevations, ground surface elevations and estimated bedrock surface are projected along transect line.
 5. The geology is generalized based on the lithology descriptions.
 6. The bottom elevation profile of the bottom ash pond is from Integrated Solutions, Inc CPT borings conducted between 3/18/2020 to 5/28/20.



Legend

-  Federal Upgradient Monitoring Well
-  Federal Downgradient Monitoring Well
-  Gavin Bottom Ash Pond
-  Kyger Creek Fly Ash Ponds

NOTES:

1. Kyger Creek features are from AEP. 1994. Hydrogeologic Site Investigation Plan for the Proposed North Fly Ash Pond Closure, Kyger Creek Station, Ohio Valley Electric Corporation, Gallia County, Ohio.
2. Aerial Imagery: ESRI World Imagery
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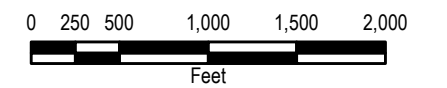
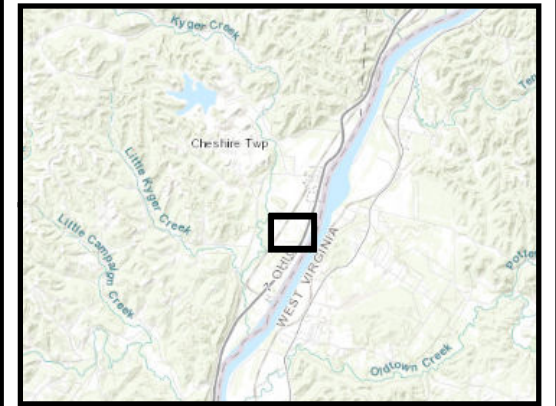
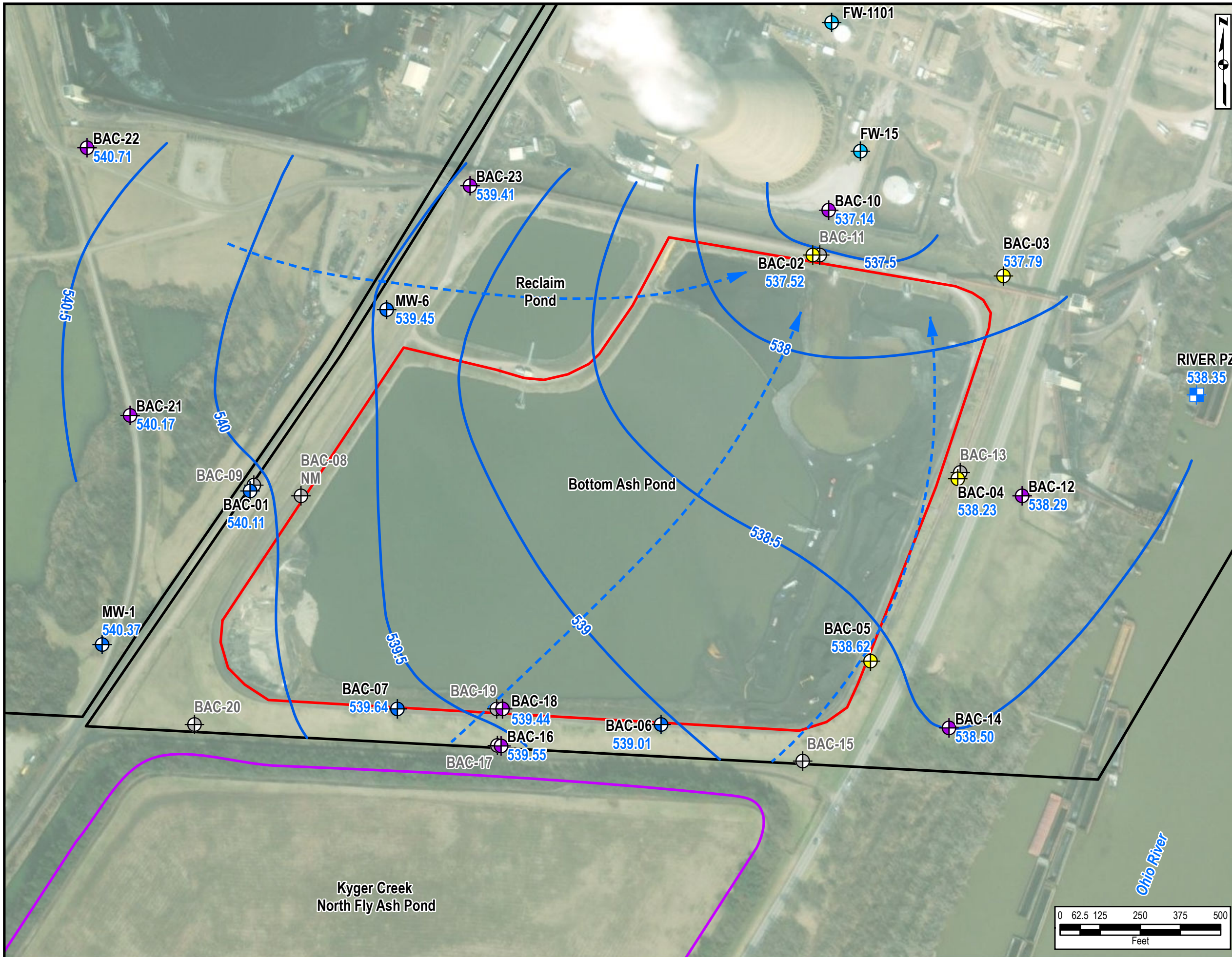


Figure 2-1: Kyger Creek Generating Station Location
Gavin Generating Station
Cheshire, Ohio





Legend

- New 2022 Monitoring Well
- Federal Upgradient Monitoring Well
- Federal Downgradient Monitoring Well
- River Stilling Well Location
- Bedrock or Silt/Clay Well (excluded from contouring)
- Water Supply Well
- 539.85** Groundwater Elevation (ft)
- Interpreted Groundwater Elevation Contours
- Interpreted Groundwater Flow Direction
- Approximate Location of Bottom Ash Pond Boundary
- Gavin Property Boundary
- Approximate Location of Kyger Creek North Fly Ash Pond Boundary

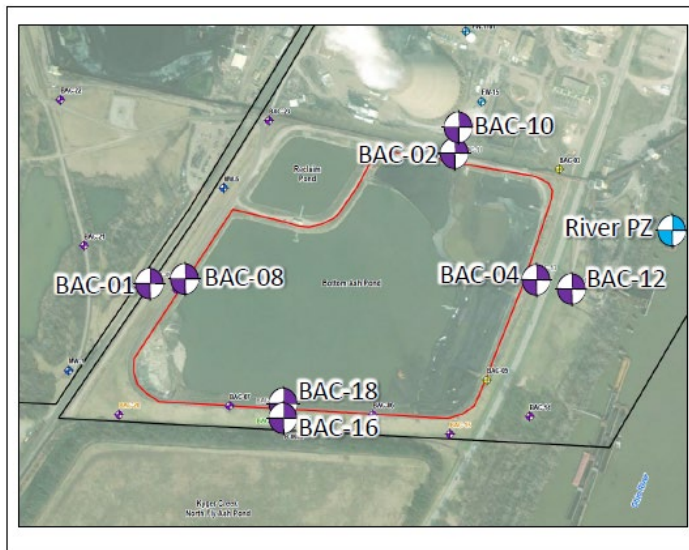
NOTES:

1. Monitoring wells were gauged on 11 September 2023.
2. Ohio River elevation obtained from pressure transducer that was collecting data at this time. Value is the average for the day.
3. Flow lines indicate a general groundwater flow direction within alluvium beneath the Bottom Ash Pond. They do not represent all potential flow paths within the alluvium, nor do they represent preferential flow paths or convergence of flow.
4. Water supply wells FW-15 and FW-1101 were operating during the gauging event. Average pumping rate for FW-15 was 650 gal/min and FW-1101 was 550 gal/min.
5. BAC-08 not able to be measured because water level in well is below the pump.
6. Aerial Imagery: ESRI World Imagery Reproduced under license in ArcGIS 10.8

Figure 3-1: Interpreted Groundwater Potentiometric Contour Map
 Fall 2023 - Pumping Conditions
 Gavin Generating Station
 Cheshire, Ohio

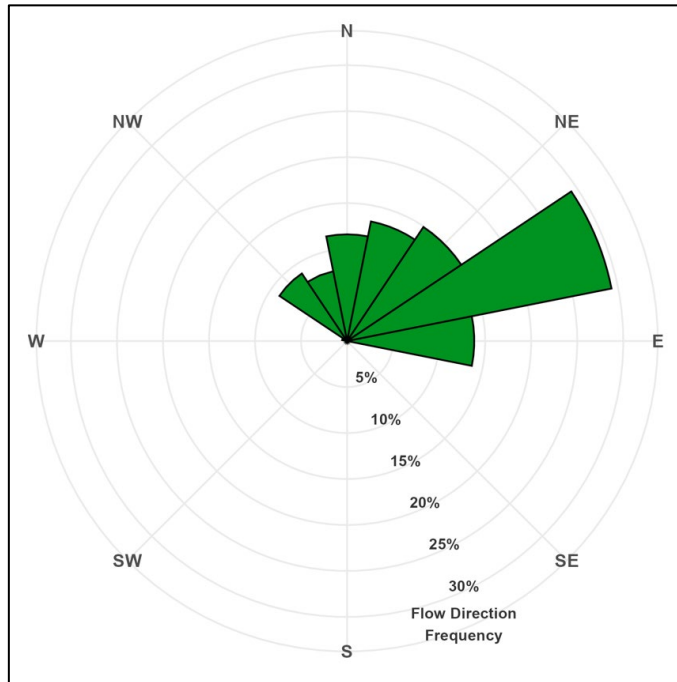


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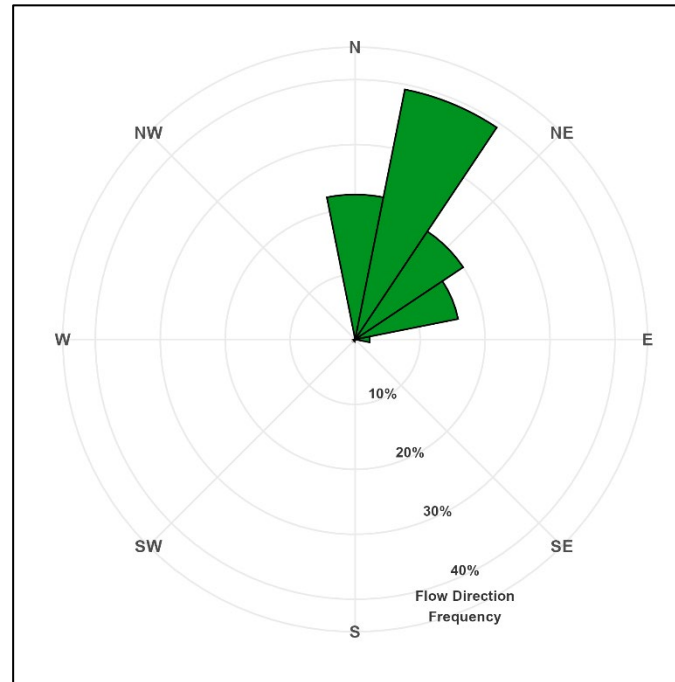


Legend

- Groundwater Monitoring Locations
- Surface Water Monitoring Locations
- Frequency of Vector Flow Direction (% Days)



1 January to 30 June 2023

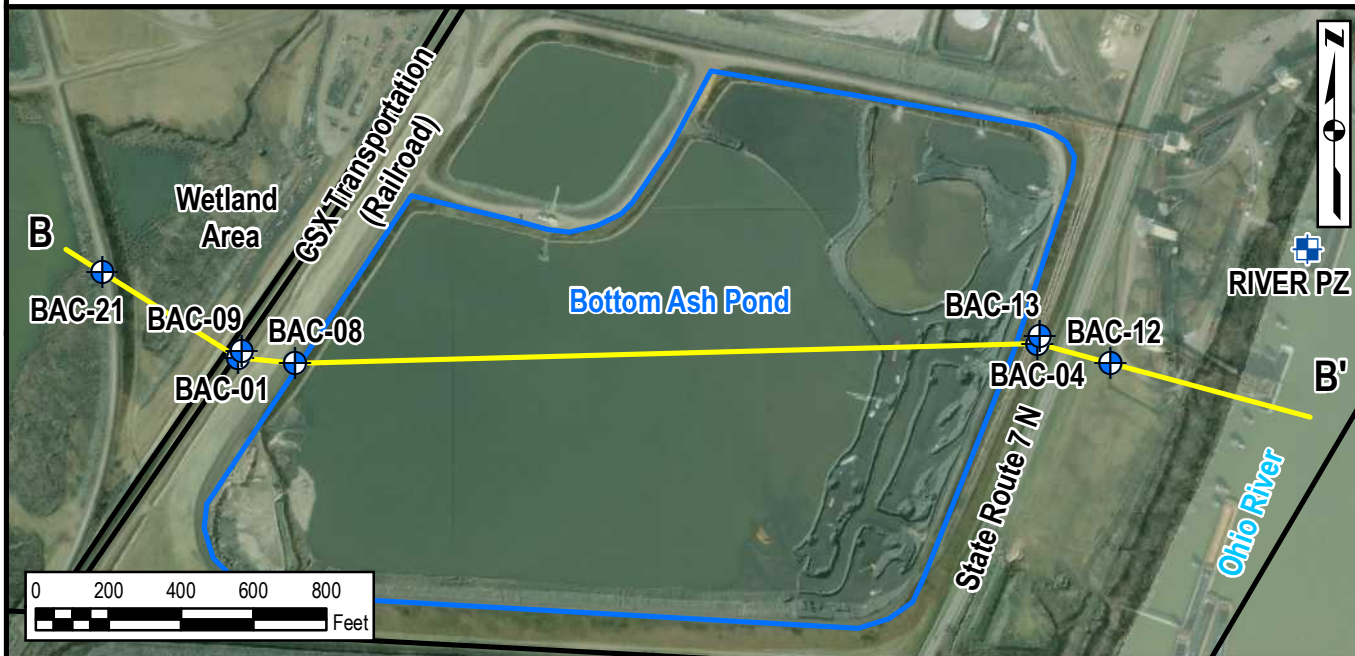
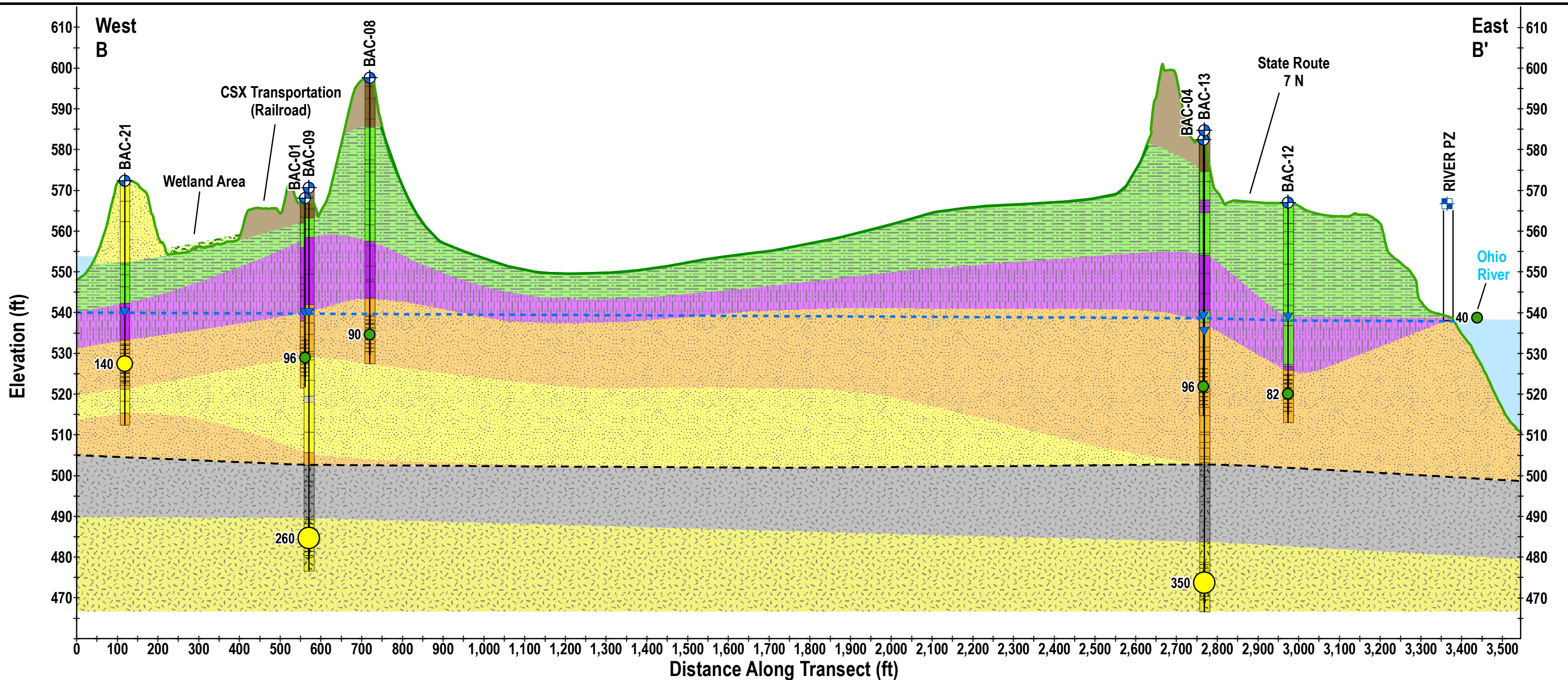


1 July to 7 November 2023

Notes:

- 1) Groundwater flow vector diagrams calculated using an R Studio Shiny application.
- 2) The approach was adapted from the EPA On-line Hydraulic Gradient Magnitude and Direction tool.
- 3) Transducer data were collected from 1 January through 7 November 2023.

Figure 3-2: Interpreted 2023 Groundwater Flow Directions



- Legend**
- Monitoring Well
 - Piezometer
 - Potentiometric Elevation (September 2023)
 - Potentiometric Surface
 - Surface Profile
 - Approximate Bedrock Surface
 - Total Depth
 - Well Screen
 - Transect
 - Site Boundary

- Bottom Ash Pond Boundary**
- Wetland Area
- Calcium Concentrations in Groundwater (mg/L)**
- <129
 - 129 - 200
 - 200 - 500
 - 500 - 1,000
 - >1,000

- Generalized Lithology**
- Road Material
 - Clay and Silt
 - Sandy Clay and Silt
 - Sand and Clay
 - Sand and Gravel
 - Sand
 - Claystone/Siltstone
 - Sandstone
- Separation Layer
- Alluvial Aquifer
- Bedrock Units

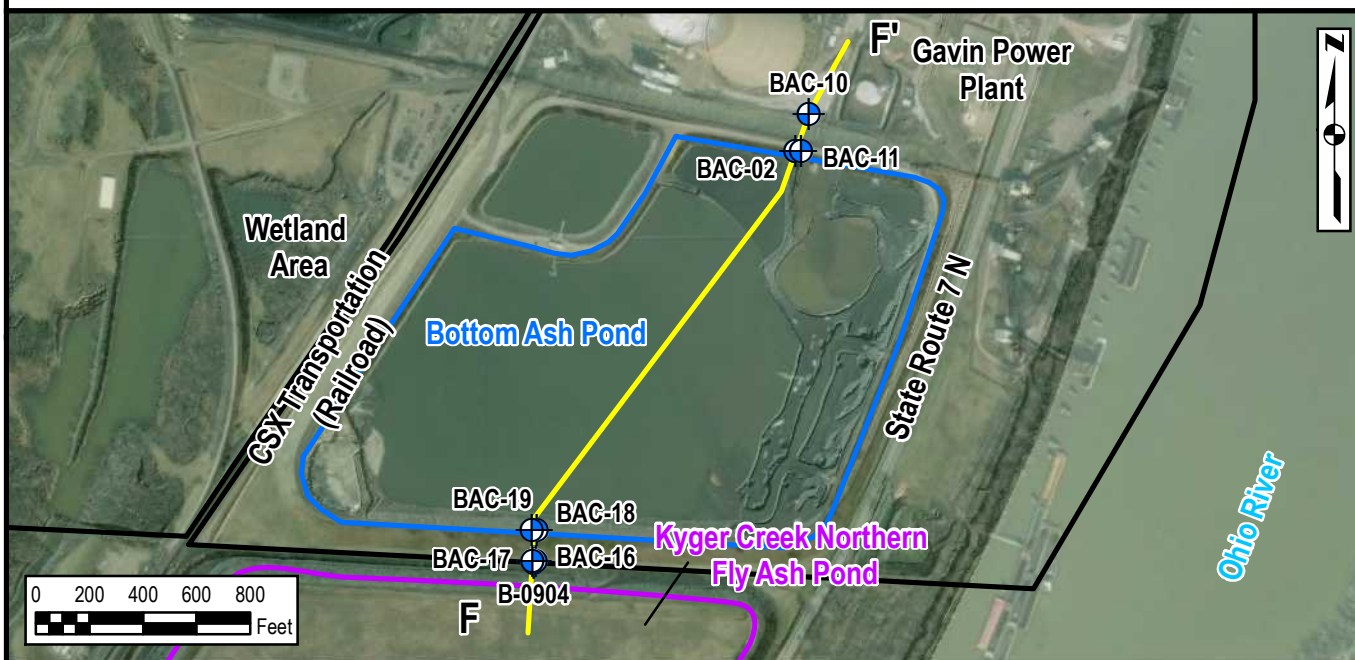
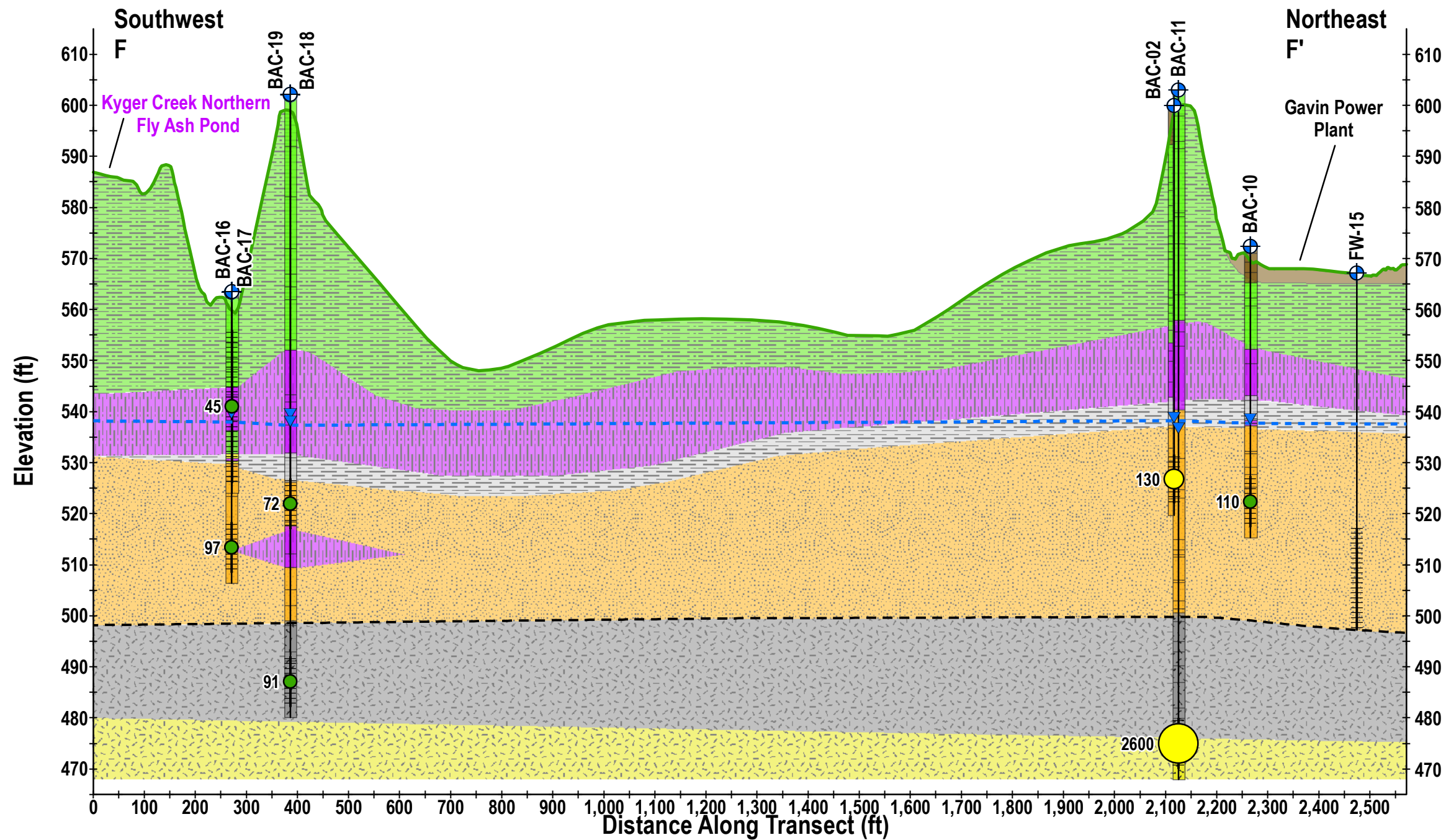
Figure 4-1a: Calcium Concentrations - Cross Section View 1
Gavin Power, LLC
Cheshire, Ohio

NOTE:

- Potentiometric elevations from September 2023.
- Groundwater data is from H2 2023 and Ohio River data is from 11/16/23.
- Surface profile from OGRIP LIDAR 2020.
- Elevation is exaggerated 10X.
- Boring surface elevations, ground surface elevations and estimated bedrock surface are projected along transect line.
- The geology is generalized based on the lithology descriptions.
- The bottom elevation profile of the bottom ash pond is from Integrated Solutions, Inc CPT borings conducted between 3/18/2020 to 5/28/20.

ERM

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Legend

- Monitoring Well
- Potentiometric Elevation (September 2023)
- Potentiometric Surface
- Surface Profile
- Approximate Bedrock Surface
- Total Depth
- Well Screen
- Transect
- Site Boundary

Bottom Ash Pond Boundary

Kyger Creek Northern Fly Ash Pond

Generalized Lithology

- Road Material
- Clay and Silt
- Sandy Clay and Silt
- Sand and Clay
- Sand and Gravel
- Sand
- Claystone/Siltstone
- Sandstone

Calcium Concentrations in Groundwater (mg/L)

- <129
- 129 - 200
- 200 - 500
- 500 - 1,000
- >1,000

Separation Layer

Alluvial Aquifer

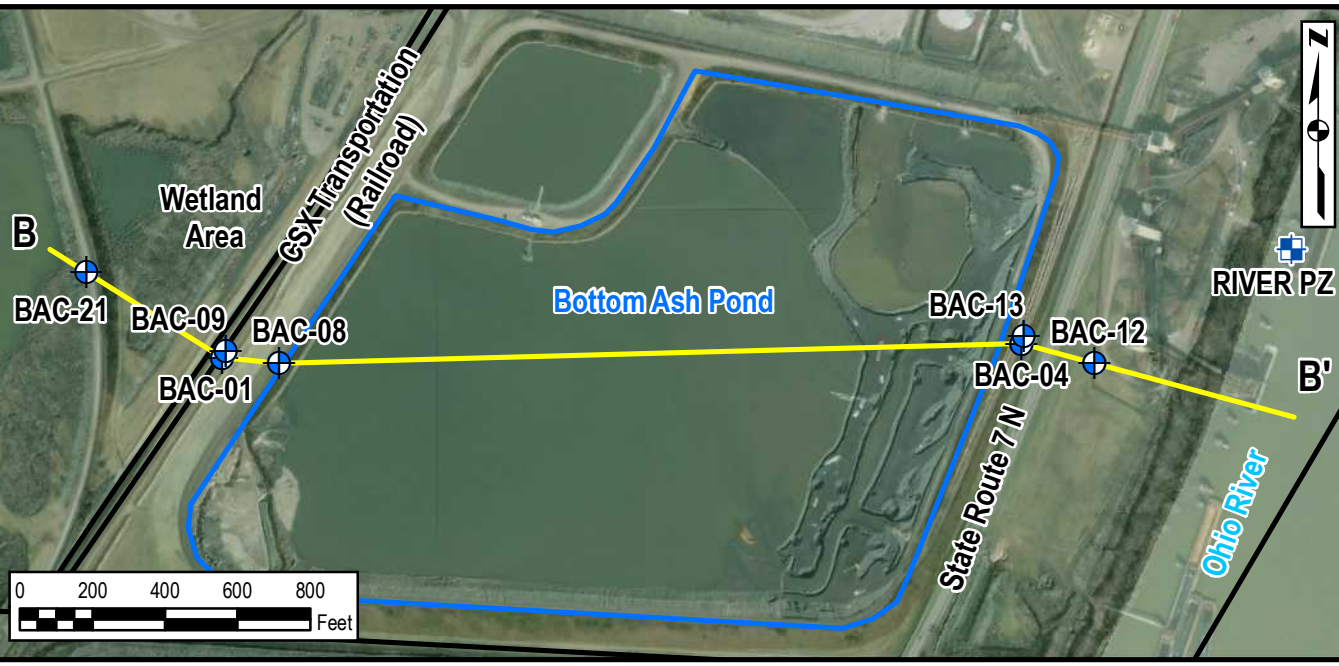
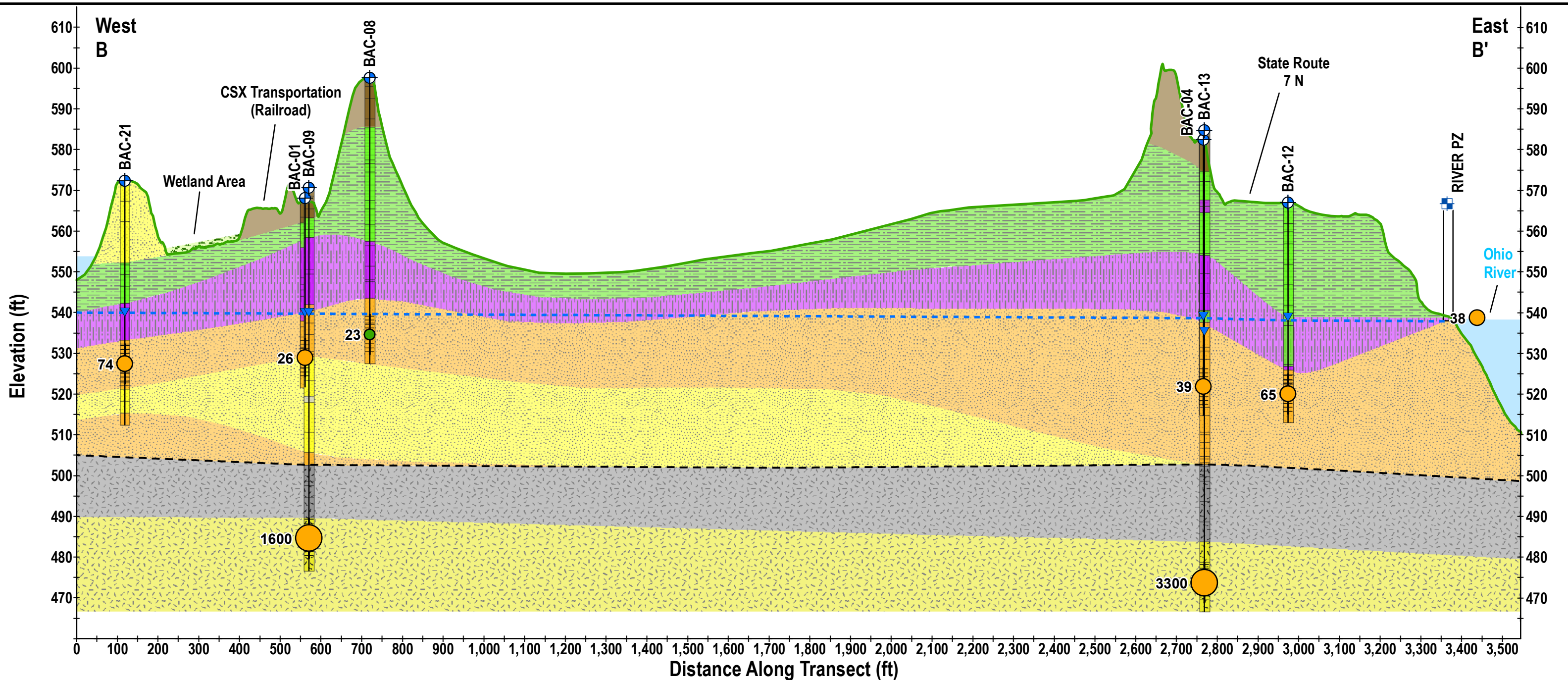
Bedrock Units

Figure 4-1b: Calcium Concentrations - Cross Section View 2
Gavin Power, LLC
Cheshire, Ohio

NOTE:

1. Potentiometric elevations from September 2023.
2. Groundwater data is from H2 2023 and Ohio River data is from 11/16/23.
3. Surface profile from OGRIP LiDAR 2020.
4. Elevation is exaggerated 10X.
5. Boring surface elevations, ground surface elevations and estimated bedrock surface are projected along transect line.
6. The geology is generalized based on the lithology descriptions.
7. The bottom elevation profile of the bottom ash pond is from Integrated Solutions, Inc CPT borings conducted between 3/18/2020 to 5/28/20.

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- Legend**
- Monitoring Well
 - Piezometer
 - Potentiometric Elevation (September 2023)
 - Potentiometric Surface
 - Surface Profile
 - Approximate Bedrock Surface
 - Total Depth
 - Well Screen
 - Transect
 - Site Boundary

- Bottom Ash Pond Boundary**
- Wetland Area
- Chloride Concentrations in Groundwater (mg/L)**
- <24.7
 - 24.7 - 100
 - 100 - 1,000
 - 1,000 - 10,000
 - >10,000

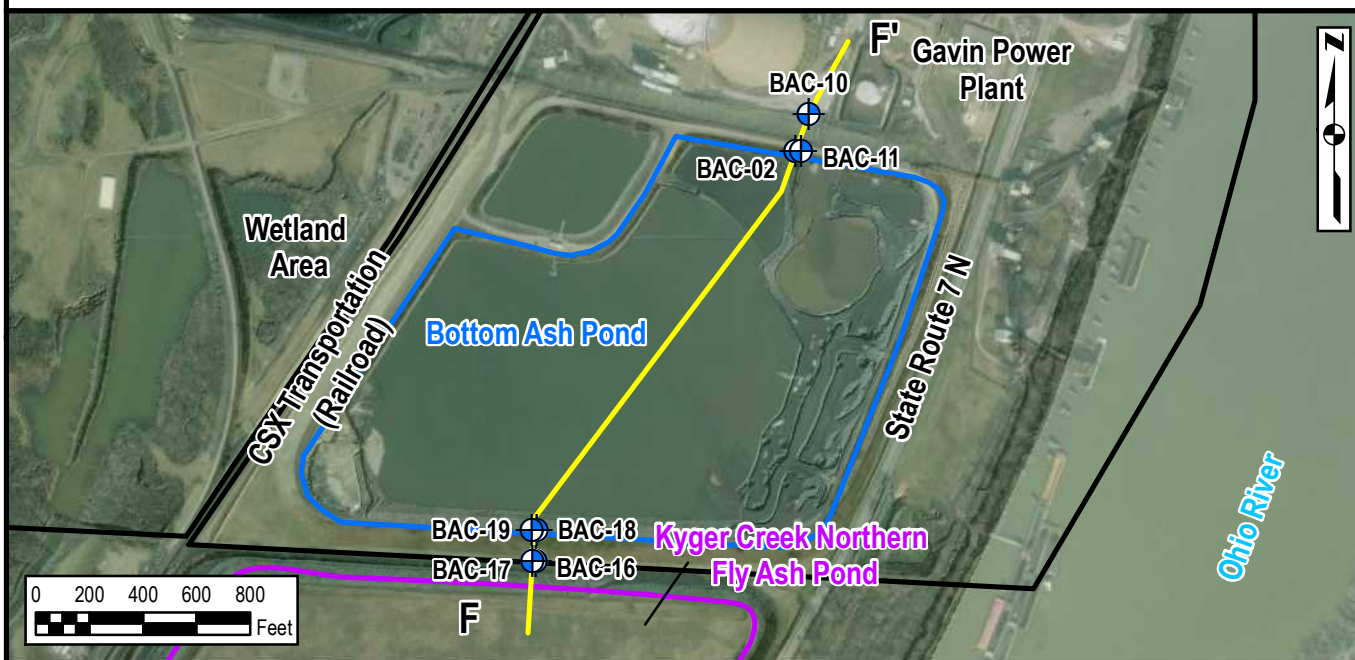
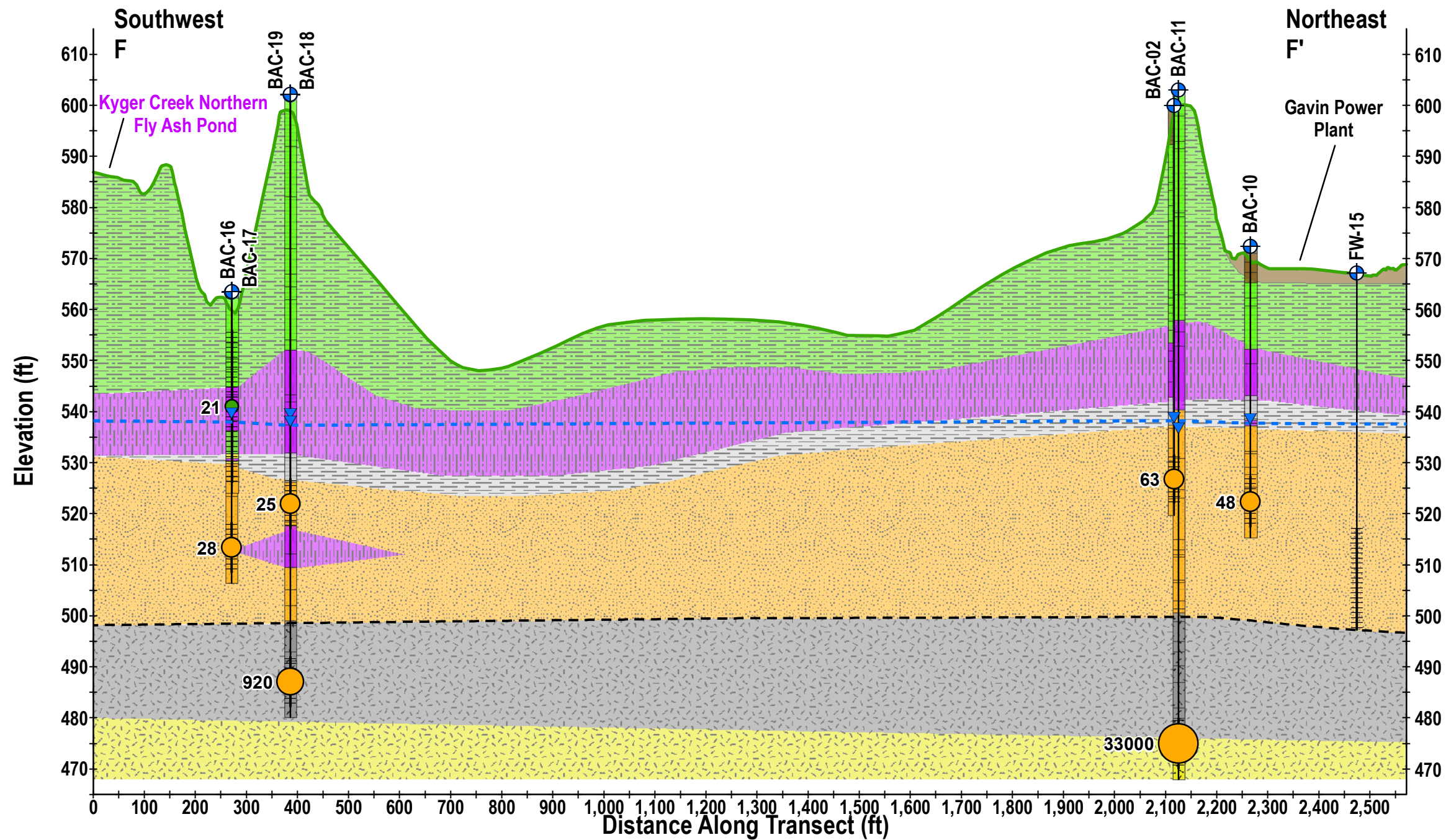
- Generalized Lithology**
- Road Material
 - Clay and Silt
 - Sandy Clay and Silt
 - Sand and Clay
 - Sand and Gravel
 - Sand
 - Claystone/Siltstone
 - Sandstone
- Separation Layer**
- Alluvial Aquifer**
- Bedrock Units**

Figure 4-2a: Chloride Concentrations - Cross Section View 1
Gavin Power, LLC
Cheshire, Ohio

NOTE:

1. Potentiometric elevations from September 2023.
2. Groundwater data is from H2 2023 and Ohio River data is from 11/16/23.
3. Surface profile from OGRIP LiDAR 2020.
4. Elevation is exaggerated 10X.
5. Boring surface elevations, ground surface elevations and estimated bedrock surface are projected along transect line.
6. The geology is generalized based on the lithology descriptions.
7. The bottom elevation profile of the bottom ash pond is from Integrated Solutions, Inc CPT borings conducted between 3/18/20 to 5/28/20.

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- Legend**
- Monitoring Well
 - Potentiometric Elevation (September 2023)
 - Potentiometric Surface
 - Surface Profile
 - Approximate Bedrock Surface
 - Total Depth
 - Well Screen
 - Transect
 - Site Boundary

- Bottom Ash Pond Boundary
- Kyger Creek Northern Fly Ash Pond

- Chloride Concentrations in Groundwater (mg/L)**
- <24.7
 - 24.7 - 100
 - 100 - 1,000
 - 1,000 - 10,000
 - >10,000

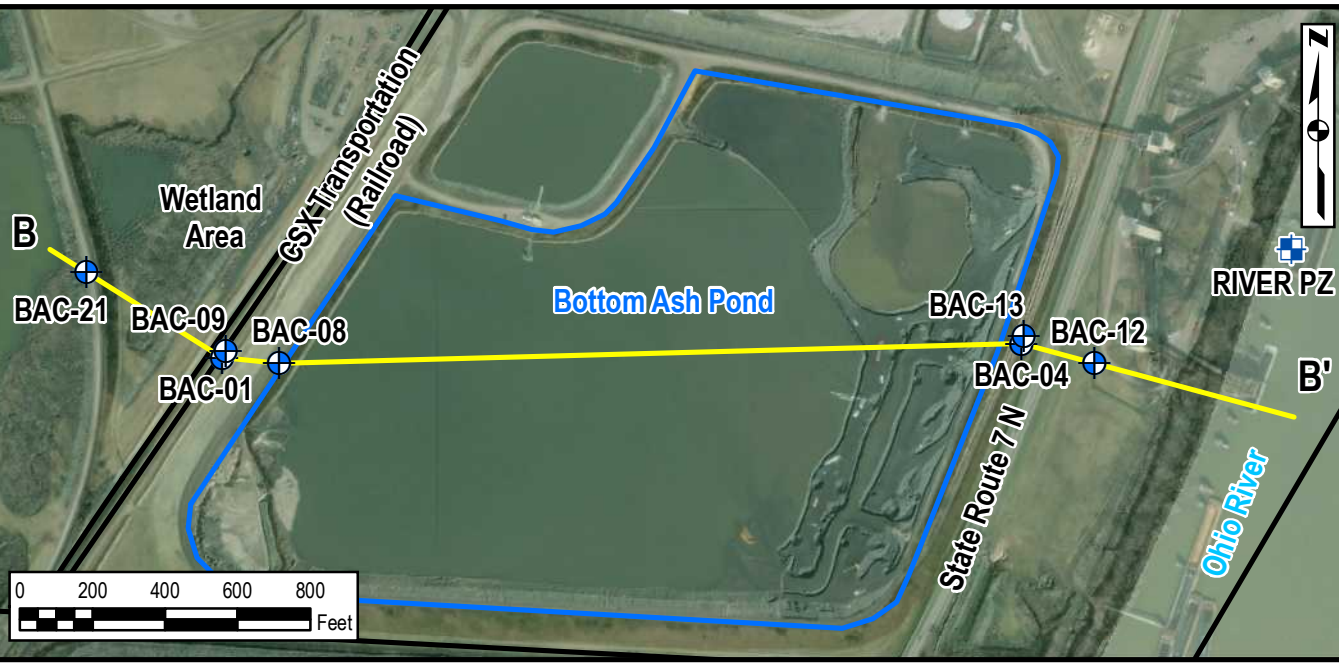
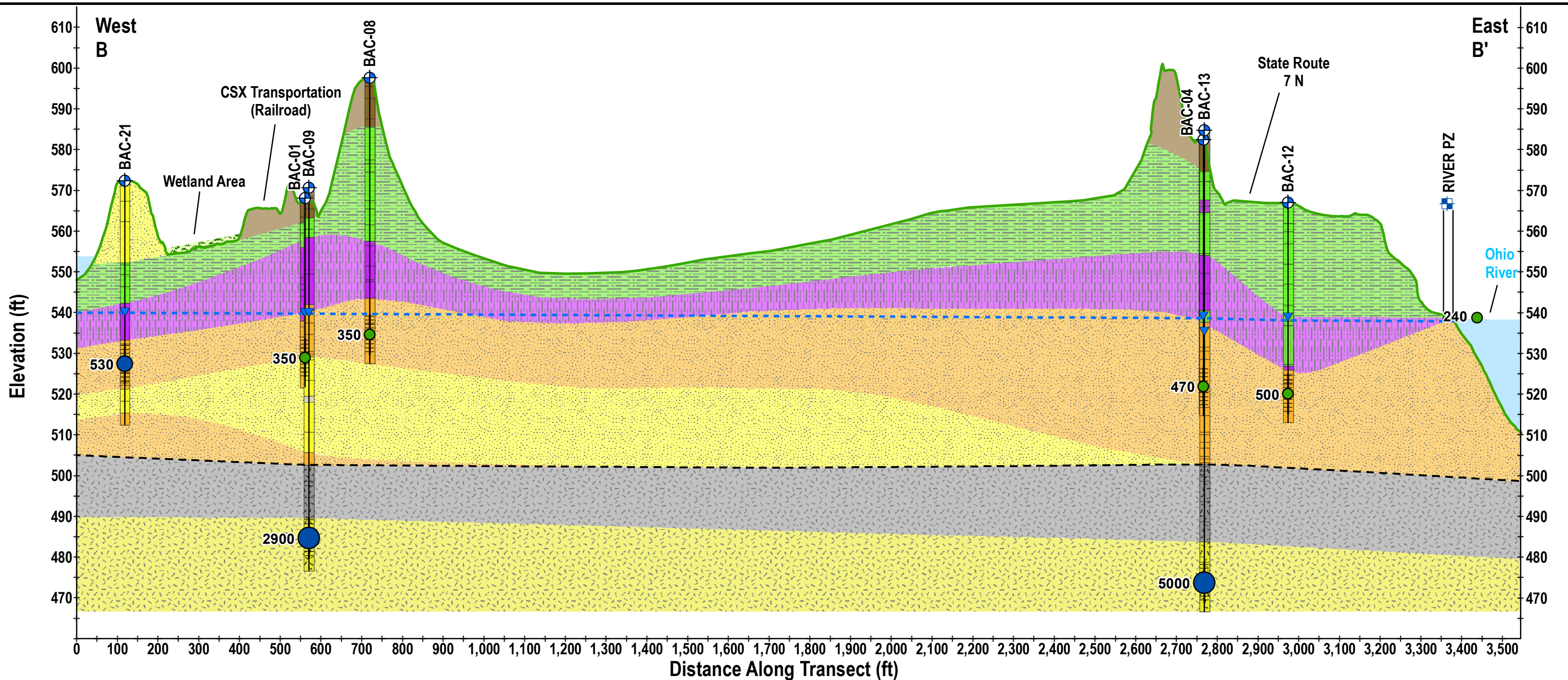
- Generalized Lithology**
- Road Material
 - Clay and Silt
 - Sandy Clay and Silt
 - Sand and Clay
 - Sand and Gravel
 - Sand
 - Claystone/Siltstone
 - Sandstone
- Separation Layer
Alluvial Aquifer
Bedrock Units

Figure 4-2b: Chloride Concentrations - Cross Section View 2 Gavin Power, LLC Cheshire, Ohio

- NOTE:**
1. Potentiometric elevations from September 2023.
 2. Groundwater data is from H2 2023 and Ohio River data is from 11/16/23.
 3. Surface profile from OGRIP LIDAR 2020.
 4. Elevation is exaggerated 10X.
 5. Boring surface elevations, ground surface elevations and estimated bedrock surface are projected along transect line.
 6. The geology is generalized based on the lithology descriptions.
 7. The bottom elevation profile of the bottom ash pond is from Integrated Solutions Inc CPT borings conducted between 3/18/20 to 5/28/20.



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Legend

- Monitoring Well
- Piezometer
- Potentiometric Elevation (September 2023)
- Potentiometric Surface
- Surface Profile
- Approximate Bedrock Surface
- Total Depth
- Well Screen
- Transect
- Site Boundary

Bottom Ash Pond Boundary

Total Dissolved Solids Concentrations in Groundwater (mg/L)

- < 505
- 505 - 1,000
- 1,000 - 10,000
- 10,000 - 20,000
- >20,000

Generalized Lithology

- Road Material
- Clay and Silt
- Sandy Clay and Silt
- Sand and Clay
- Sand and Gravel
- Sand
- Claystone/Siltstone
- Sandstone

Separation Layer

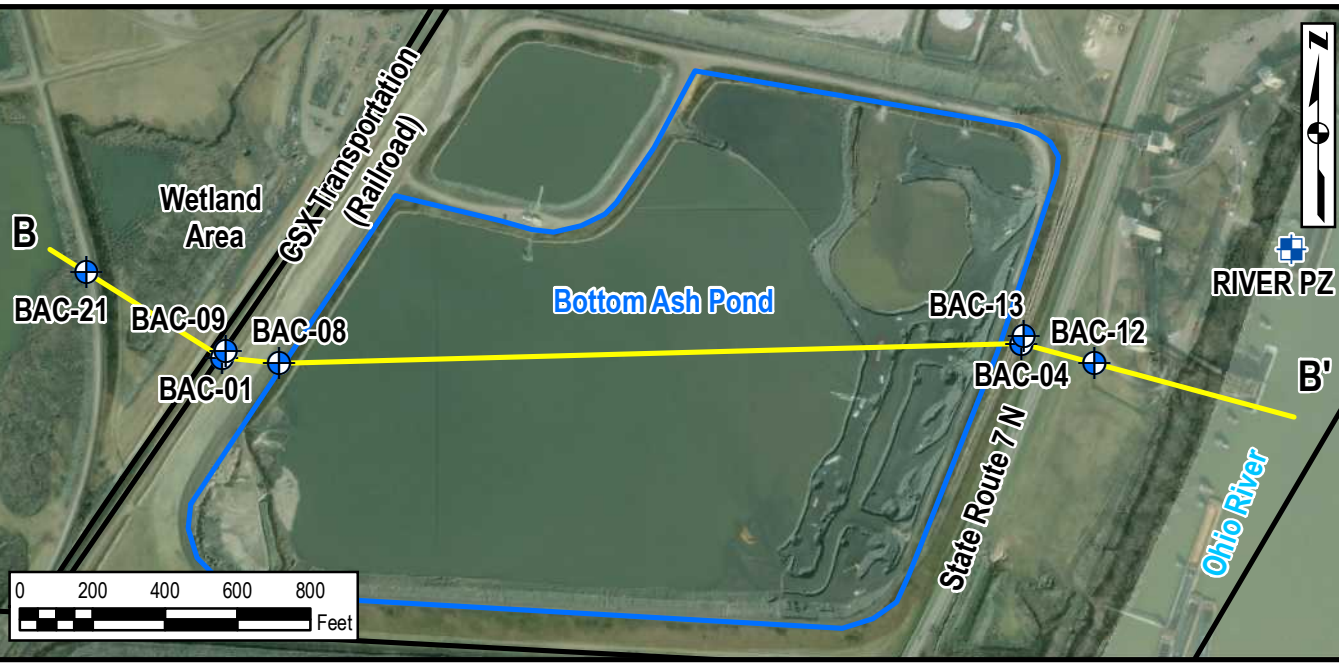
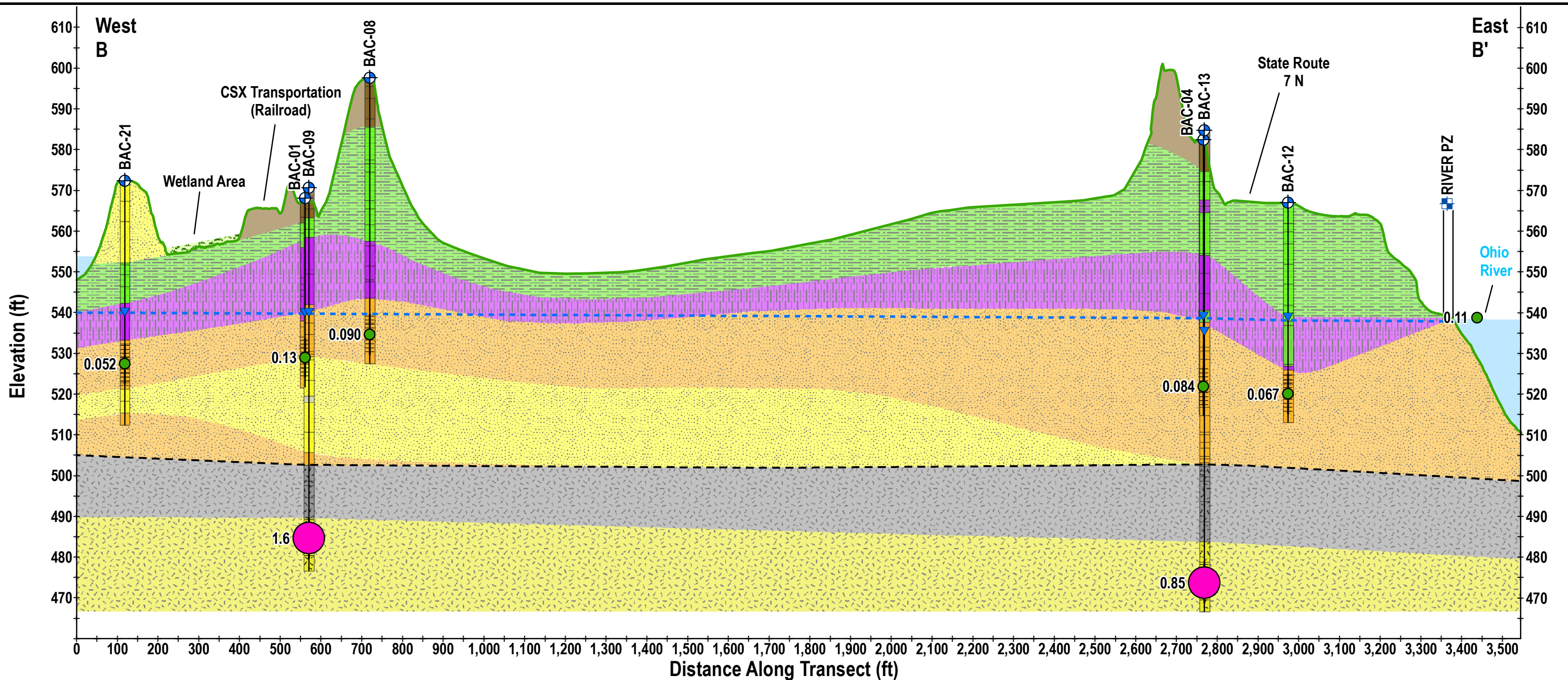
Alluvial Aquifer

Bedrock Units

Figure 4-3a: TDS Concentrations - Cross Section View 1
Gavin Power, LLC
Cheshire, Ohio

NOTE:

1. Potentiometric elevations from September 2023.
2. Groundwater data is from H2 2023 and Ohio River data is from 11/16/23.
3. Surface profile from OGRIP LiDAR 2020.
4. Elevation is exaggerated 10X.
5. Boring surface elevations, ground surface elevations and estimated bedrock surface are projected along transect line.
6. The geology is generalized based on the lithology descriptions.
7. The bottom elevation profile of the bottom ash pond is from Integrated Solutions, Inc CPT borings conducted between 3/18/20 to 5/28/20.



Legend

- Monitoring Well
- Piezometer
- Potentiometric Elevation (September 2023)
- Potentiometric Surface
- Surface Profile
- Approximate Bedrock Surface
- Total Depth
- Well Screen
- Transect
- Site Boundary

Bottom Ash Pond Boundary

Fluoride Concentrations in Groundwater (mg/L)

- <0.161
- 0.161 - 0.2
- 0.2 - 0.3
- 0.3 - 0.4
- >0.4

Generalized Lithology

- Wetland Area
- Road Material
- Clay and Silt
- Sandy Clay and Silt
- Sand and Clay
- Sand and Gravel
- Sand
- Claystone/Siltstone
- Sandstone

Separation Layer

Alluvial Aquifer

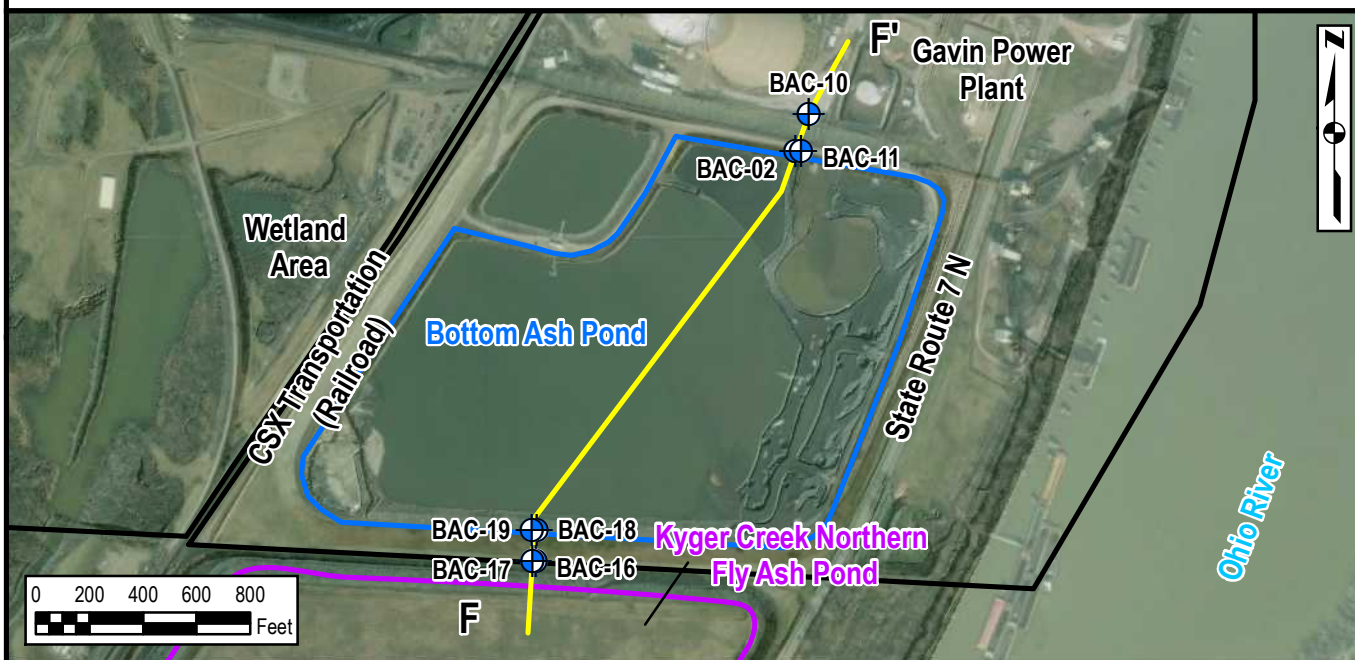
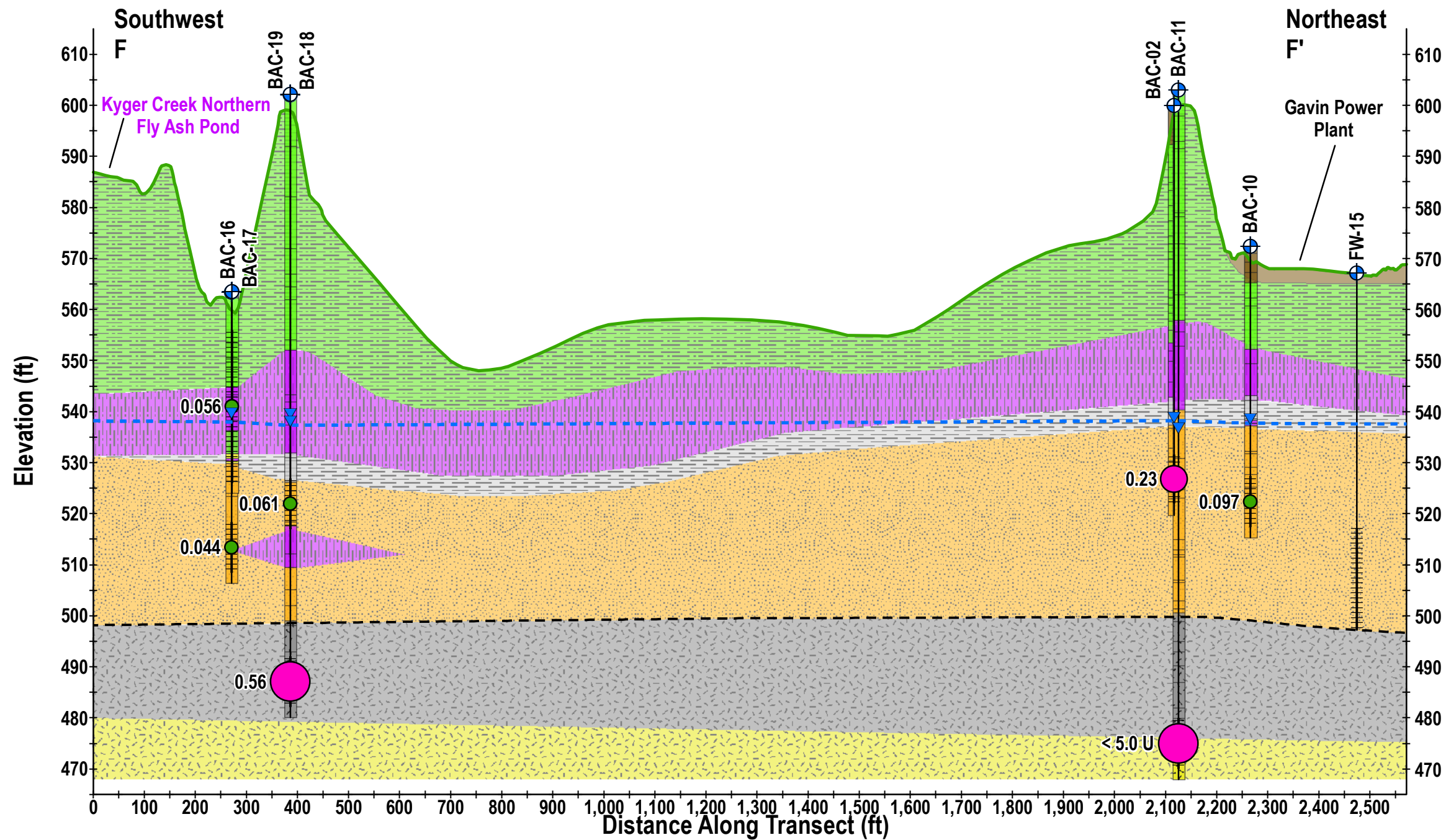
Bedrock Units

Figure 4-4a: Fluoride Concentrations - Cross Section View 1
Gavin Power, LLC
Cheshire, Ohio

NOTE:

- Potentiometric elevations from September 2023.
- Groundwater data is from H2 2023 and Ohio River data is from 11/16/23.
- Surface profile from OGRIP LiDAR 2020.
- Elevation is exaggerated 10X.
- Boring surface elevations, ground surface elevations and estimated bedrock surface are projected along transect line.
- The geology is generalized based on the lithology descriptions.
- The bottom elevation profile of the bottom ash pond is from Integrated Solutions, Inc CPT borings conducted between 3/18/2020 to 5/28/20.

ERM



Legend

- Monitoring Well
- Potentiometric Elevation (September 2023)
- Potentiometric Surface
- Surface Profile
- Approximate Bedrock Surface
- Total Depth
- Well Screen
- Transect
- Site Boundary

Bottom Ash Pond Boundary

Kyger Creek Northern Fly Ash Pond

Generalized Lithology

- Road Material
- Clay and Silt
- Sandy Clay and Silt
- Sand and Clay
- Sand and Gravel
- Sand
- Claystone/Siltstone
- Sandstone

Separation Layer

Alluvial Aquifer

Bedrock Units

Fluoride Concentrations in Groundwater (mg/L)

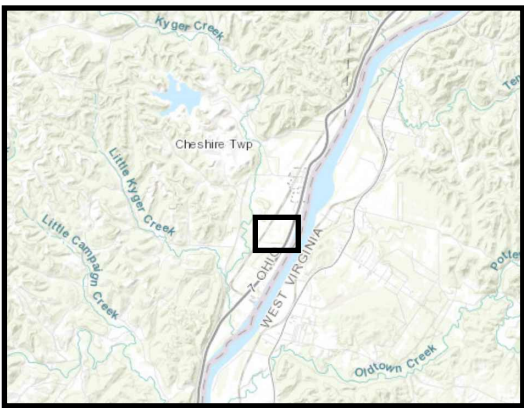
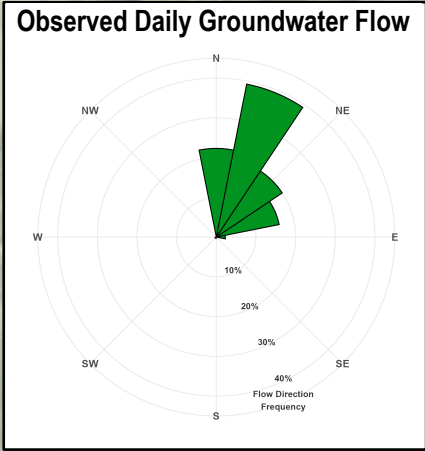
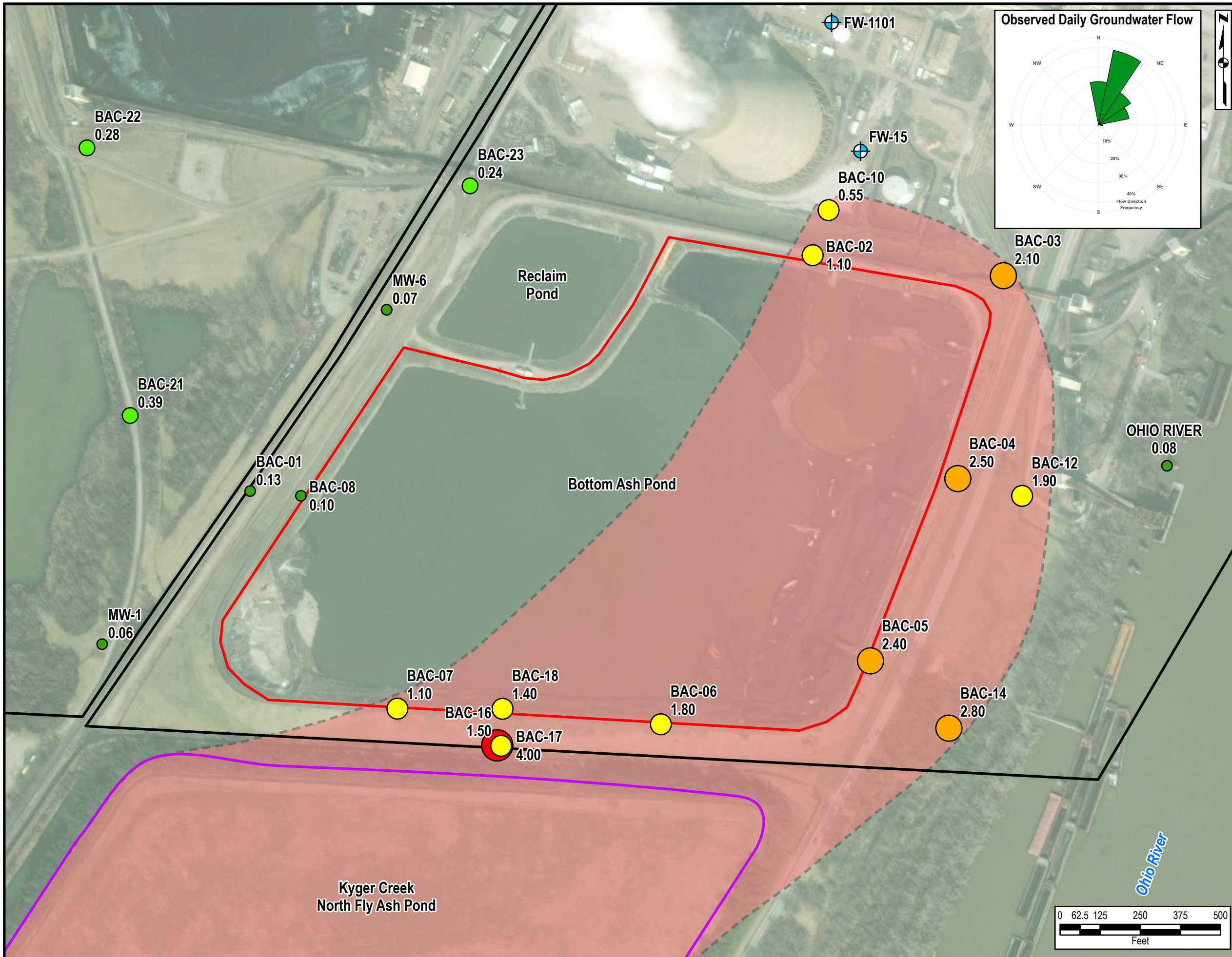
- <0.161
- 0.161 - 0.2
- 0.2 - 0.3
- 0.3 - 0.4
- >0.4

Figure 4-4b: Fluoride Concentrations - Cross Section View 2 Gavin Power, LLC Cheshire, Ohio

NOTE:

- Potentiometric elevations from September 2023.
- Groundwater data is from H2 2023 and Ohio River data is from 11/16/23.
- Surface profile from OGRIP LiDAR 2020.
- Elevation is exaggerated 10X.
- Boring surface elevations, ground surface elevations and estimated bedrock surface are projected along transect line.
- The geology is generalized based on the lithology descriptions.
- The bottom elevation profile of the bottom ash pond is from Integrated Solutions, Inc CPT borings conducted between 3/18/2020 to 5/28/20.
- BAC-11 reporting limit elevated due to sample dilution.

ERM



Legend

Boron Concentrations in Groundwater (mg/L)

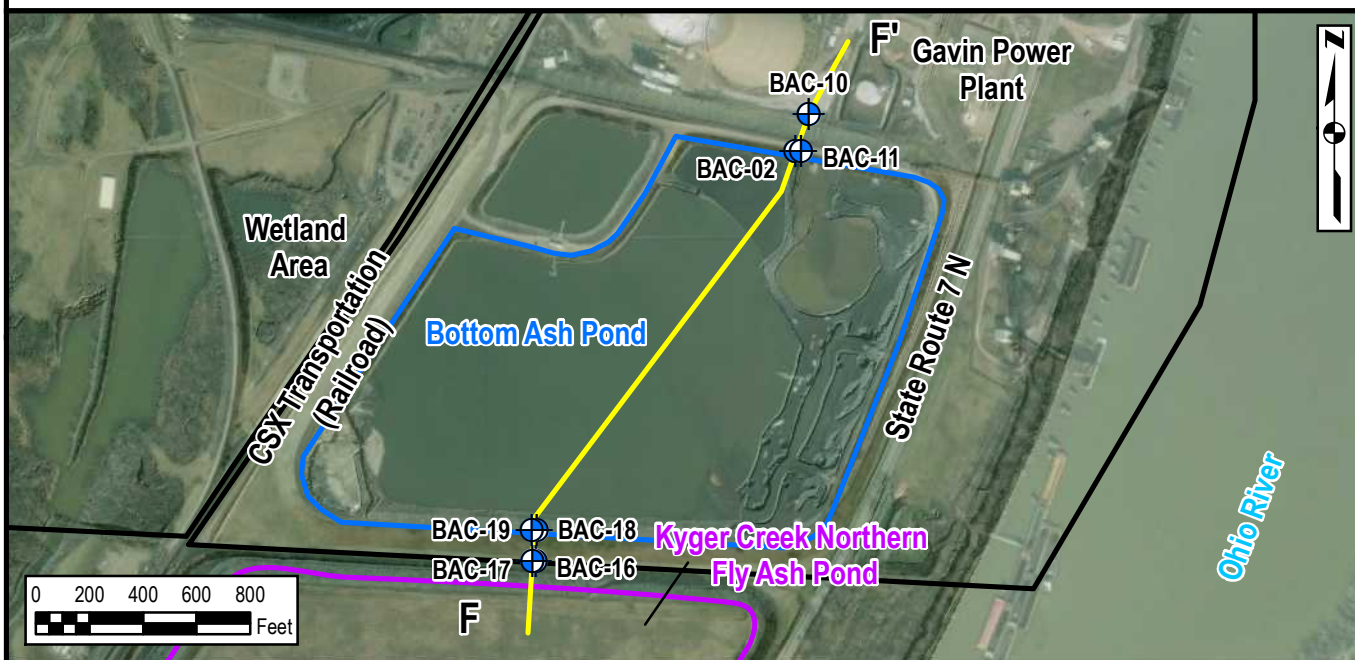
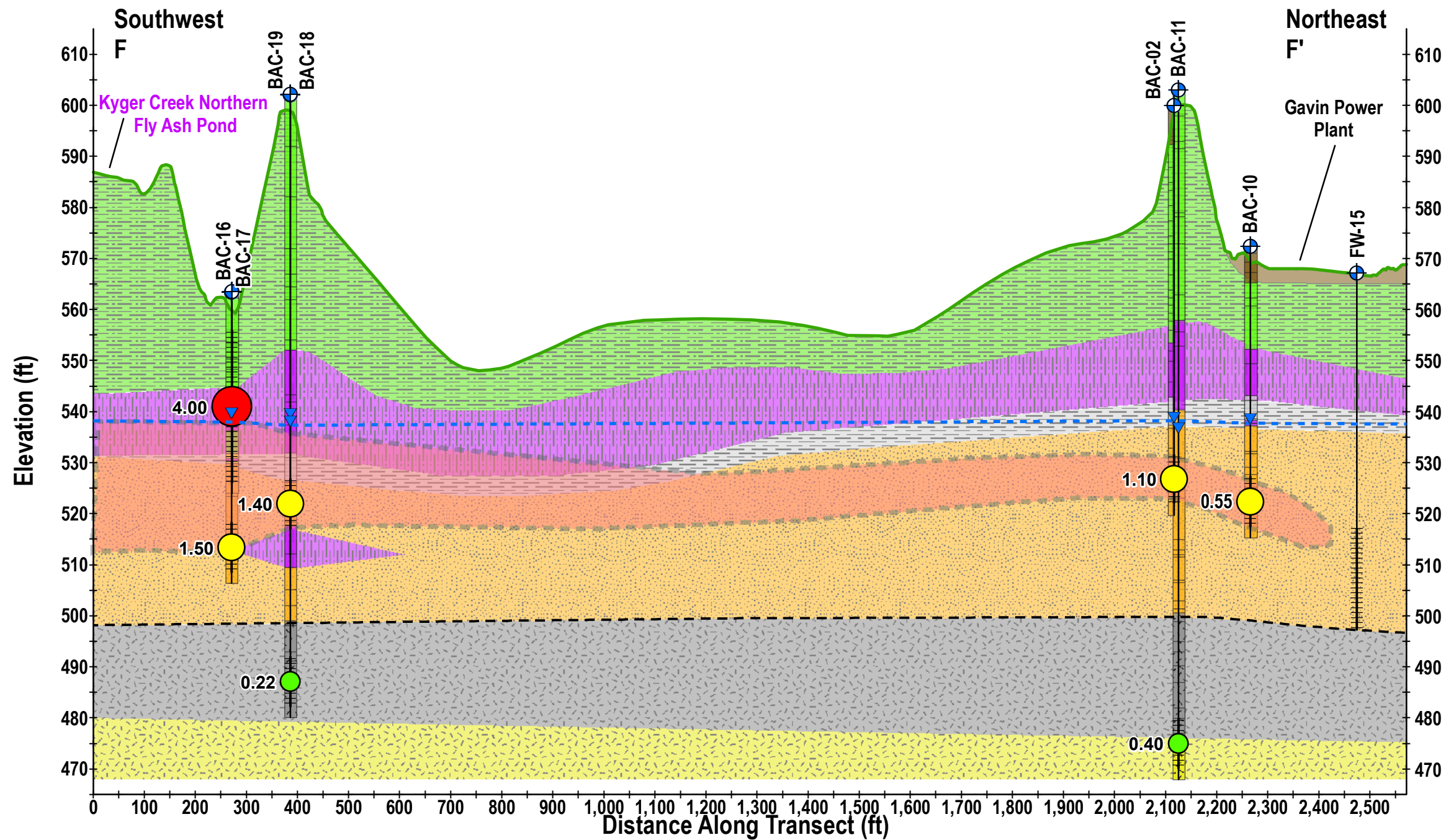
- <0.17
- 0.17 - 0.5
- 0.5 - 2
- 2 - 3
- >3

- ⊕ Water Supply Well Location
- Approximated Boron Plume
- Approximate Location of Bottom Ash Pond Boundary
- Gavin Property Boundary
- Approximate Location of Kyger Creek North Fly Ash Pond Boundary

- NOTES:**
1. mg/L = milligrams per liter
 2. Groundwater samples collected Sept-Oct 2023.
 3. Surface water data is from Nov 2023.
 4. Daily groundwater flow direction calculated based on transducer data collected from 1 July 2023 through 7 November 2023.
 5. Aerial Imagery: ESRI World Imagery
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Figure 4-5: Boron Distribution in Groundwater (Map View)
Gavin Generating Station
Cheshire, Ohio

INDUSTRIAL/POWER/HAZARDOUS WASTE/ENVIRONMENTAL INVESTIGATION/REMEDIATION/ASBESTOS/LEAD/PCB/PAH/PERF/ASD_REPORT_2023_MAPPING/GRP_ASD_REPORT_2023_MAPPING/BAC_ASD_REPORT_2023_MAPPING/10172024



- Legend**
- Monitoring Well
 - Water Supply Well
 - Potentiometric Elevation (September 2023)
 - Potentiometric Surface
 - Surface Profile
 - Approximate Bedrock Surface
 - Total Depth
 - Well Screen
 - Transect
 - Site Boundary

- Bottom Ash Pond Boundary
 - Kyger Creek Northern Fly Ash Pond
- Boron Concentration in Groundwater (mg/L)**
- < 0.177
 - 0.177 - 0.5
 - 0.5 - 2
 - 2 - 3
 - >3

- Generalized**
- Road Material
 - Clay and Silt
 - Sandy Clay and Silt
 - Sand and Clay
 - Sand and Gravel
 - Sand
 - Claystone/Siltstone
 - Sandstone
- Separation Layer
- Alluvial Aquifer
- Bedrock Units

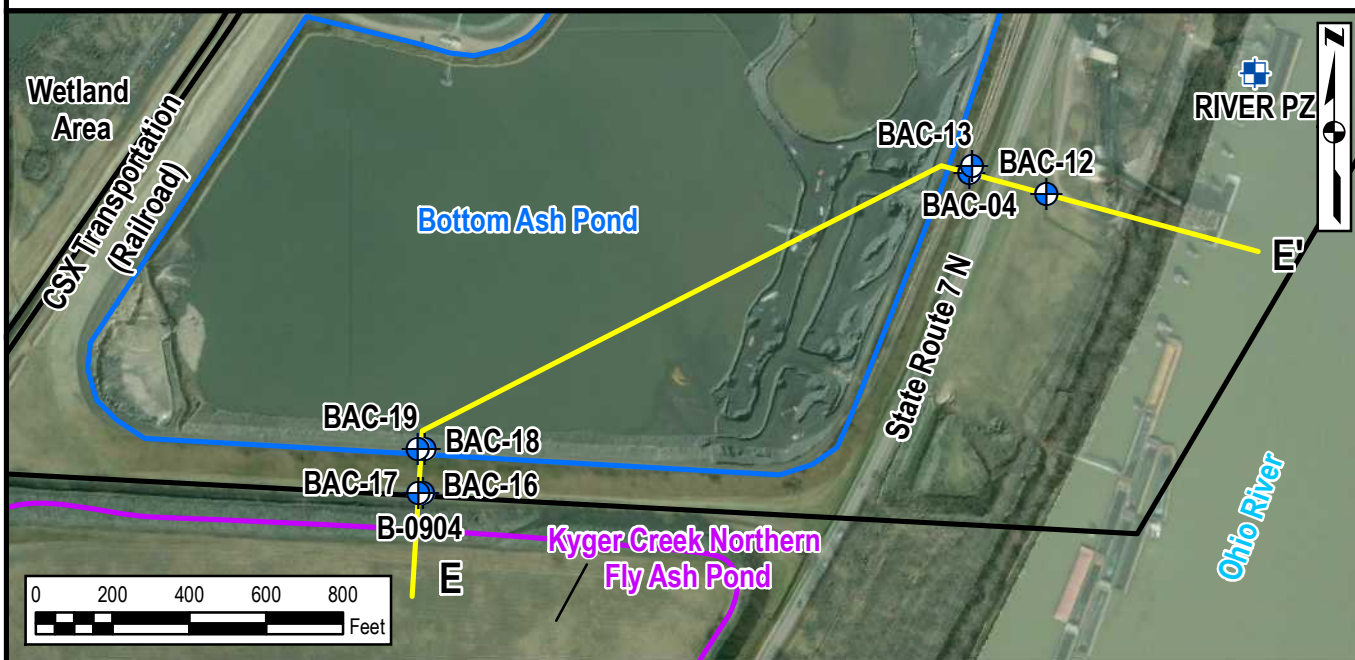
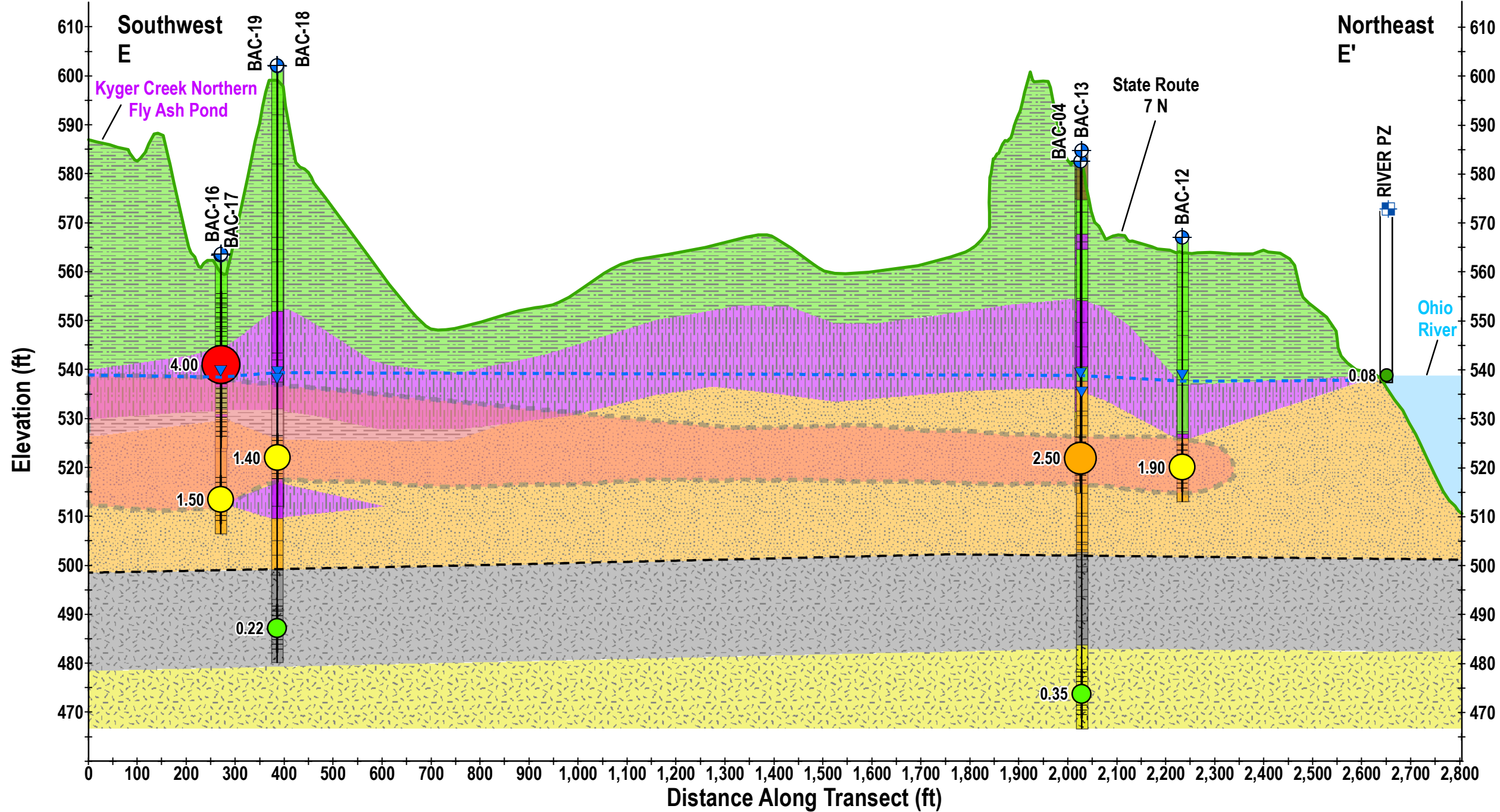
Figure 4-6a: Boron Distribution in Groundwater (Cross-Section View 1)
 Gavín Power, LLC
 Cheshire, Ohio

NOTE:

1. Potentiometric elevations from September 2023.
2. Groundwater data is from H2 2023 and Ohio River data is from 11/16/23.
3. Surface profile from OGRIP LIDAR 2020.
4. Elevation is exaggerated 10X.
5. Boring surface elevations, ground surface elevations and estimated bedrock surface are projected along transect line.
6. The geology is generalized based on the lithology descriptions.
7. The bottom elevation profile of the bottom ash pond is from Integrated Solutions, Inc CPT borings conducted between 3/18/20 to 5/28/20.



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Legend

- Monitoring Well
- Piezometer
- Potentiometric Elevation (September 2023)
- Potentiometric Surface
- Surface Profile
- Approximate Bedrock Surface
- Total Depth
- Well Screen
- Transect
- Site Boundary
- Bottom Ash Pond Boundary

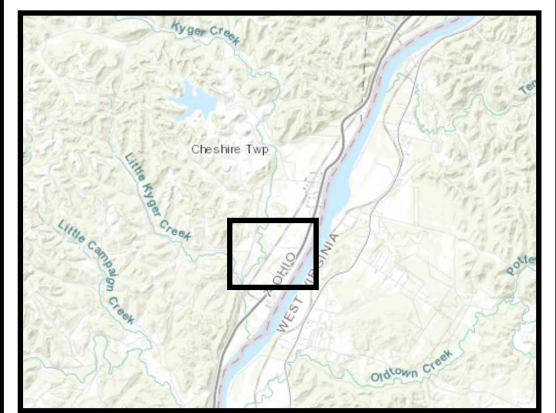
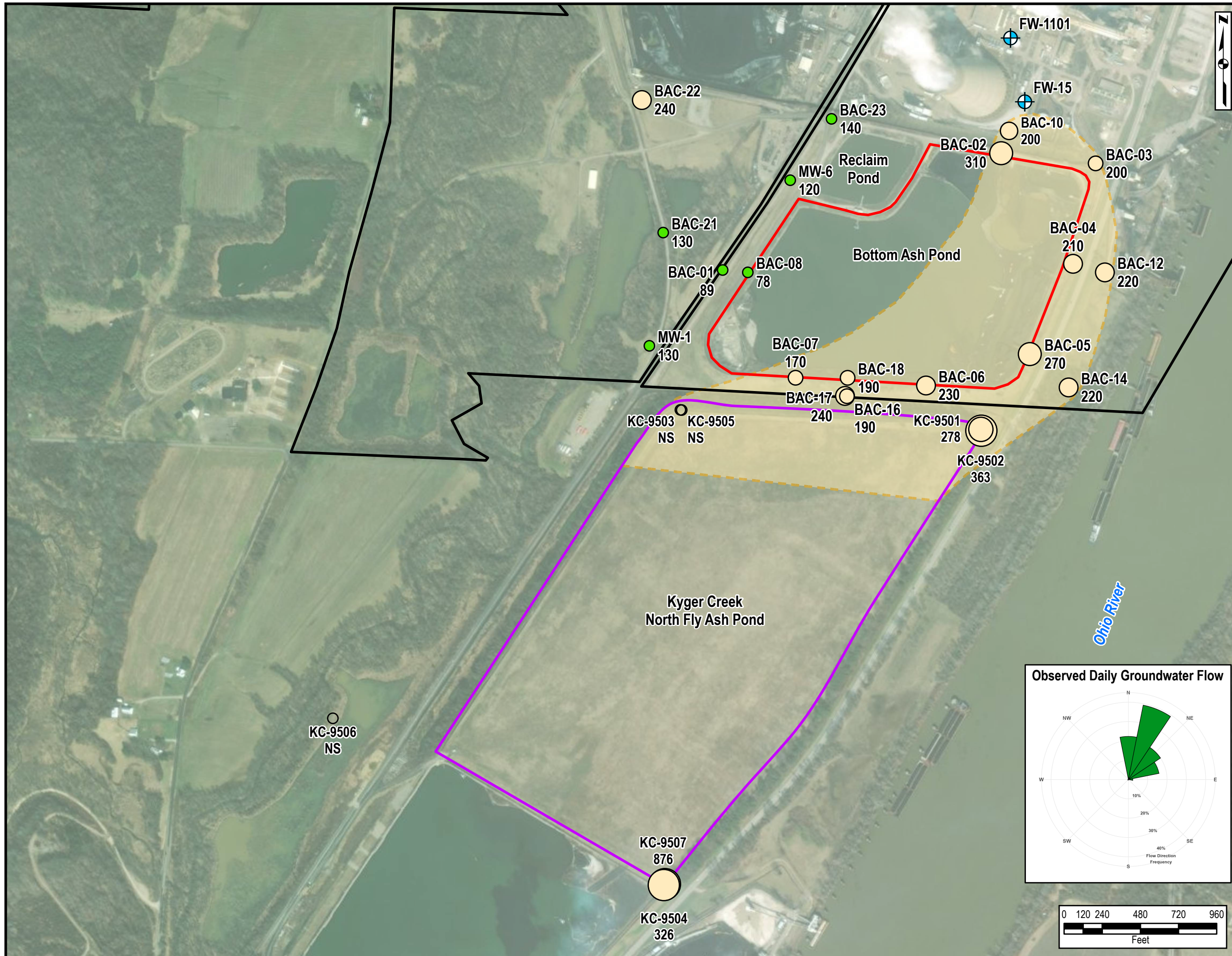
- Kyger Creek Northern Fly Ash Pond
 - Approximated Boron Plume
- Boron Concentrations in Groundwater (mg/L)**
- <0.177
 - 0.177 - 1
 - 1 - 2
 - 2 - 3
 - >3

- Generalized Lithology**
- Road Material
 - Clay and Silt
 - Sandy Clay and Silt
 - Sand and Clay
 - Sand and Gravel
 - Sand
 - Claystone/Siltstone
 - Sandstone

Figure 4-6b: Boron Distribution in Groundwater (Cross-Section View 2)
 Gavin Power, LLC
 Cheshire, Ohio

NOTE:

1. Potentiometric elevations from September 2023.
2. Groundwater data is from H2 2023 and Ohio River data is from 11/16/23.
3. Surface profile from OGRIP LIDAR 2020.
4. Elevation is exaggerated 10X.
5. Boring surface elevations, ground surface elevations and estimated bedrock surface are projected along transect line.
6. The geology is generalized based on the lithology descriptions.
7. The bottom elevation profile of the bottom ash pond is from Integrated Solutions, Inc CPT borings conducted between 3/18/20 to 5/28/20.



Legend

- Sulfate Concentration (mg/L)**
- <140
 - 140-200
 - 200-260
 - 260-320
 - >320
 - Not Sampled
 - ⊕ Water Supply Well Location
 - Approximated Sulfate Plume
 - Approximate Location of Bottom Ash Pond Boundary
 - Gavin Property Boundary
 - Approximate Location of Kyger Creek North Fly Ash Pond Boundary

NOTES:

1. mg/L = milligrams per liter
2. NS = Not Sampled
3. Gavin samples were collected Sept-Oct 2023.
4. Kyger Creek groundwater samples results collected 10/19/2023.
5. Daily groundwater flow direction calculated based on transducer data collected from 1 July 2023 through 7 November 2023.
6. Aerial Imagery: ESRI World Imagery
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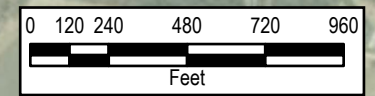
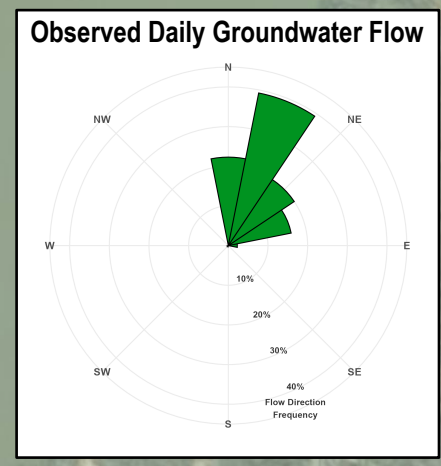
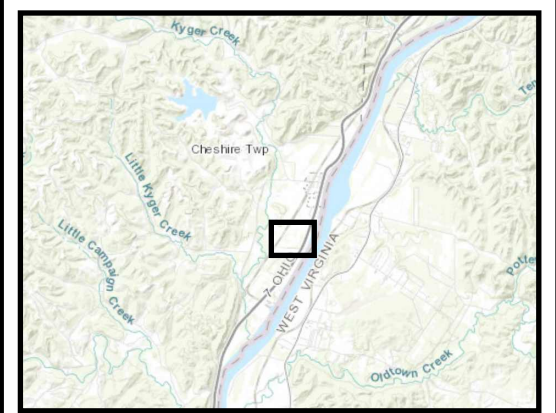
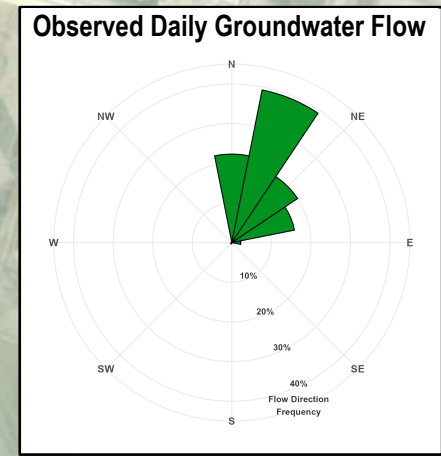
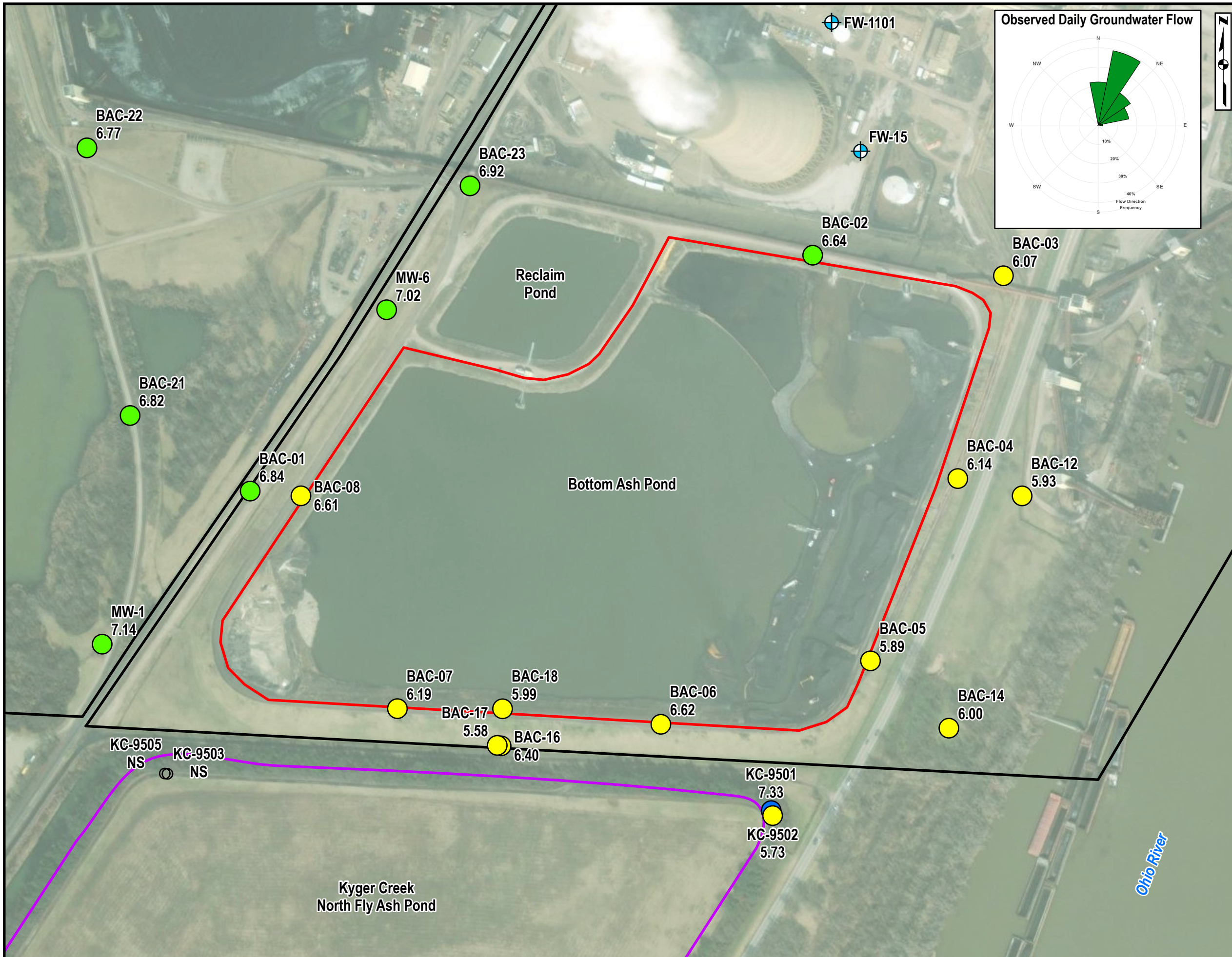


Figure 4-7: Sulfate Distribution in Groundwater (Map View)
Gavin Generating Station
Cheshire, Ohio



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- Legend**
- pH Concentrations in Groundwater (SU)**
- <6.63
 - 6.63-7.22
 - >7.22
 - Not Sampled
 - ⊕ Water Supply Well
 - BAC Alluvial Aquifer Well
 - BAC Separation Layer and Alluvial Aquifer Well
 - Approximate Location of Bottom Ash Pond Boundary
 - Gavin Property Boundary
 - Approximate Location of Kyger Creek North Fly Ash Pond Boundary

- NOTES:**
1. SU = standard units
 2. NS = Not Sampled
 3. Groundwater samples were collected September 2023.
 4. Kyger Creek groundwater samples results collected 10/19/2023.
 5. Daily groundwater flow direction calculated based on transducer data collected from 1 July 2023 through 7 November 2023.
 6. Aerial Imagery: ESRI World Imagery
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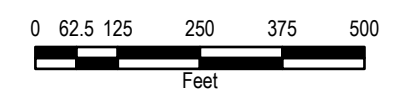
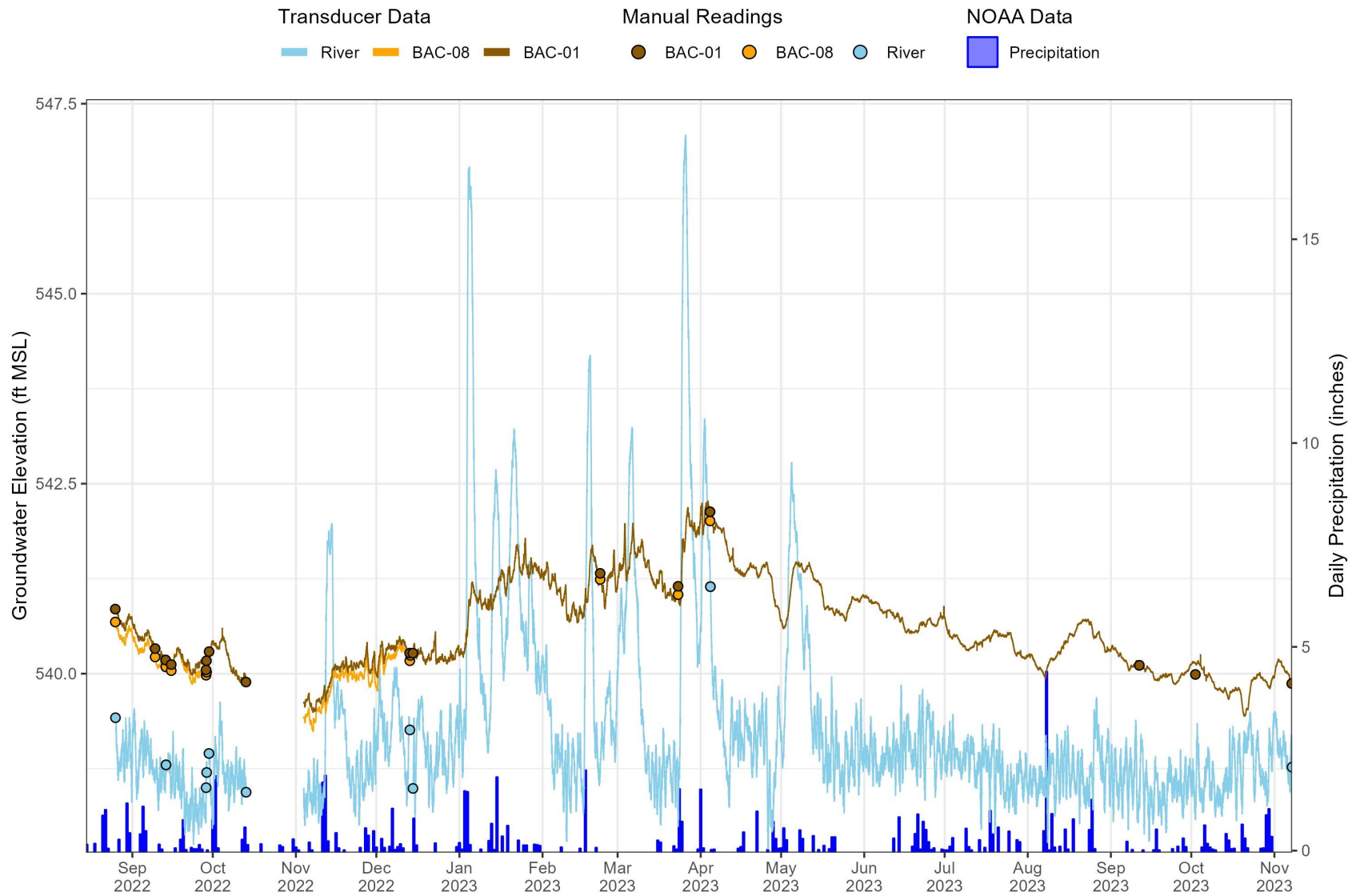


Figure 4-8: pH Distribution in Groundwater (Map View)
Gavin Generating Station
Cheshire, Ohio



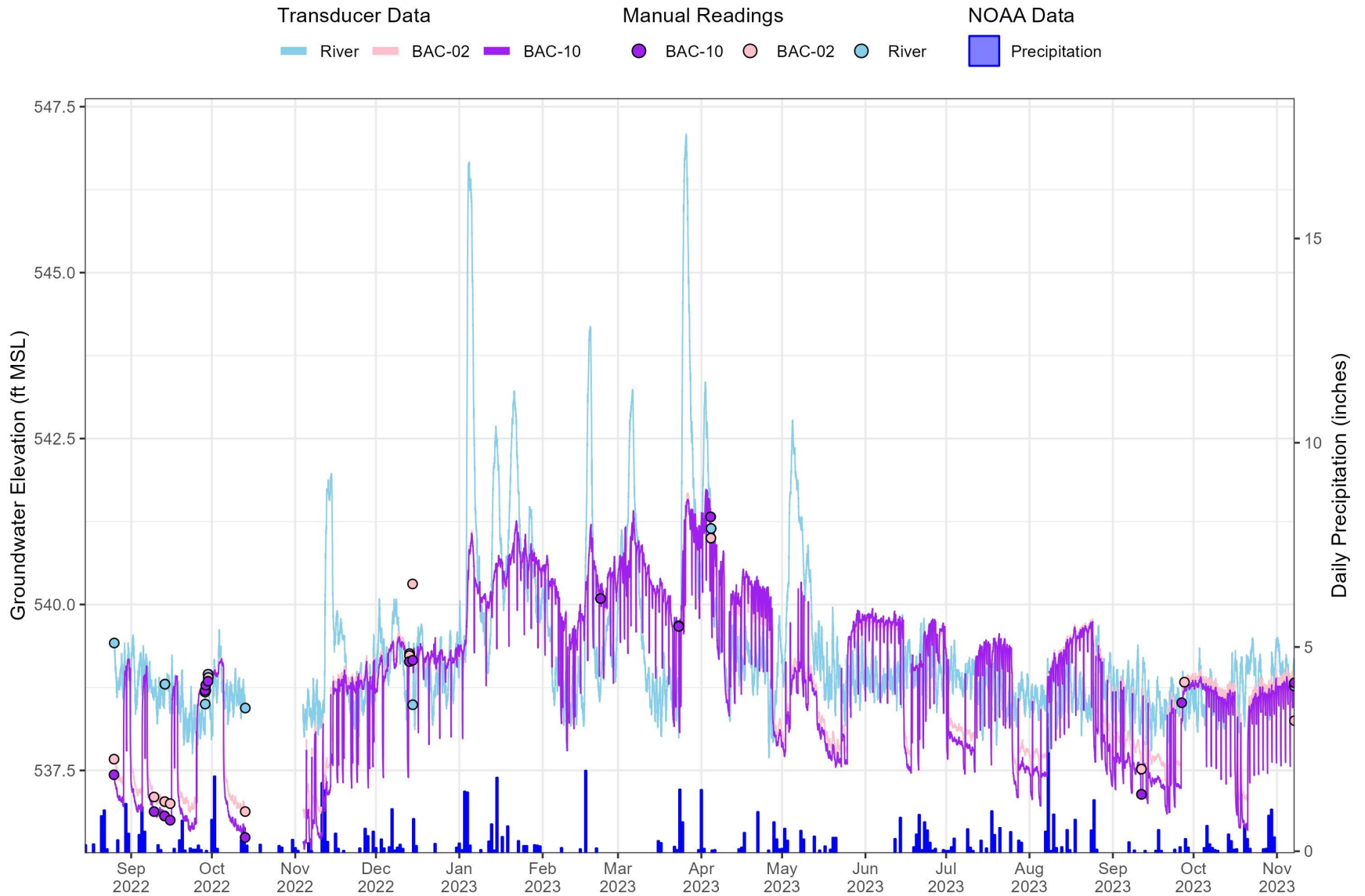
Notes:

- 1.) River data from on-site stilling well
- 2.) Transducer reading frequency was set to 15min
- 3.) Precipitation Source: NOAA Cheshire, OH, Albany, OH & Parkersburg WV

Figure 6-1: BAC-01 and BAC-08 Hydrograph

Gavin Power, LLC
Cheshire, Ohio




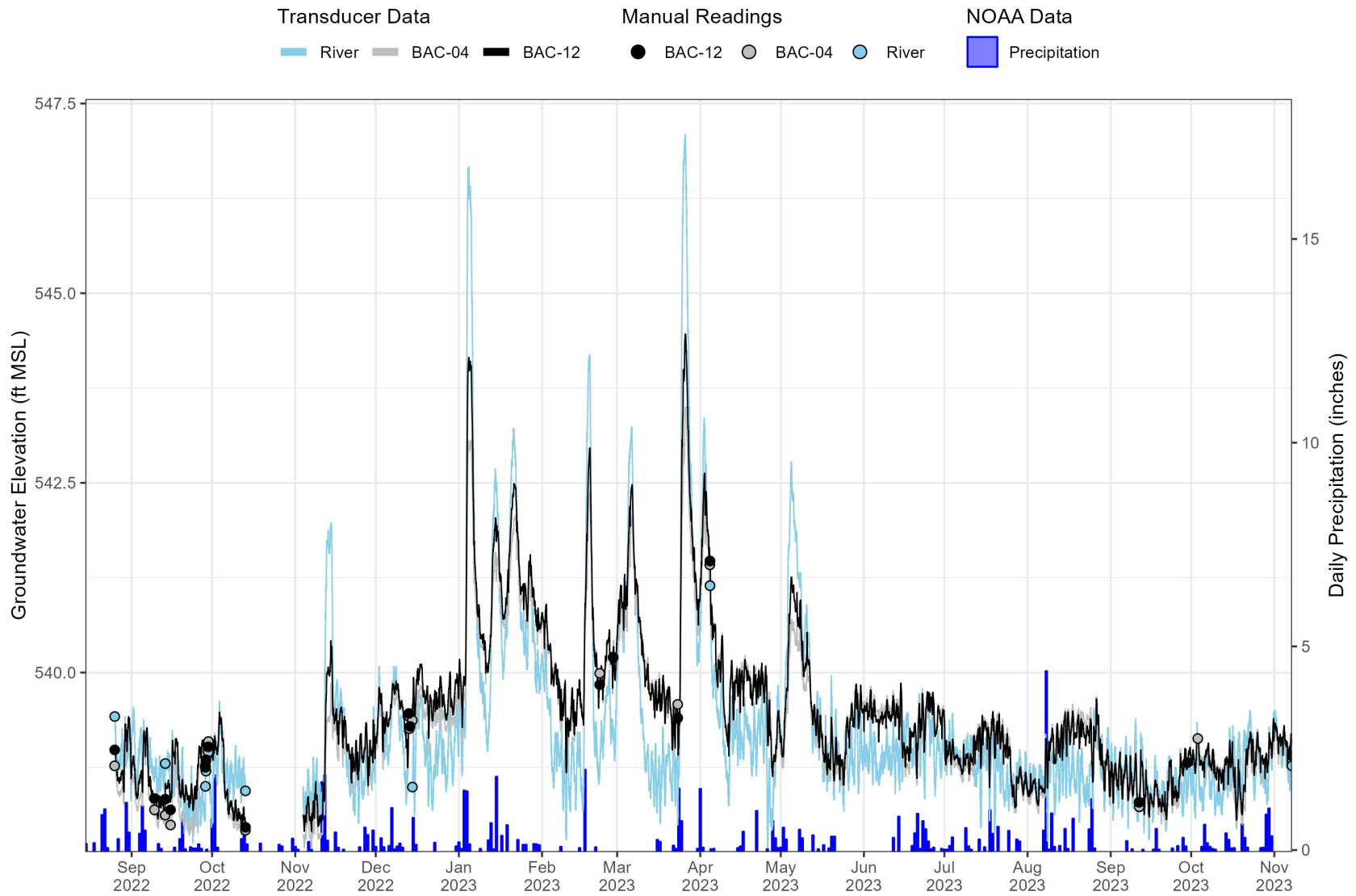


- Notes:
- 1.) River data from on-site stilling well
 - 2.) Transducer reading frequency was set to 15min
 - 3.) Precipitation Source: NOAA Cheshire, OH, Albany, OH & Parkersburg WV

Figure 6-2: BAC-10 and BAC-02 Hydrograph

Gavin Power, LLC
Cheshire, Ohio




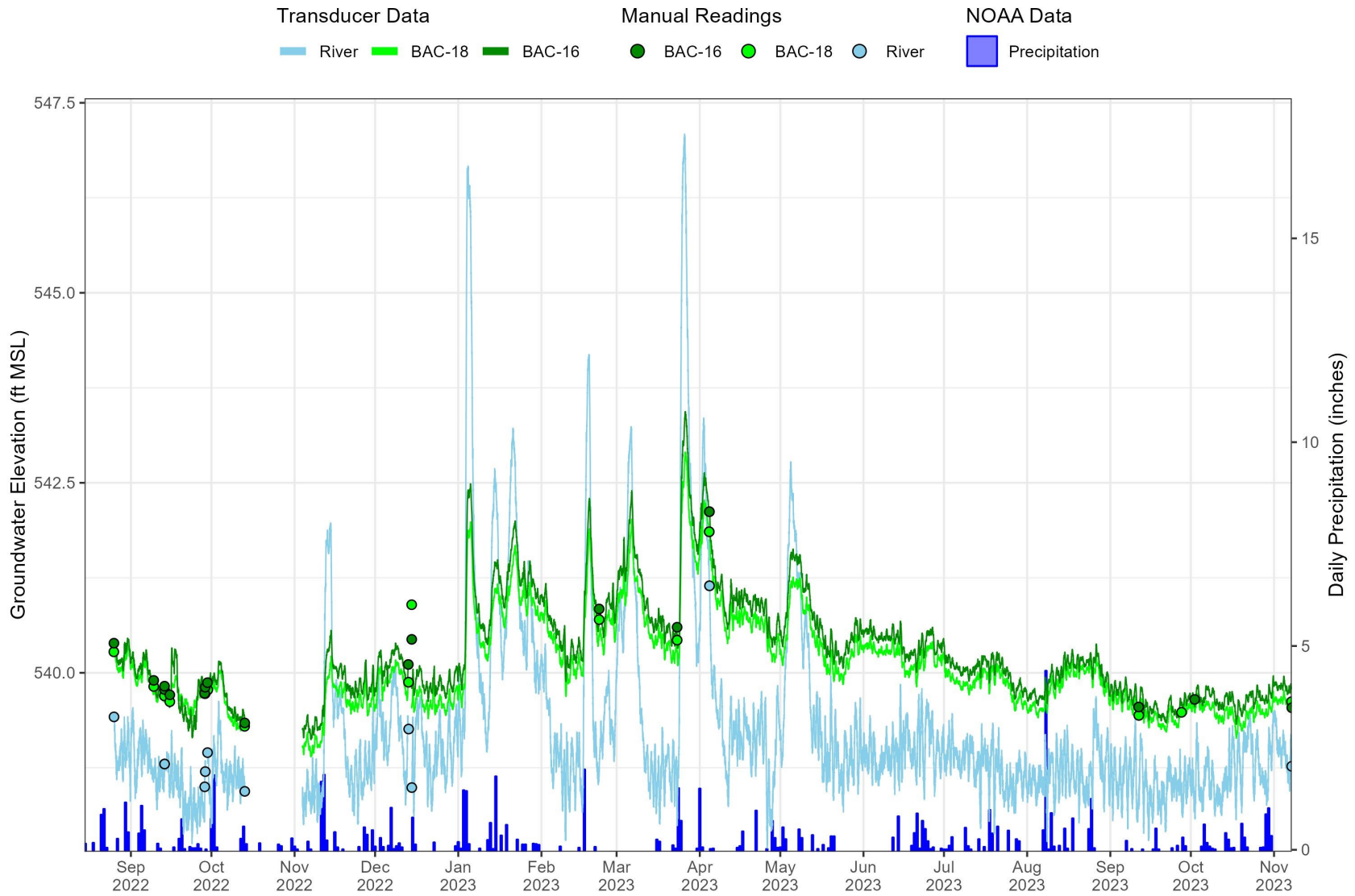


Notes:
 1.) River data from on-site stilling well
 2.) Transducer reading frequency was set to 15min
 3.) Precipitation Source: NOAA Cheshire, OH, Albany, OH & Parkersburg WV

Figure 6-3: BAC-12 and BAC-04 Hydrograph

Gavin Power, LLC
 Cheshire, Ohio



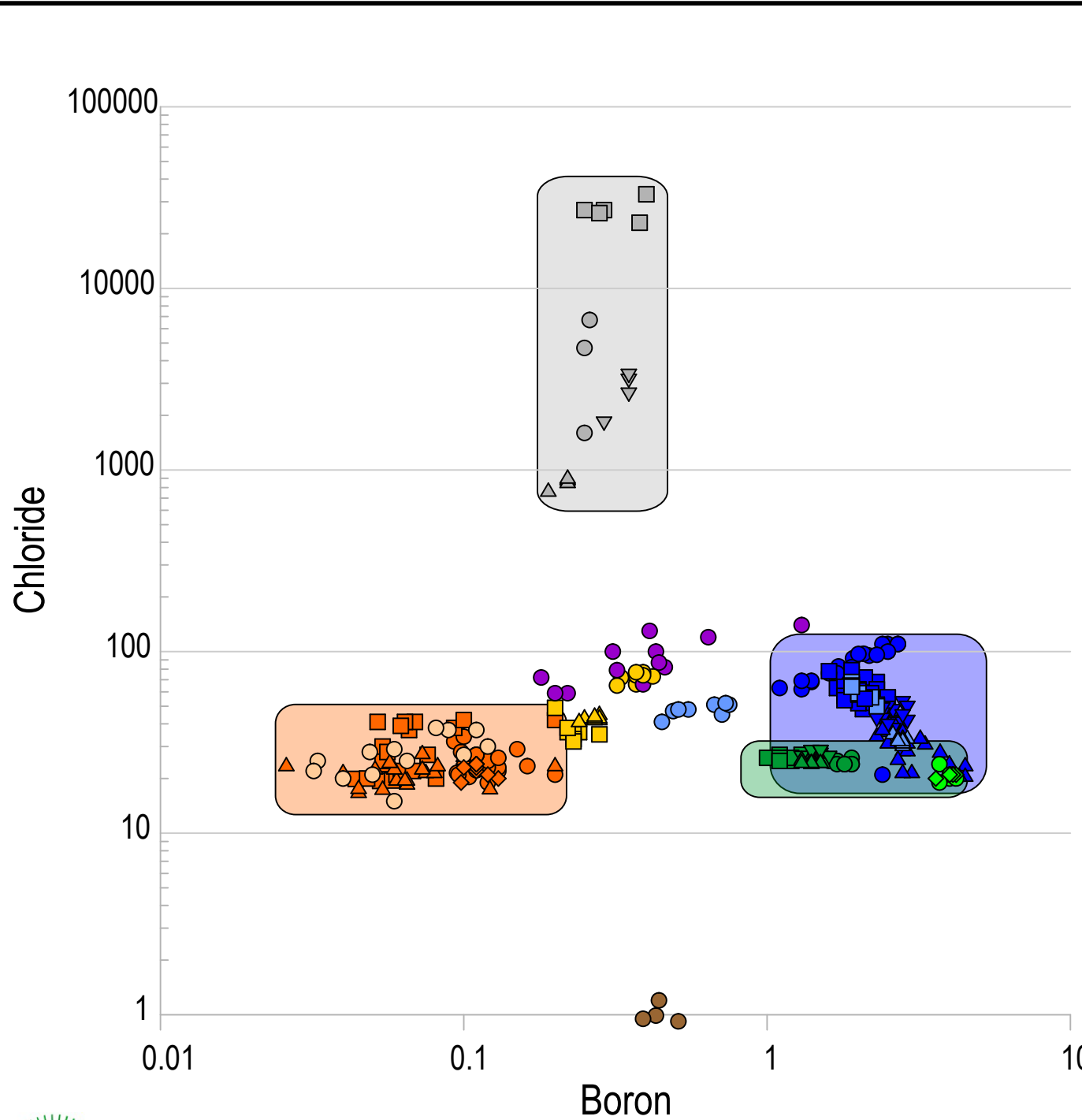


- Notes:
- 1.) River data from on-site stilling well
 - 2.) Transducer reading frequency was set to 15min
 - 3.) Precipitation Source: NOAA Cheshire, OH, Albany, OH & Parkersburg WV

Figure 6-4: BAC-16 and BAC-18 Hydrograph

Gavin Power, LLC
Cheshire, Ohio

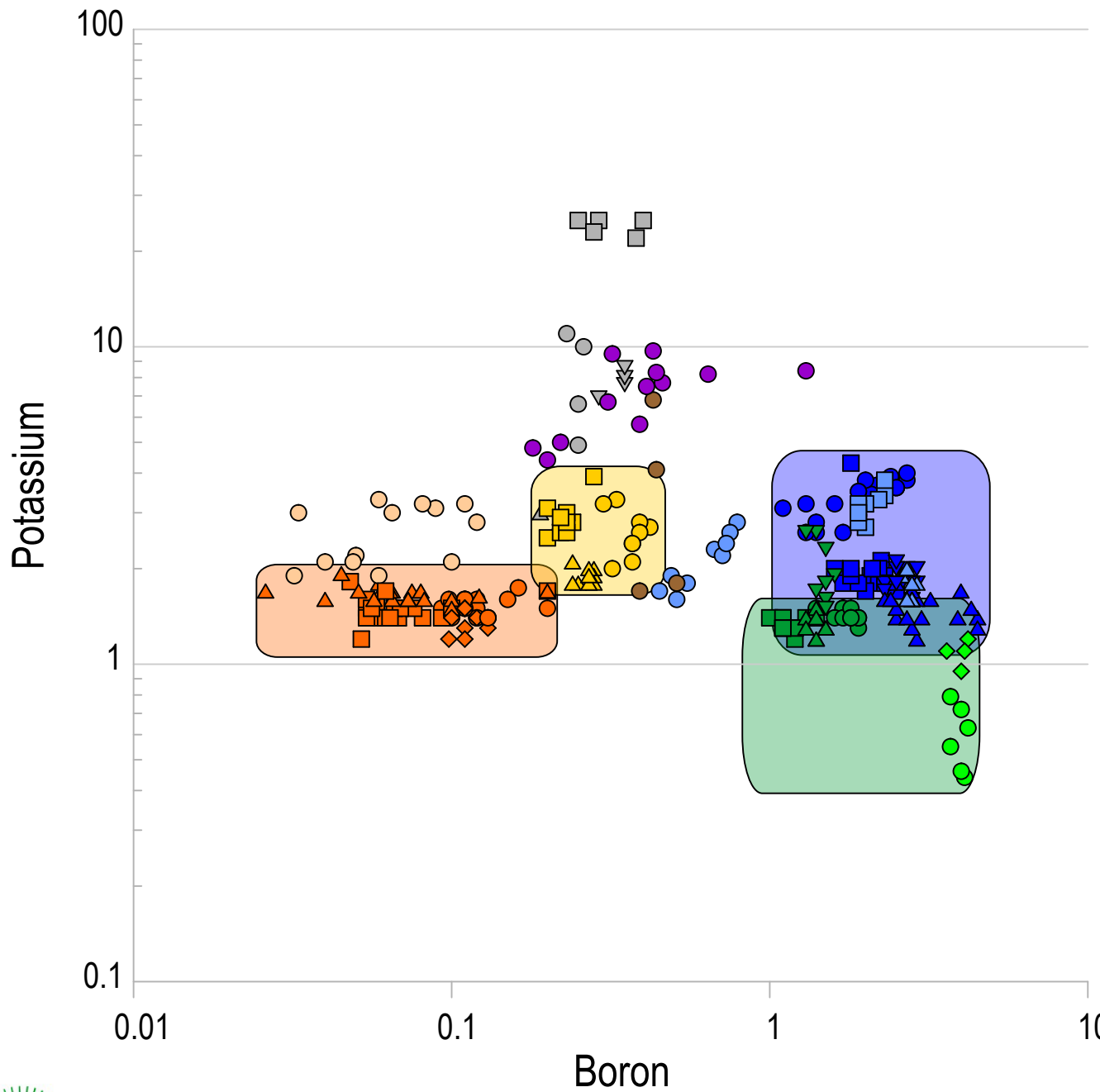




Legend	
● BAC-01	Historical Upgradient Wells
■ MW-1	
▲ MW-6	
● BAC-02	Historical Downgradient Wells
■ BAC-03	
▼ BAC-04	
▲ BAC-05	
● B-0904	Historical Kyger Creek Groundwater
● BAC-06	2020 Southern Boundary Wells
■ BAC-07	
○ BAC-09	2022 Bedrock Wells
■ BAC-11	
▼ BAC-13	
▲ BAC-19	
○ BAC-21	
■ BAC-22	2022 Northwestern Wells
▲ BAC-23	
◆ BAC-08	
● BAC-10	2022 Downgradient Wells
■ BAC-12	
▲ BAC-14	
▼ BAC-16	2022 Southern Boundary Wells
▲ BAC-18	
◆ BAC-17	2022 Kyger Creek Groundwater
● BAC-15	2022 Silt and Clay Well
○ Ohio River	
● Bottom Ash Pond	



Figure 6-5. Boron-Chloride Concentration Plot
 Gavin Generating Station
 Cheshire, Ohio



Legend	
● BAC-01	Historical Upgradient Wells
■ MW-1	
▲ MW-6	
● BAC-02	Historical Downgradient Wells
■ BAC-03	
▼ BAC-04	
▲ BAC-05	Historical Kyger Creek Groundwater
● B-0904	
● BAC-06	2020 Southern Boundary Wells
■ BAC-07	
○ BAC-09	2022 Bedrock Wells
■ BAC-11	
▼ BAC-13	
▲ BAC-19	2022 Northwestern Wells
● BAC-21	
■ BAC-22	
▲ BAC-23	2022 Upgradient Well
◆ BAC-08	
● BAC-10	2022 Downgradient Wells
■ BAC-12	
▲ BAC-14	
▼ BAC-16	2022 Southern Boundary Wells
▲ BAC-18	
◆ BAC-17	2022 Kyger Creek Groundwater
● BAC-15	2022 Silt and Clay Well
○ Ohio River	
● Bottom Ash Pond	



Figure 6-6. Boron-Potassium Concentration Plot
 Gavin Generating Station
 Cheshire, Ohio



ERM

APPENDIX A

2023 KYGER CREEK *CLOSED* NORTH FLY
ASH POND GROUNDWATER SEMIANNUAL
DATA ANALYSIS



OHIO VALLEY ELECTRIC CORPORATION

3932 U. S. Route 23
P. O. Box 468
Piketon, Ohio 45661
740-289-7200

WRITER'S DIRECT DIAL NO:

(740) 289-7259

December 7, 2023

Delivered Electronically

Mr. Marco Deshaies
Division of Surface Water
Ohio Environmental Protection Agency
Southeast District Office
2195 Front Street
Logan, Ohio 43138

Dear Mr. Deshaies:

**Re: Ohio Valley Electric Corporation
Kyger Creek Station- Closed North Fly Ash Pond
Groundwater Semi-annual Data Analysis**

Attached are field data (Attachment I) and laboratory analytical data (Attachment II) for the forty ninth set of semiannual samples collected on October 19, 2023, from groundwater monitoring wells KC-9501, KC-9502, KC-9504, KC-9507, KC-9508 and KC-9509 at the Ohio Valley Electric Corporation's (OVEC's) Kyger Creek Station.

In accordance with the groundwater sampling and analysis plan dated July 5, 1996, for the North Fly Ash Pond Closure Project (hereinafter referred to as "the Plan") and the statistical method notification letter dated October 20, 1999, the analytical results of the semiannual samples were statistically compared to the background data for the four Groundwater Contamination Indicator Parameters (alkalinity, specific conductivity, sulfate, and total dissolved solids) to determine if any significant change in groundwater quality has occurred. The statistical evaluation was performed by using the tolerance interval method for intrawell comparison in accordance with the Plan and notification letter.

An upper tolerance limit was calculated for each of the four parameters at each well using the background data set with a coverage of 95% (i.e., contains 95% of all possible sample measurements) and a tolerance coefficient of 95% (i.e., 95% degree of confidence with which the interval reaches the specified coverage).

The upper tolerance limits were constructed in accordance with "Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Interim Final Guidance" (U.S. EPA, 1989), using a one-sided tolerance factor of $K=3.188$ for $n=8$ found in Table 5 of Appendix B.

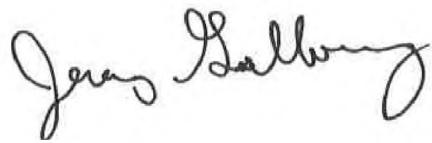
A summary of the sampling results as well as the calculated upper tolerance limits can

be seen for each well on the spreadsheets included under Attachment III.

In accordance with the Plan, verbal communication of parameters exceeding upper tolerance limits was provided to you via voicemail on 12/7/2023 detailing that the concentrations for the parameter alkalinity exceeded the upper tolerance limit at wells KC-9501, KC-9502, and KC-9507; the concentrations for the parameter sulfate exceeded the upper tolerance limit at wells KC-9501, KC-9502, KC-9507, and KC-9509; and the concentrations for the parameter total dissolved solids exceeded the upper tolerance limit at wells KC-9501, KC-9502, KC-9507, and KC-9509.

If you have any questions, please contact me at (740) 289-7259.

Sincerely,

A handwritten signature in black ink that reads "Jeremy Galloway". The signature is written in a cursive, flowing style.

Jeremy Galloway
Environmental Specialist

JDG:tlf

Attachments

Attachment I

MONITORING WELL SAMPLING

	KC-9501	KC-9502	KC-9504	KC-9507	KC-9508	KC-9509
DATE	10/19/2023	10/19/2023	10/19/2023	10/19/2023	10/19/2023	10/19/2023
PUMP TIME (MIN.)	4	5	6	5	4	6
FLOW (ml/min)	780	800	400	780	640	800
VOL. PUMPED(ml)	3120	4000	2400	3900	2560	4800
TIME	1234	1250	1322	1340	1401	1414
TEMPERATURE(C)	15.5	14.9	17	16.6	17.6	16.9
COND. (uS/cm)	907	729	836	1735	880	866
pH(S.U.)	7.33	5.73	6.60	6.91	7.04	6.87
TIME	1235	1251	1323	1341	1402	1415
TEMPERATURE(C)	14.8	14.7	16.5	16.3	17	16.7
COND. (uS/cm)	909	733	828	1727	867	865
pH(S.U.)	7.25	5.70	6.56	6.99	7.02	6.73
TIME	1236	1252	1323	1342	1403	1416
TEMPERATURE(C)	14.60	14.60	16.50	16.10	16.80	16.40
COND. (uS/cm)	916	734	829	1714	863	867
pH(S.U.)	7.24	5.66	6.49	7.01	7.02	6.65
TIME		1253	1324	1343		1417
TEMPERATURE(C)		14.60	16.40	16.00		16.30
COND. (uS/cm)		734	834	1714		868
pH(S.U.)		5.64	6.43	7.01		6.62
TIME			1325			1418
TEMPERATURE(C)			16.30			16.30
COND. (uS/cm)			835			867
pH(S.U.)			6.39			6.60
TIME						
TEMPERATURE(C)						
COND. (uS/cm)						
pH(S.U.)						
TIME						
TEMPERATURE(C)						
COND. (uS/cm)						
pH(S.U.)						
TIME						
TEMPERATURE(C)						
COND. (uS/cm)						
pH(S.U.)						
TIME						
TEMPERATURE(C)						
COND. (uS/cm)						
pH(S.U.)						
SAMPLE TIME	1237	1254	1326	1344	1404	1419
APPEARANCE	Clear	Clear	slight turbid	turbid	clear	slight turbid
ODOR	None	None	None	None	None	None
SAMPLER	HC/JM	HC/JM	HC/JM	HC/JM	HC/JM	HC/JM

WELL #	LEVEL READING
KC-9501	52.60
KC-9502	52.60
KC-9503	
KC-9504	49.10
KC-9505	
KC-9506	
KC-9507	49.10
KC-9508	24.20
KC-9509	24.60
KC-9510	
KC-9511	
KC-9512	
KC-9513	
KC-9514	

DATE	RIVER LEVEL
10/8/2023	539.2
10/9/2023	538.8
10/10/2023	539.0
10/11/2023	539.0
10/12/2023	538.8
10/13/2023	539.0
10/14/2023	539.0
10/15/2023	539.0
10/16/2023	539.0
10/17/2023	539.4
10/18/2023	538.9
10/19/2023	539.4

CALIBRATION	
PARAMETER	TIME
pH	0800
CONDUCT.	0810

Attachment II



Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 233259

Customer: Kyger Creek Plant

Date Reported: 11/02/2023

Customer Sample ID: KC-9501

Customer Description:

Lab Number: 233259-001

Preparation: Dissolved

Date Collected: 10/19/2023 12:37 EDT

Date Received: 10/20/2023 11:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Chloride	26.1	mg/L	10	0.20	0.05		CRJ	10/25/2023 01:21	EPA 300.1 -1997, Rev. 1.0
Sulfate	278	mg/L	10	3.0	0.6		CRJ	10/25/2023 01:21	EPA 300.1 -1997, Rev. 1.0

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Barium	82.7	µg/L	1	0.20	0.05		GES	10/26/2023 16:42	EPA 200.8-1994, Rev. 5.4
Calcium	146	mg/L	1	0.05	0.01		GES	10/26/2023 16:42	EPA 200.8-1994, Rev. 5.4
Iron	0.780	mg/L	1	0.020	0.003		GES	10/26/2023 16:42	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	10/26/2023 16:42	EPA 200.8-1994, Rev. 5.4
Magnesium	29.3	mg/L	1	0.100	0.006		GES	10/26/2023 16:42	EPA 200.8-1994, Rev. 5.4
Manganese	0.832	mg/L	1	0.00100	0.00008		GES	10/26/2023 16:42	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	10/26/2023 16:42	EPA 200.8-1994, Rev. 5.4
Sodium	20.1	mg/L	1	0.20	0.01		GES	10/26/2023 16:42	EPA 200.8-1994, Rev. 5.4

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	227	mg/L	1	20	5		MGK	10/23/2023 15:48	SM 2320B-2011
TDS, Filterable Residue	690	mg/L	1	50	20		ELT	10/24/2023 09:31	SM 2540C-2015



Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 233259

Customer: Kyger Creek Plant

Date Reported: 11/02/2023

Customer Sample ID: KC-9502

Customer Description:

Lab Number: 233259-002

Preparation: Dissolved

Date Collected: 10/19/2023 12:54 EDT

Date Received: 10/20/2023 11:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Chloride	26.2	mg/L	10	0.20	0.05		CRJ	10/25/2023 05:09	EPA 300.1 -1997, Rev. 1.0
Sulfate	363	mg/L	10	3.0	0.6		CRJ	10/25/2023 05:09	EPA 300.1 -1997, Rev. 1.0

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Barium	27.4	µg/L	1	0.20	0.05		GES	10/26/2023 16:47	EPA 200.8-1994, Rev. 5.4
Calcium	75.8	mg/L	1	0.05	0.01		GES	10/26/2023 16:47	EPA 200.8-1994, Rev. 5.4
Iron	0.088	mg/L	1	0.020	0.003		GES	10/26/2023 16:47	EPA 200.8-1994, Rev. 5.4
Lead	0.08	µg/L	1	0.20	0.05	J1	GES	10/26/2023 16:47	EPA 200.8-1994, Rev. 5.4
Magnesium	26.0	mg/L	1	0.100	0.006		GES	10/26/2023 16:47	EPA 200.8-1994, Rev. 5.4
Manganese	26.5	mg/L	1	0.00100	0.00008		GES	10/26/2023 16:47	EPA 200.8-1994, Rev. 5.4
Selenium	0.04	µg/L	1	0.50	0.04	J1	GES	10/26/2023 16:47	EPA 200.8-1994, Rev. 5.4
Sodium	24.1	mg/L	1	0.20	0.01		GES	10/26/2023 16:47	EPA 200.8-1994, Rev. 5.4

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	26	mg/L	1	20	5		MGK	10/23/2023 15:48	SM 2320B-2011
TDS, Filterable Residue	610	mg/L	1	50	20		ELT	10/24/2023 09:31	SM 2540C-2015



Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 233259

Customer: Kyger Creek Plant

Date Reported: 11/02/2023

Customer Sample ID: KC-9504

Customer Description:

Lab Number: 233259-003

Preparation: Dissolved

Date Collected: 10/19/2023 13:26 EDT

Date Received: 10/20/2023 11:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Chloride	89.9	mg/L	25	0.5	0.1		CRJ	10/25/2023 05:46	EPA 300.1 -1997, Rev. 1.0
Sulfate	326	mg/L	25	8	2		CRJ	10/25/2023 05:46	EPA 300.1 -1997, Rev. 1.0

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Barium	26.4	µg/L	1	0.20	0.05		GES	10/26/2023 16:52	EPA 200.8-1994, Rev. 5.4
Calcium	113	mg/L	1	0.05	0.01		GES	10/26/2023 16:52	EPA 200.8-1994, Rev. 5.4
Iron	0.858	mg/L	1	0.020	0.003		GES	10/26/2023 16:52	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	10/26/2023 16:52	EPA 200.8-1994, Rev. 5.4
Magnesium	11.4	mg/L	1	0.100	0.006		GES	10/26/2023 16:52	EPA 200.8-1994, Rev. 5.4
Manganese	0.363	mg/L	1	0.00100	0.00008		GES	10/26/2023 16:52	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	10/26/2023 16:52	EPA 200.8-1994, Rev. 5.4
Sodium	53.2	mg/L	1	0.20	0.01		GES	10/26/2023 16:52	EPA 200.8-1994, Rev. 5.4

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	16	mg/L	1	20	5	J1	MGK	10/23/2023 15:48	SM 2320B-2011
TDS, Filterable Residue	650	mg/L	1	50	20		ELT	10/24/2023 09:38	SM 2540C-2015



Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 233259

Customer: Kyger Creek Plant

Date Reported: 11/02/2023

Customer Sample ID: KC-9507

Customer Description:

Lab Number: 233259-004

Preparation: Dissolved

Date Collected: 10/19/2023 13:44 EDT

Date Received: 10/20/2023 11:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Chloride	101	mg/L	25	0.5	0.1		CRJ	10/25/2023 06:24	EPA 300.1 -1997, Rev. 1.0
Sulfate	876	mg/L	25	8	2		CRJ	10/25/2023 06:24	EPA 300.1 -1997, Rev. 1.0

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Barium	31.0	µg/L	1	0.20	0.05		GES	10/26/2023 16:57	EPA 200.8-1994, Rev. 5.4
Calcium	271	mg/L	5	0.25	0.05		GES	10/26/2023 17:02	EPA 200.8-1994, Rev. 5.4
Iron	3.84	mg/L	1	0.020	0.003		GES	10/26/2023 16:57	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	10/26/2023 16:57	EPA 200.8-1994, Rev. 5.4
Magnesium	33.2	mg/L	1	0.100	0.006		GES	10/26/2023 16:57	EPA 200.8-1994, Rev. 5.4
Manganese	3.26	mg/L	1	0.00100	0.00008		GES	10/26/2023 16:57	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	10/26/2023 16:57	EPA 200.8-1994, Rev. 5.4
Sodium	73.7	mg/L	1	0.20	0.01		GES	10/26/2023 16:57	EPA 200.8-1994, Rev. 5.4

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	67	mg/L	1	20	5		MGK	10/23/2023 15:48	SM 2320B-2011
TDS, Filterable Residue	1560	mg/L	1	50	20		ELT	10/24/2023 09:38	SM 2540C-2015



Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 233259

Customer: Kyger Creek Plant

Date Reported: 11/02/2023

Customer Sample ID: KC-9508

Customer Description:

Lab Number: 233259-005

Preparation: Dissolved

Date Collected: 10/19/2023 14:04 EDT

Date Received: 10/20/2023 11:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Chloride	32.5	mg/L	10	0.20	0.05		CRJ	10/25/2023 07:02	EPA 300.1 -1997, Rev. 1.0
Sulfate	266	mg/L	10	3.0	0.6		CRJ	10/25/2023 07:02	EPA 300.1 -1997, Rev. 1.0

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Barium	61.7	µg/L	1	0.20	0.05		GES	10/26/2023 17:07	EPA 200.8-1994, Rev. 5.4
Calcium	147	mg/L	1	0.05	0.01		GES	10/26/2023 17:07	EPA 200.8-1994, Rev. 5.4
Iron	2.83	mg/L	1	0.020	0.003		GES	10/26/2023 17:07	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	10/26/2023 17:07	EPA 200.8-1994, Rev. 5.4
Magnesium	21.8	mg/L	1	0.100	0.006		GES	10/26/2023 17:07	EPA 200.8-1994, Rev. 5.4
Manganese	1.59	mg/L	1	0.00100	0.00008		GES	10/26/2023 17:07	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	10/26/2023 17:07	EPA 200.8-1994, Rev. 5.4
Sodium	16.7	mg/L	1	0.20	0.01		GES	10/26/2023 17:07	EPA 200.8-1994, Rev. 5.4

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	203	mg/L	1	20	5		MGK	10/23/2023 15:48	SM 2320B-2011
TDS, Filterable Residue	660	mg/L	1	50	20		ELT	10/24/2023 09:45	SM 2540C-2015



Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 233259

Customer: Kyger Creek Plant

Date Reported: 11/02/2023

Customer Sample ID: KC-9509

Customer Description:

Lab Number: 233259-006

Preparation: Dissolved

Date Collected: 10/19/2023 14:19 EDT

Date Received: 10/20/2023 11:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Chloride	41.4	mg/L	25	0.5	0.1		CRJ	10/25/2023 09:01	EPA 300.1 -1997, Rev. 1.0
Sulfate	305	mg/L	25	8	2		CRJ	10/25/2023 09:01	EPA 300.1 -1997, Rev. 1.0

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Barium	49.4	µg/L	1	0.20	0.05		GES	10/26/2023 17:12	EPA 200.8-1994, Rev. 5.4
Calcium	122	mg/L	1	0.05	0.01		GES	10/26/2023 17:12	EPA 200.8-1994, Rev. 5.4
Iron	2.46	mg/L	1	0.020	0.003		GES	10/26/2023 17:12	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	10/26/2023 17:12	EPA 200.8-1994, Rev. 5.4
Magnesium	21.1	mg/L	1	0.100	0.006		GES	10/26/2023 17:12	EPA 200.8-1994, Rev. 5.4
Manganese	16.7	mg/L	1	0.00100	0.00008		GES	10/26/2023 17:12	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	10/26/2023 17:12	EPA 200.8-1994, Rev. 5.4
Sodium	16.6	mg/L	1	0.20	0.01		GES	10/26/2023 17:12	EPA 200.8-1994, Rev. 5.4

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	150	mg/L	1	20	5		MGK	10/23/2023 15:48	SM 2320B-2011
TDS, Filterable Residue	700	mg/L	1	50	20		ELT	10/24/2023 09:45	SM 2540C-2015



Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 233259

Customer: Kyger Creek Plant

Date Reported: 11/02/2023

Customer Sample ID: Trip Blank

Customer Description:

Lab Number: 233259-007

Preparation: Dissolved

Date Collected: 10/19/2023 10:32 EDT

Date Received: 10/20/2023 11:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Chloride	<0.01	mg/L	2	0.04	0.01	U1	CRJ	10/25/2023 08:18	EPA 300.1 -1997, Rev. 1.0
Sulfate	0.2	mg/L	2	0.6	0.1	J1	CRJ	10/25/2023 08:18	EPA 300.1 -1997, Rev. 1.0

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Barium	<0.05	µg/L	1	0.20	0.05	U1	GES	10/26/2023 17:17	EPA 200.8-1994, Rev. 5.4
Calcium	0.01	mg/L	1	0.05	0.01	J1	GES	10/26/2023 17:17	EPA 200.8-1994, Rev. 5.4
Iron	0.006	mg/L	1	0.020	0.003	J1	GES	10/26/2023 17:17	EPA 200.8-1994, Rev. 5.4
Lead	0.09	µg/L	1	0.20	0.05	J1	GES	10/26/2023 17:17	EPA 200.8-1994, Rev. 5.4
Magnesium	<0.006	mg/L	1	0.100	0.006	U1	GES	10/26/2023 17:17	EPA 200.8-1994, Rev. 5.4
Manganese	0.00020	mg/L	1	0.00100	0.00008	J1	GES	10/26/2023 17:17	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	10/26/2023 17:17	EPA 200.8-1994, Rev. 5.4
Sodium	<0.01	mg/L	1	0.20	0.01	U1	GES	10/26/2023 17:17	EPA 200.8-1994, Rev. 5.4

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	10/23/2023 15:48	SM 2320B-2011
TDS, Filterable Residue	<20	mg/L	1	50	20	U1	ELT	10/24/2023 09:51	SM 2540C-2015



Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 233259

Customer: Kyger Creek Plant

Date Reported: 11/02/2023

Customer Sample ID: Duplicate

Customer Description:

Lab Number: 233259-008

Preparation: Dissolved

Date Collected: 10/19/2023 12:37 EDT

Date Received: 10/20/2023 11:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Chloride	26.2	mg/L	10	0.20	0.05		CRJ	10/25/2023 09:38	EPA 300.1 -1997, Rev. 1.0
Sulfate	277	mg/L	10	3.0	0.6		CRJ	10/25/2023 09:38	EPA 300.1 -1997, Rev. 1.0

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Barium	82.4	µg/L	1	0.20	0.05		GES	10/26/2023 17:23	EPA 200.8-1994, Rev. 5.4
Calcium	144	mg/L	1	0.05	0.01	M1	GES	10/26/2023 17:23	EPA 200.8-1994, Rev. 5.4
Iron	0.759	mg/L	1	0.020	0.003		GES	10/26/2023 17:23	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	10/26/2023 17:23	EPA 200.8-1994, Rev. 5.4
Magnesium	28.9	mg/L	1	0.100	0.006		GES	10/26/2023 17:23	EPA 200.8-1994, Rev. 5.4
Manganese	0.862	mg/L	1	0.00100	0.00008	M1	GES	10/26/2023 17:23	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	10/26/2023 17:23	EPA 200.8-1994, Rev. 5.4
Sodium	20.1	mg/L	1	0.20	0.01		GES	10/26/2023 17:23	EPA 200.8-1994, Rev. 5.4

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	247	mg/L	1	20	5		MGK	10/23/2023 15:48	SM 2320B-2011
TDS, Filterable Residue	690	mg/L	1	50	20		ELT	10/24/2023 09:51	SM 2540C-2015



Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 233259

Customer: Kyger Creek Plant

Date Reported: 11/02/2023

Report Verification

This report and the above data have been confirmed by the following analyst.

Michael Ohlinger, Chemist

Email: msohlinger@aep.com

Phone: 614-836-4184

Audinet: 8-210-4184

THIS TEST REPORT RELATES ONLY TO THE ITEMS TESTED AND SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL OF THE LABORATORY. ALL TEST RESULTS MEET ALL OF THE REQUIREMENTS OF THE ACCREDITING AUTHORITY, UNLESS OTHERWISE NOTED. ALL TIMES LISTED ARE IN THE EASTERN TIME ZONE.

Data Qualifier Legend

U1 - Not detected at or above method detection limit (MDL).

J1 - Concentration estimated. Analyte was detected between the method detection limit and the reporting limit.

M1 - The associated matrix spike (MS) or matrix spike duplicate (MSD) recovery was outside acceptance limits.

Chain-of-Custody Record and Analysis Request Form

233259



Location:
(District, Region, Plant, etc.) **OVEC - Kyger Creek Station**

Program/Project:
(If applicable)

Submitted/Requested By:
H. E. Cleland **Phone/Fax/E-mail:**
Audinet 241-5323; hcleland@ovec.com

Sample(s) Origin: OIB00005*QD; Monitoring Wells KC-9501, KC-9502, KC-9504, KC-9507, KC-9508, and KC-9509
(NPDES Permit, Outfall No., etc.)

Additional Information:
(Site Description, Sample Type, etc.) Grab, Filtered through a .45 micron in-line filter

Analyses Requested:
(Attach information if necessary) Barium, Calcium, Iron, Lead, Magnesium, Manganese, Selenium, Sodium

Results Turnaround:
(Select One)
(Please date non-routine)

Routine
Priority
Rush
Date By:
Weather Conditions Affecting Sampling:

Bottle or Analysis ID's	Preservatives and Filtering (Codes/Colors)	Sample Volume (mL)	Units of Flow <input checked="" type="checkbox"/>		Sampler(s) Initials	Flow	Select One Per Line		
			<input type="checkbox"/> mgd	<input type="checkbox"/> gpm			COMPOSITE		GRAB
			Other				Date/Time	mL Added	Date/Time
KC-9501	D, Red F, Pink	1000 mL	Preservatives and Filtering		HCBKA				10/19/23 1237
KC-9502	D, Red F, Pink	1000 ml	(Codes) (Colors)		HCBKA				10/19/23 1254
KC-9504	D, Red F, Pink	1000 ml	(A) None (White) (B) Cool, ≤ 6° C (Blue) (C) NaOH; pH > 12 (Yellow) (D) HNO ₃ ; pH < 2 (Red) (E) 1:1 H ₂ SO ₄ ; pH < 2 (Green) (F) Filtered (Pink) (G) 1:1 HCl; pH < 2 (Gray) (H) Zinc Acetate (Black)		HCBKA				10/19/23 1326
KC-9507	D, Red F, Pink	1000 ml	(I) Other		HCBKA				10/19/23 1344
KC-9508	D, Red F, Pink	1000 ml	Samplers Initials Code		HCBKA				10/19/23 1404
KC-9509	D, Red F, Pink	1000 ml	Initials Print Sampler Name(s)		HCBKA				10/19/23 1419
Trip Blank	D, Red F, Pink	1000 ml	HE Henry Cleland JW Jennifer W. W. W.		HCBKA				10/19/23 1032
Duplicate	D, Red F, Pink	1000 ml			HCBKA				10/19/23 1237

Relinquished By:
(Sampling supervisor or personnel) *[Signature]* **Date/Time:** 10/20/23 1101

Transportation: Employee AEP Courier UPS Fed-Ex **Other (Name):** _____

Received by Transporter: _____ **Date/Time:** _____

Relinquished by Transporter: _____ **Date/Time:** _____

Received By:
(Testing laboratory receiving personnel) *[Signature]* **Date/Time:** 10/20/23 1100

Receipt Notes: _____

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, Ohio 43125
Phone: 8-210-4211 or 614-836-4211
Fax: 8-210-4168 or 614-836-4168

A PROPERLY FILLED OUT COPY OF THIS FORM MUST ACCOMPANY EACH SET OF SAMPLES SENT TO THE WATER TESTING LABORATORY. ALSO, A TAG ON THE SAMPLE OR CONTAINER IS NECESSARY FOR THE SAMPLE(S) TO BE PROPERLY PROCESSED. FEDERAL REGULATIONS REQUIRE THAT THIS INFORMATION BE RETAINED FOR AT LEAST THREE YEARS. LABORATORY DATA FOR THESE SAMPLES SHOULD BE FILED WITH A COPY OF THIS CHAIN-OF-CUSTODY RECORD.

Chain-of-Custody Record and Analysis Request Form



Location: (District, Region, Plant, etc.) OVEC - Kyger Creek Station									
Program/Project: (If applicable)									
Submitted/Requested By: H. E. Cleland				Phone/Fax/E-mail: Audinet 241-5323; hcleland@ovec.com					
Sample(s) Origin: OIB00005*QD; Monitoring Wells KC-9501, KC-9502, KC-9504, KC-9507, KC-9508, and KC-9509 (NPDES Permit, Outfall No., etc.)									
Additional Information: (Site Description, Sample Type, etc.) Grab, Filtered through a .45 micron in-line filter									
Analyses Requested: (Attach information if necessary) Alkalinity, Sulfate, TDS, Chloride									
Results Turnaround: (Select One <input checked="" type="checkbox"/>) (Please date non-routine)		Routine <input checked="" type="checkbox"/>	Priority <input type="checkbox"/>	Rush <input type="checkbox"/>	Date By: <input type="text"/>	Weather Conditions Affecting Sampling:			
Bottle or Analysis ID's	Preservatives and Filtering (Codes/Colors)	Sample Volume (mL)	Units of Flow <input checked="" type="checkbox"/>		Sampler(s) Initials	Flow	Select One Per Line		
			<input type="checkbox"/> mgd	<input type="checkbox"/> gpm			COMPOSITE		GRAB
			Other <input type="text"/>				Date/Time	mL Added	Date/Time
KC-9501	B, Blue F, Pink	1000 mL			HC/BJK				10/19/23 1237
KC-9502	B, Blue F, Pink	1000 ml			HC/BJK				10/19/23 1254
KC-9504	B, Blue F, Pink	1000 ml			HC/BJK				10/19/23 1320
KC-9507	B, Blue F, Pink	1000 ml			HC/BJK				10/19/23 1344
KC-9508	B, Blue F, Pink	1000 ml			HC/BJK				10/19/23 1404
KC-9509	B, Blue F, Pink	1000 ml			HC/BJK				10/19/23 1419
Trip Blank	B, Blue F, Pink	1000 ml			HC/BJK				10/19/23 1032
Duplicate	B, Blue F, Pink	1000 ml							10/19/23 1237

Relinquished By: (Sampling supervisor or personnel) **Date/Time:** 10/20/23 1101

Transportation: Employee AEP Courier UPS Fed-Ex Other (Name): _____

Received by Transporter: _____ **Date/Time:** _____

Relinquished by Transporter: _____ **Date/Time:** _____

Received By: (Testing laboratory receiving personnel) **Date/Time:** 10/20/23 1100

Receipt Notes: _____

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, Ohio 43125
Phone: 8-210-4211 or 614-836-4211
Fax: 8-210-4168 or 614-836-4168

A PROPERLY FILLED OUT COPY OF THIS FORM MUST ACCOMPANY EACH SET OF SAMPLES SENT TO THE WATER TESTING LABORATORY.
ALSO, A TAG ON THE SAMPLE OR CONTAINER IS NECESSARY FOR THE SAMPLE(S) TO BE PROPERLY PROCESSED.
FEDERAL REGULATIONS REQUIRE THAT THIS INFORMATION BE RETAINED FOR AT LEAST THREE YEARS.
LABORATORY DATA FOR THESE SAMPLES SHOULD BE FILED WITH A COPY OF THIS CHAIN-OF-CUSTODY RECORD.

AEF WATER & WASTE SAMPLE RECEIPT FORM

Package Type			Delivery Type				
<input checked="" type="radio"/> Cooler	<input type="radio"/> Box	<input type="radio"/> Bag	<input type="radio"/> Envelope	<input type="radio"/> PONY	<input type="radio"/> UPS	<input type="radio"/> FedEx	<input type="radio"/> USPS
				Other _____			

Plant/Customer Kyger Number of Plastic Containers: _____

Opened By MGK WCG Number of Glass Containers: _____

Date/Time 10/20/23 1100 Number of Mercury Containers: _____

Were all temperatures within 0-6°C? Y / N or N/A Initial: WCG MGK on ice / no ice
(IR Gun Ser# 2213689000, Expir. 03/24/2024) - If No, specify each deviation: _____

Was container in good condition? Y / N Comments _____

Was Chain of Custody received? Y / N Comments _____

Requested turnaround: Routine If RUSH, who was notified? _____

pH (15 min)	Cr ⁶⁺ (pres) (24 hr)	NO ₂ or NO ₃ (48 hr)	ortho-PO ₄ (48 hr)	Hg-diss (pres) (48 hr)
-------------	-------------------------------------	--------------------------------------------	-------------------------------	----------------------------

Was COC filled out properly? Y / N Comments _____

Were samples labeled properly? Y / N Comments _____

Were correct containers used? Y / N Comments _____

Was pH checked & Color Coding done? Y / N or N/A Initial & Date: WCG MGK 10/20/23

pH paper (circle one): MQuant.PN1.09535.0001.LOT# _____ (OR) Lab Rat.PN4801.LOT# X000RWDG21 Exp 11/15/2024

- Was Add'l Preservative needed? Y / N If Yes: By whom & when: _____ (See Prep Book)

Is sample filtration requested? Y / N Comments _____ (See Prep Book)

Was the customer contacted? If Yes: Person Contacted: _____

Lab ID# 237299 Initial & Date & Time: _____

Logged by WCG Comments _____

Reviewed by Mso _____

REMINDER: Document the pertinent sample integrity information and deviations in sample receipt (as noted above) in the "Notes" field in the LIMS to be included on the report to the customer.



Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

M3K0262

Project Description

Kyger Creek

For:

Kristen Pelfrey

Ohio Valley Electric Co.

Kyger Creek Station 5758 St. Rt. 7 North

Cheshire, OH 45620

Customer Relationship Coordinator

Tiffany Bailey

Wednesday, November 29, 2023

Please find enclosed the analytical results for the samples you submitted to Microbac Laboratories. Review and compilation of your report was completed by Microbac Laboratories Inc., - Marietta, OH. If you have any questions, comments, or require further assistance regarding this report, please contact your service representative listed above.

I certify that all test results meet all of the requirements of the accrediting authority listed within this report. Analytical results are reported on a 'as received' basis unless specified otherwise. Analytical results for solids with units ending in (dry) are reported on a dry weight basis. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories. The reported results are related only to the samples analyzed as received.

Microbac Laboratories, Inc.

158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 p | www.microbac.com



Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

M3K0262

Ohio Valley Electric Co.

Project Name: Kyger Creek

Kristen Pelfrey
Kyger Creek Station 5758 St. Rt. 7 North
Cheshire, OH 45620

Project / PO Number: N/A
Received: 11/03/2023
Reported: 11/29/2023

Sample Summary Report

<u>Sample Name</u>	<u>Laboratory ID</u>	<u>Client Matrix</u>	<u>Sample Type</u>	<u>Sample Begin</u>	<u>Sample Taken</u>	<u>Lab Received</u>
KC-9501	M3K0262-01	Wastewater	Grab		10/19/23 12:37	11/03/23 10:00
KC-9502	M3K0262-02	Wastewater	Grab		10/19/23 12:54	11/03/23 10:00
KC-9504	M3K0262-03	Wastewater	Grab		10/19/23 13:26	11/03/23 10:00
KC-9507	M3K0262-04	Wastewater	Grab		10/19/23 13:44	11/03/23 10:00
KC-9508	M3K0262-05	Wastewater	Grab		10/19/23 14:04	11/03/23 10:00
KC-9509	M3K0262-06	Wastewater	Grab		10/19/23 14:19	11/03/23 10:00



Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

M3K0262

Analytical Testing Parameters

Client Sample ID:	
Sample Matrix:	
Lab Sample ID:	Collection Date:

	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
	Result	UNC	MDA	Units		Note	Prepared	Analyzed	Analyst
Surrogate:						% Rec			
						% Rec			

Definitions

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 4.2°C

Cooler Inspection Checklist

Ice Present or not required?	Yes	Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes	Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes	Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes	Sample type identified on COC?	Yes
Correct type of Containers Received	Yes	Correct number of containers listed on COC?	Yes
Containers Intact?	Yes	COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes	Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes	Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes	Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes		

Report Comments

The data and information on this, and other accompanying documents, represents only the sample(s) analyzed. This report is incomplete unless all pages indicated in the footnote are present and an authorized signature is included. The services were provided under and subject to Microbac's standard terms and conditions which can be located and reviewed at <https://www.microbac.com/standard-terms-conditions>.

Reviewed and Approved By:

Tiffany Bailey

Tiffany Bailey
Customer Relationship Coordinator
Reported: 11/29/2023 12:58

MICROBAC Return to: 158 Starline Drive Marietta Ohio 45750

CHAIN OF CUSTODY RECORD

Number Instructions on back

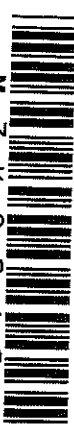
TO BE COMPLETED BY MICROBAC
Temperature Upon Receipt (°C) 4.2

Lab Report Address: Microbac
 Client Name: Microbac
 Address: 158 Starline Drive
 City, State, Zip: Marietta, OH 45750
 Contact: Aitch Walker
 Telephone No.: 740-373-4071
 Invoice Address: Same
 Client Name: Same
 Turnaround Time: [X] Routine (5 to 7 business days) [] RUSH (notify lab)
 Report Type: (needed by)
 Results: [] Results Only [] Level 1 [] Level 2 [] Level 3 [] Level 4 [] EDD
 Samples Received on Ice? Yes No N/A
 Custody Seals Intact? Yes No N/A
 Holding Time:
 Project: KC Monitoring Well Sampling
 Location: Chestire, OH
 PO No.:
 Compliance Monitoring? [X] Yes [] No
 Agency/Program:
 Sampled by (PRINT): Henry Cleland/Kristen Peifrey
 Sampler Signature: *[Signature]*
 Sampler Phone No.: 740-648-8484

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)
 ** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved
 REQUESTED ANALYSIS

Lab ID	Client Sample ID	Date Collected	Time Collected	No. of Containers	Matrix	Grab / Composite Types**	Preservative		Additional Notes
							sh	sa	
KC-9501		10/19/2023	1237	2	WW	G	1	1	
KC-9502		10/19/2023	1254	2	WW	G	1	1	
KC-9504		10/19/2023	1326	2	WW	G	1	1	
KC-9507		10/19/2023	1344	2	WW	G	1	1	
KC-9508		10/19/2023	1464	2	WW	G	1	1	
KC-9509		10/19/2023	1419	2	WW	G	1	1	

Ohio Valley Electric Co.
 Rec'd: 11/03/2023 10:00
 By: Stephanie Murphy
 Temp: 4.2
 (Signature)



M 3 K 0 2 6 2

Possible Hazard Identification: [] Hazardous [X] Non-Hazardous [] Radioactive
 Comments:
 Relinquished By (Signature): *[Signature]* Date/Time: 11/03/23 1000
 Relinquished By (Signature): *[Signature]* Date/Time:
 Relinquished By (Signature): Date/Time:
 Received By (Signature): *[Signature]* Date/Time: 11/03/2023 1000
 Received By (Signature): *[Signature]* Date/Time:
 Received By (Signature): *[Signature]* Date/Time: 11/03/2023 1000

Sample Acceptance Policy for Environmental Chemistry and Microbiology



November 29, 2023

Tiffany Bailey
Microbac OH
158 Starlite Drive
Marietta, OH 45750

RE: Project: M3K0262
Pace Project No.: 30637359

Dear Tiffany Bailey:

Enclosed are the analytical results for sample(s) received by the laboratory on November 07, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Greensburg

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

Sincerely,

Carla Cmar
carla.cmar@pacelabs.com
(724)850-5600
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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



CERTIFICATIONS

Project: M3K0262
Pace Project No.: 30637359

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991

Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572023-03
New Hampshire/TNI Certification #: 297622
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: M3K0262
Pace Project No.: 30637359

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30637359001	M3K0262-01	Water	10/19/23 12:37	11/07/23 09:10
30637359002	M3K0262-02	Water	10/19/23 12:54	11/07/23 09:10
30637359003	M3K0262-03	Water	10/19/23 13:26	11/07/23 09:10
30637359004	M3K0262-04	Water	10/19/23 13:44	11/07/23 09:10
30637359005	M3K0262-05	Water	10/19/23 14:04	11/07/23 09:10
30637359006	M3K0262-06	Water	10/19/23 14:19	11/07/23 09:10

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: M3K0262
Pace Project No.: 30637359

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30637359001	M3K0262-01	EPA 903.1	CLM	1	PASI-PA
		EPA 904.0	VAL	1	PASI-PA
30637359002	M3K0262-02	EPA 903.1	CLM	1	PASI-PA
		EPA 904.0	VAL	1	PASI-PA
30637359003	M3K0262-03	EPA 903.1	CLM	1	PASI-PA
		EPA 904.0	VAL	1	PASI-PA
30637359004	M3K0262-04	EPA 903.1	CLM	1	PASI-PA
		EPA 904.0	VAL	1	PASI-PA
30637359005	M3K0262-05	EPA 903.1	CLM	1	PASI-PA
		EPA 904.0	VAL	1	PASI-PA
30637359006	M3K0262-06	EPA 903.1	CLM	1	PASI-PA
		EPA 904.0	VAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: M3K0262
Pace Project No.: 30637359

Method: EPA 903.1
Description: 903.1 Radium 226
Client: Microbac Laboratories, Inc.-OH
Date: November 29, 2023

General Information:

6 samples were analyzed for EPA 903.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Additional Comments:

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PROJECT NARRATIVE

Project: M3K0262
Pace Project No.: 30637359

Method: EPA 904.0
Description: 904.0 Radium 228
Client: Microbac Laboratories, Inc.-OH
Date: November 29, 2023

General Information:

6 samples were analyzed for EPA 904.0 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Additional Comments:

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

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: M3K0262
 Pace Project No.: 30637359

Sample: M3K0262-01 Lab ID: 30637359001 Collected: 10/19/23 12:37 Received: 11/07/23 09:10 Matrix: Water
 PWS: Site ID: Sample Type:

Comments: • Only 500 ml sent for each sample, lab notified 11/9/23.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 903.1	0.849 ± 0.930 (1.50) C:NA T:78%	pCi/L	11/28/23 13:27	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 904.0	0.402 ± 0.530 (1.13) C:82% T:78%	pCi/L	11/20/23 15:11	15262-20-1	

Sample: M3K0262-02 Lab ID: 30637359002 Collected: 10/19/23 12:54 Received: 11/07/23 09:10 Matrix: Water
 PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 903.1	-0.257 ± 0.558 (1.29) C:NA T:86%	pCi/L	11/28/23 13:40	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 904.0	0.345 ± 0.466 (0.995) C:73% T:76%	pCi/L	11/20/23 15:11	15262-20-1	

Sample: M3K0262-03 Lab ID: 30637359003 Collected: 10/19/23 13:26 Received: 11/07/23 09:10 Matrix: Water
 PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 903.1	0.000 ± 0.352 (0.716) C:NA T:89%	pCi/L	11/28/23 13:40	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 904.0	0.272 ± 0.455 (0.991) C:80% T:75%	pCi/L	11/20/23 15:11	15262-20-1	

Sample: M3K0262-04 Lab ID: 30637359004 Collected: 10/19/23 13:44 Received: 11/07/23 09:10 Matrix: Water
 PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 903.1	0.308 ± 0.669 (1.23) C:NA T:77%	pCi/L	11/28/23 13:40	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 904.0	0.195 ± 0.421 (0.932) C:78% T:81%	pCi/L	11/20/23 15:11	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: M3K0262
 Pace Project No.: 30637359

Sample: M3K0262-05		Lab ID: 30637359005	Collected: 10/19/23 14:04	Received: 11/07/23 09:10	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 903.1	0.605 ± 0.660 (1.04)		pCi/L	11/28/23 13:40	13982-63-3	
C:NA T:77%							
Pace Analytical Services - Greensburg							
Radium-228	EPA 904.0	0.387 ± 0.427 (0.889)		pCi/L	11/20/23 15:11	15262-20-1	
C:78% T:83%							

Sample: M3K0262-06		Lab ID: 30637359006	Collected: 10/19/23 14:19	Received: 11/07/23 09:10	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 903.1	-0.0753 ± 0.391 (0.905)		pCi/L	11/28/23 13:40	13982-63-3	
C:NA T:85%							
Pace Analytical Services - Greensburg							
Radium-228	EPA 904.0	0.469 ± 0.418 (0.838)		pCi/L	11/20/23 15:12	15262-20-1	
C:77% T:84%							

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QUALITY CONTROL - RADIOCHEMISTRY

Project: M3K0262
 Pace Project No.: 30637359

QC Batch: 628304 Analysis Method: EPA 903.1
 QC Batch Method: EPA 903.1 Analysis Description: 903.1 Radium-226
 Laboratory: Pace Analytical Services - Greensburg
 Associated Lab Samples: 30637359001, 30637359002, 30637359003, 30637359004, 30637359005, 30637359006

METHOD BLANK: 3062813 Matrix: Water
 Associated Lab Samples: 30637359001, 30637359002, 30637359003, 30637359004, 30637359005, 30637359006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.192 ± 0.220 (0.130) C:NA T:91%	pCi/L	11/28/23 13:15	

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

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QUALITY CONTROL - RADIOCHEMISTRY

Project: M3K0262
 Pace Project No.: 30637359

QC Batch: 628305	Analysis Method: EPA 904.0
QC Batch Method: EPA 904.0	Analysis Description: 904.0 Radium 228
	Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30637359001, 30637359002, 30637359003, 30637359004, 30637359005, 30637359006

METHOD BLANK: 3062814 Matrix: Water
 Associated Lab Samples: 30637359001, 30637359002, 30637359003, 30637359004, 30637359005, 30637359006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.354 ± 0.279 (0.540) C:86% T:87%	pCi/L	11/20/23 15:11	

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

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QUALIFIERS

Project: M3K0262
Pace Project No.: 30637359

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

Act - Activity

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

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

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

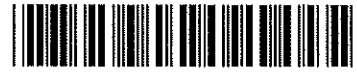
Carr - Carrier Recovery (%)

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

TNI - The NELAC Institute.

REPORT OF LABORATORY ANALYSIS

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SUBCONTRACTED CHAIN OF CUSTODY
M3K0262

SENDING LABORATORY:

Microbac Laboratories Inc., - Marietta, OH
158 Starlite Drive
Marietta, OH 45750
Phone: 800.373.4071
Lab Manager: Tiffany Bailey
Email: Tiffany.Bailey@microbac.com

RECEIVING LABORATORY:

Pace Analytical - Greensburg, PA
1638 Roseytown RD STE 2, 3, 4
Greensburg, PA 15601
Phone: (724) 850-5615

Project Info:

Project Type: ENV-WasteWater Report TAT: 14
Project Location: Ohio Due: 11/24/2023 17:00

Sample ID: M3K0262-01

Sampled: 10/19/2023 12:37

Sampler:

Matrix: Aqueous

Description: KC-9501

Analysis	Method	Analysis Due	Expires
Radium-226 E903 Radium-226	EPA 903.0 pCi/L <i>Carrier Recovery(Surr)</i>	11/24/2023 16:00	04/19/2024 12:37
Radium-228 E904 Radium-228 <i>Carrier Recovery(Surr)</i>	EPA 904.0 pCi/L <i>Barium Carrier Recovery(Surr)</i> <i>Yttrium Carrier Recovery(Surr)</i>	11/24/2023 16:00	04/19/2024 12:37

Sample ID: M3K0262-02

Sampled: 10/19/2023 12:54

Sampler:

Matrix: Aqueous

Description: KC-9502

Analysis	Method	Analysis Due	Expires
Radium-226 E903 Radium-226	EPA 903.0 pCi/L <i>Carrier Recovery(Surr)</i>	11/24/2023 16:00	04/19/2024 12:54
Radium-228 E904 Radium-228 <i>Carrier Recovery(Surr)</i>	EPA 904.0 pCi/L <i>Barium Carrier Recovery(Surr)</i> <i>Yttrium Carrier Recovery(Surr)</i>	11/24/2023 16:00	04/19/2024 12:54

Sample ID: M3K0262-03

Sampled: 10/19/2023 13:26

Sampler:

Matrix: Aqueous

Description: KC-9504

Analysis	Method	Analysis Due	Expires
Radium-226 E903 Radium-226	EPA 903.0 pCi/L <i>Carrier Recovery(Surr)</i>	11/24/2023 16:00	04/19/2024 13:26
Radium-228 E904 Radium-228 <i>Carrier Recovery(Surr)</i>	EPA 904.0 pCi/L <i>Barium Carrier Recovery(Surr)</i> <i>Yttrium Carrier Recovery(Surr)</i>	11/24/2023 16:00	04/19/2024 13:26

WO# : 30637359



30637359



SUBCONTRACTED CHAIN OF CUSTODY

M3K0262

Sample ID: M3K0262-04

Sampled: 10/19/2023 13:44

Sampler:

Matrix: Aqueous

Description: kc-9507

Analysis	Method	Analysis Due	Expires
Radium-226 E903 Radium-226	EPA 903.0 pCi/L <i>Carrier Recovery(Surr)</i>	11/24/2023 16:00	04/19/2024 13:44
Radium-228 E904 Radium-228 <i>Carrier Recovery(Surr)</i>	EPA 904.0 pCi/L <i>Barium Carrier Recovery(Surr)</i> <i>Yttrium Carrier Recovery(Surr)</i>	11/24/2023 16:00	04/19/2024 13:44

Sample ID: M3K0262-05

Sampled: 10/19/2023 14:04

Sampler:

Matrix: Aqueous

Description: KC-9508

Analysis	Method	Analysis Due	Expires
Radium-226 E903 Radium-226	EPA 903.0 pCi/L <i>Carrier Recovery(Surr)</i>	11/24/2023 16:00	04/19/2024 14:04
Radium-228 E904 Radium-228 <i>Carrier Recovery(Surr)</i>	EPA 904.0 pCi/L <i>Barium Carrier Recovery(Surr)</i> <i>Yttrium Carrier Recovery(Surr)</i>	11/24/2023 16:00	04/19/2024 14:04

Sample ID: M3K0262-06

Sampled: 10/19/2023 14:19

Sampler:

Matrix: Aqueous

Description: KC-9509

Analysis	Method	Analysis Due	Expires
Radium-226 E903 Radium-226	EPA 903.0 pCi/L <i>Carrier Recovery(Surr)</i>	11/24/2023 16:00	04/19/2024 14:19
Radium-228 E904 Radium-228 <i>Carrier Recovery(Surr)</i>	EPA 904.0 pCi/L <i>Barium Carrier Recovery(Surr)</i> <i>Yttrium Carrier Recovery(Surr)</i>	11/24/2023 16:00	04/19/2024 14:19

WO# : 30637359
 PM: CMC Due Date: 11/30/23
 CLIENT: MICROBAC-OH

Stephanie Murphy 11/06/2023 1255 *[Signature]* 11/7/23 910
 Released By Date Received By Date

Released By Date Received By Date

DC#_ Title: ENV-FRM-GBUR-0088 v06_Samp
 Pittsburgh
 Effective Date: 09/20/2023

WO#: 30637359

PM: CMC Due Date: 11/30/23
 CLIENT: MICROBAC-OH

Client Name: Microbac

Courier: Fed Ex UPS USPS Client Commercial Pace Other

Initial / Date

Tracking Number: 7128 2695 4113

Examined By: LB 11-7-23
 Labeled By: LB 11-8-23
 Temped By: _____

Custody Seal on Cooler/Box Present: Yes No
 Thermometer Used: _____ Type of Ice: Wet Blue None Seals Intact: Yes No

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

Comments:	Yes	No	NA	pH paper Lot#	D.P.D. Residual Chlorine Lot #
				<u>1000831</u>	
Chain of Custody Present	X				1.
Chain of Custody Filled Out: -Were client corrections present on COC	X				2.
Chain of Custody Relinquished	X	X			3.
Sampler Name & Signature on COC:		X			4.
Sample Labels match COC: -Includes date/time/ID Matrix: <u>WT</u>	X				5.
Samples Arrived within Hold Time:	X				6.
Short Hold Time Analysis (<72hr remaining):		X			7.
Rush Turn Around Time Requested:		X			8.
Sufficient Volume: <u>LB 11-7-23</u>	X	X			9. 500ml sent for each test.
Correct Containers Used: -Pace Containers Used	X				10.
Containers Intact:	X				11.
Orthophosphate field filtered:			X		12.
Hex Cr Aqueous samples field filtered:			X		13.
Organic Samples checked for dechlorination			X		14.
Filtered volume received for dissolved tests:			X		15.
All containers checked for preservation: exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix	X				16.
All containers meet method preservation requirements:	X			Initial when completed <u>LB</u> Lot# of added Preservative	Date/Time of Preservation
8260C/D: Headspace in VOA Vials (> 6mm)			X		17.
624.1: Headspace in VOA Vials (0mm)			X		18.
Trip Blank Present:			X		Trip blank custody seal present? YES or NO
Rad Samples Screened <.05 mrem/hr.	/			Initial when completed <u>PS</u> Date: <u>11/7/23</u> Survey Meter SN: <u>25014380</u>	
Comments:					

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

Attachment III

OHIO VALLEY ELECTRIC CORPORATION
 KYGER CREEK FLY ASH POND CLOSURE PROJECT
 MONITORING WELL KC-9501
 SAMPLING RESULTS

B A C K G R O U N D	Round	Date	Alkalinity (total) mg/l	Barium (diss) ug/l	Calcium (diss) mg/l	Chloride mg/l	Gross Alpha pCi/l	Gross Beta pCi/l	Iron (diss) mg/l	Lead (diss) ug/l	Magnesium (diss) mg/l	Manganese (diss) mg/l	Residue, Filterable, TDS mg/l	Selenium (diss) ug/l	Sodium (diss) mg/l	Sulfate mg/l	Conductivity Field mhos/c	Temperature Field °C	pH Field S.U.	Well Elev. ft.	River Elev. ft.	
	95% Tol.	Upper Lower	193 N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	593 N/A	N/A N/A	N/A N/A	221 N/A	1095 N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	
1	10/14/97	169	63	118	43	2.3	4.1	0.36	<2	20.7	0.78	545	<5	22.5	196	509	15.6	7.18	51.7	539		
2	01/06/98	179	65	108	41	5.5	6.9	0.3	<2	18.8	0.57	539	<5	21.5	200	585	15.4	7.1	51.4	540		
3	05/22/98	181	68	114	40	1.8	4	0.68	<2	21	0.64	576	<5	22.4	194	815	16.1	7.12	50.9	539		
4	07/21/98	168	63	121	40	2	3	0.61	<2	21.2	0.72	564	<5	23.6	203	760	16.5	7.11	51	539		
5	10/21/98	161	61	115	41	3.7	4	0.6	<2	20.4	0.61	548	<5	21.1	211	781	15.9	6.83	51.7	539		
6	01/13/99	171	64	114	40	1.5	5.1	0.59	<2	21.2	0.56	547	<5	21.8	208	760	15.3	6.71	51.7	540		
7	04/21/99	176	61	109	39	6	5.9	0.54	<2	20.5	0.52	549	<5	20.9	201	811	15.8	6.58	50.7	541		
8	07/27/99	167	64	117	31	5	3.6	0.55	<2	21.3	0.56	562	<5	21.5	207	813	17.9	6.64	51.4	540		
95% Tol.	Upper	193	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	593	N/A	N/A	221	1095	N/A	N/A	N/A	N/A	
95% Tol.	Lower	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
A S E N S I T I V E	1	10/13/99	160	61	117	41	5	6.6	0.56	<2	21.8	0.49	538	<5	21.8	222	818	18.4	6.8	52	539	
2	05/04/00	179	67	122	46	2.6	3.2	0.59	<2	21.6	0.66	578	<5	23.2	196	880	16.5	6.2	51.5	538		
3	10/19/00	138	65	116	39	1.3	3.2	0.59	<2	21.5	0.52	568	<5	22	237	818	15.92	6.27	52.25	539		
4	04/25/01	152	-	-	-	-	-	-	-	-	-	600	-	-	214	864	16.37	6.34	51.83	539		
5	10/04/01	149	61	119	-	6	6.2	0.65	<2	22.3	0.53	571	<5	21.6	219	822	16.48	7.26	52.68	538		
6	06/05/02	162	-	-	36	-	-	-	-	-	-	620	-	-	234	814	16.35	7.24	51.50	538		
7	10/31/02	152	71	117	43	4.5	5.3	0.45	<2	20.9	0.63	565	<5	24.8	237	798	15.38	7.30	52.39	538		
8	04/08/03	133	-	-	-	-	-	-	-	-	-	570	-	-	258	826	15.29	7.34	49.50	541		
9	10/09/03	137	69	115	38	0.8	3.4	0.39	<2	20.1	0.61	552	<5	24	235	784	15.24	7.51	52.50	538		
10	05/05/04	153	-	-	-	-	-	-	-	-	-	563	-	-	214	791	15.16	7.43	50.55	540		
11	10/21/04	136	66	118	30	5	5.9	0.2	<2	18.1	0.65	529	<5	23.4	204	791	15.40	7.37	52.45	540		
12	04/26/05	140	-	-	-	-	-	-	-	-	-	517	-	-	207	803	15.20	7.27	49.00	542		
13	10/19/05	132	51	96.6	34	7.9	7.3	0.03	<2	16	0.37	732	<5	25.6	208	759	15.50	7.31	52.00	539		
14	04/18/06	128	-	-	-	-	-	-	-	-	-	489	-	-	198	764	15.40	7.26	51.84	539		
15	10/19/06	126	55	101	38	4.3	4.1	0.09	<10	15.8	0.57	492	<20	19.9	207	734	15.60	7.30	50.40	541		
16	04/27/07	127	-	-	-	-	-	-	-	-	-	541	-	-	192	840	14.60	7.41	50.14	539		
17	11/05/07	143	64	108	-	4.6	2.8	0.03	<5	15.8	0.69	566	<0.5	27.4	193	832	14.60	7.00	51.66	539		
18	04/22/08	160	-	-	-	-	-	-	-	-	-	591	-	-	186	513	14.62	5.87	52.80	539		
19	11/04/08	132	76	116	30.9	1.5	1.09	0.04	<0.05	19.4	0.89	519	<0.5	24.6	192	506	15.10	6.94	52.29	539		
20	04/23/09	132	-	-	30.3	-	-	-	-	-	-	500	-	-	192	762	13.78	7.21	51.22	539		
21	10/21/09	151	55	90.2	31.7	7.2	6.1	0.02	<10	15.2	0.36	499	<0.5	21.1	189	740	16.20	7.33	52.00	539		
22	04/20/10	151	-	-	-	-	-	-	-	-	-	500	-	-	189	759	14.90	7.50	51.85	539		
23	10/15/10	158	63	102	31.5	2.9	3.8	0.17	<10	17.8	0.61	495	<0.5	22.6	195	702	14.80	7.33	52.30	539		
24	06/07/11	164	-	-	-	-	-	-	-	-	-	513	-	-	185	748	14.80	6.72	50.50	539		
25	10/19/11	188	56	94.8	24.6	5.3	7.5	0.38	<10	18.3	0.44	484	<0.5	20.6	168	709	14.00	7.31	51.50	539		
26	04/25/12	204	-	-	20	-	-	-	-	-	-	503	-	-	147	684	14.10	7.35	51.62	539		
27	10/09/12	247	60.7	110	22.1	4.7	2.9	0.39	0.04	21	0.48	492	<0.1	21.5	146	739	13.60	7.08	52.30	539		
28	04/24/13	220	-	-	18.2	-	-	-	-	-	-	508	-	-	128	754	14.60	7.44	52.10	538		
29	10/24/13	218	63.3	114	22.7	1.9	1.2	0.34	0.06	19.9	0.53	508	<0.2	19.9	150	732	14.20	7.06	52.10	539		
30	04/17/14	228	-	-	-	-	-	-	-	-	-	531	-	-	155	781	14.30	7.45	51.10	540		
31	10/28/14	234	67	112	20.6	2.9	4.1	0.47	0.01	21.5	0.53	513	<0.1	20	160	835	14.70	7.03	52.20	538		
32	05/21/15	232	-	-	22.4	-	-	-	-	-	-	522	-	-	172	852	14.40	7.27	51.00	538		
33	10/29/15	235	68.5	126	20.7	4.9	7	0.53	0.02	24.8	0.61	558	<0.03	21	173	845	14.50	7.14	51.40	539		
34	04/21/16	252	-	-	22.9	-	-	-	-	-	-	528	-	-	173	789	15.00	7.27	51.70	539		
35	10/13/16	260	68.6	122	20.9	14.4	4.9	0.43	0.01	23.8	0.57	518	<0.03	20.2	160	887	15.00	7.16	52.90	539		
36	04/27/17	254	-	-	23.5	-	-	-	-	-	-	534	-	-	173	854	14.90	6.86	50.70	540		
37	10/17/17	259	76.4	124	22.2	2.6	8.3	0.56	0.01	24.1	0.64	569	<0.03	19.3	202	909	15.50	7.16	52.10	539		
38	06/06/18	256	-	-	23.7	-	-	-	-	-	-	591	-	-	206	894	14.90	7.18	50.90	540		
39	10/18/18	270	70.7	121	23.4	3	0	0.54	<0.02	23.3	0.59	578	<0.03	17.9	193	977	14.80	7.16	51.00	540		
40	04/22/19	247	-	-	23.8	-	-	-	-	-	-	603	-	-	199	959	14.50	7.11	48.40	541		
41	10/29/19	277	73.3	118	24	1.47	2.54	0.68	<0.05	26	0.49	578	<0.03	19.4	189	856	15.00	6.96	52.30	541		
42	06/12/20	261	-	-	26.2	-	-	-	-	-	-	683	-	-	242	927	15.60	7.23	51.00	536		
43	10/23/20	246	83.4	140	24.3	0.75	0.89	2.4	<0.05	28	0.7	763	<0.03	18.2	232	939	14.30	7.27	52.30	539		
44	04/28/21	244	-	-	26.5	-	-	-	-	-	-	651	-	-	242	997	14.60	7.43	51.70	539		
45	10/19/22	266	80.7	142	26	0.2	1.12	0.79	<0.03	28.4	0.75	660	<0.5	20	242	1007	15.7	7.13	52.6	539		
46	04/22/22	259	-	-	25.9	-	-	-	-	-	-	660	-	-	266	1016	14.7	7.23	50.2	541		
47	10/25/22	250	82.8	129	25.2	0.74	0	0.73	<0.05	27.1	0.73	670	<0.09	18.7	260	946	14.8	7.17	52.9	537		
48	05/24/23	232	-	-	25.2	-	-	-	-	-	-	680	-	-	263	614	14.6	7.29	52.3	537		
49	10/19/23	227	82.7	146	26.1	1.5	1.13	0.78	<0.05	29.3	0.83	690	<0.04	20.1	278	916	14.6	7.24	52.6	539		

OHIO VALLEY ELECTRIC CORPORATION
 KYGER CREEK FLY ASH POND CLOSURE PROJECT
 MONITORING WELL KC-9502
 SAMPLING RESULTS

B A C K G R O U N D	Round	Date	Alkalinity	Barium	Calcium	Chloride	Gross Alpha	Gross Beta	Iron	Lead	Magnesium	Manganese	Residue, Filterable, TDS	Selenium	Sodium	Sulfate	Conductivity	Temperature	pH	Well	River
			(total) mg/l	(diss) ug/l	(diss) mg/l	mg/l	pCi/l	pCi/l	(diss) mg/l	(diss) ug/l	(diss) mg/l	(diss) mg/l	mg/l	(diss) ug/l	(diss) mg/l	mg/l	Field umhos/cm	Field °C	Field S.U.	Elev. ft.	Elev. ft.
	1	10/14/97	19	19	59.1	38	1	2.7	3.79	<2	20.9	16.5	464	△	24.1	233	409	15.68	5.69	51.65	538.6
	2	01/06/98	17	21	56.1	40	4.8	12.8	5.37	3	18.2	11.6	449	△	24.8	232	455	15.6	5.69	51.37	539.5
	3	05/22/98	19	24	55.6	40	<1	2.7	6.67	<2	19	12.6	494	△	24.9	238	623	15.93	5.7	50.81	538.8
	4	07/21/98	17	19	59.4	40	<1	2.1	6.85	3	20	13.4	463	△	25	236	604	16.4	5.48	50.9	539
	5	10/21/98	18	18	58.6	40	<1	2.1	5.54	<2	19	13.3	474	△	23	232	606	15.91	5.49	51.62	539
	6	01/13/99	15	23	54.3	42	<1	1.5	6.86	2	18.7	11.4	470	△	23.8	239	594	15.62	5.23	51.66	539.5
	7	04/21/99	15	16	53.5	34	<1	1.7	2.11	3	18	13.1	478	△	22.1	236	633	16.25	5.24	50.65	541
	8	07/27/99	16	19	58.6	31	1.7	2.3	3.38	4	19.2	14.6	510	△	24.1	220	634	17.89	5.36	51.36	540
	95% Tol.	Upper	22	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	536	N/A	N/A	252	847	N/A	N/A	N/A	N/A
	95% Tol.	Lower	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
A S E N S I T I V E	1	10/13/99	18	16	59.7	45	0	5.8	1.64	<2	19.5	16.2	461	△	23.3	239	640	16.96	5.49	51.9	538.5
	2	05/04/00	18	19	58.7	58	0.4	1.7	3.85	2	19.9	14.8	509	△	25.3	251	687	16.46	5.19	51.46	538
	3	10/19/00	20	19	58.4	31	1.1	1.8	4.68	<2	19.7	13.9	509	△	24.2	241	656	16.02	5.40	52.18	538.8
	4	04/25/01	18	-	-	-	-	-	-	-	-	-	546	-	-	240	593	15.86	5.89	51.67	539
	5	10/04/01	22	18	61.3	-	0	1.8	3.4	2	20	15	483	△	22.9	237	658	16.29	5.90	52.61	538
	6	06/05/02	22	-	-	40	-	-	-	-	-	-	612	-	-	247	640	15.73	5.81	51.46	538
	7	10/31/02	21	20	61.5	39	0.8	2.1	4.44	<2	20.4	14.4	492	△	24.5	248	641	15.39	5.91	52.31	538.4
	8	04/08/03	15	-	-	-	-	-	-	-	-	-	513	-	-	275	682	15.32	5.63	49.45	540.7
	9	10/09/03	20	23	62.1	42	0.8	1.1	4.23	<2	21.1	14.8	486	△	23.2	250	651	15.41	6.22	52.48	538
	10	05/05/04	19	-	-	-	-	-	-	-	-	-	538	-	-	266	685	15.16	6.04	50.50	540
	11	10/21/04	23	19	69.6	33	0.6	0	12.2	<2	21.3	12.1	516	△	24.9	279	726	15.40	5.86	52.00	540
	12	04/26/05	12	-	-	-	-	-	-	-	-	-	527	-	-	278	703	15.10	5.54	49.40	542
	13	10/19/05	16	15	59.7	32	1.2	2.9	7.28	5	19.7	13	522	△	27.8	260	693	15.80	5.67	51.94	539
	14	04/18/06	18	-	-	-	-	-	-	-	-	-	483	-	-	274	693	15.20	5.61	51.60	539
	15	10/19/06	15	16	56.3	32.9	1.7	3.2	7.18	<10	17.7	11.6	481	<20	19.2	278	694	15.40	5.57	50.30	541
	16	04/27/07	19	-	-	-	-	-	-	-	-	-	520	-	-	276	738	14.40	5.77	50.12	539
	17	11/05/07	18	7	64.5	-	1.1	0	6.26	<5	19.8	13	538	<0.5	25.3	259	716	14.60	5.81	51.57	539
	18	04/22/08	28	-	-	-	-	-	-	-	-	-	527	-	-	244	641	14.86	7.47	52.76	539
	19	11/04/08	26	<10	62.8	23.4	0.165	0.77	4.36	0.14	19.9	13.9	484	<0.5	24	226	438	15.12	5.91	52.18	539
	20	04/23/09	28	-	-	24.8	-	-	-	-	-	-	469	-	-	240	687	13.77	6.55	51.16	539
	21	10/21/09	27	<20	52.9	26.6	1.1	1.6	4.88	<10	17.3	11.7	484	<0.5	22.5	248	681	15.20	5.75	51.80	538.7
	22	04/20/10	31.5	-	-	-	-	-	-	-	-	-	487	-	-	247	708	14.80	5.96	51.68	539
	23	10/15/10	29.3	<20	60.1	32.2	0	2	5.74	<10	20.2	13.4	470	<0.5	23.9	300	627	14.70	5.91	52.20	539
	24	06/07/11	31.9	-	-	-	-	-	-	-	-	-	471	-	-	249	659	14.60	6.83	50.37	538.8
	25	10/19/11	32.8	<20	55.6	28.3	1.5	6	4.48	<10	18.2	11.8	478	<0.5	22.8	257	652	13.90	5.79	51.40	538.9
	26	04/25/12	31	-	-	23.9	-	-	-	-	-	-	478	-	-	240	616	14.00	5.55	51.58	538.7
	27	10/09/12	26	19	62.7	26.7	0.7	1.5	3.54	0.035	20.1	14.3	462	<0.1	24.7	228	646	13.50	5.03	52.12	538.5
	28	04/24/13	42	-	-	22.8	-	-	-	-	-	-	458	-	-	246	658	14.50	5.99	52.11	538.1
	29	10/24/13	33.8	18.9	62.1	26.6	0	0.8	4.89	0.144	19	14.2	474	<0.2	22.2	238	613	13.10	5.80	52.00	538.5
	30	04/17/14	33	-	-	-	-	-	-	-	-	-	480	-	-	246	680	14.20	5.84	51.00	540
	31	10/28/14	38.8	19.5	59	25.2	0.7	2.8	4.5	0.006	19.1	14.5	462	<0.1	23	242	690	14.70	6.50	52.20	538
	32	05/21/15	48.9	-	-	20.6	-	-	-	-	-	-	450	-	-	254	684	14.40	6.04	51.00	538.1
	33	10/29/15	41.1	19.6	66.4	25.8	1	1.1	2.44	0.016	20.8	18.6	446	<0.03	24.5	249	683	14.50	5.79	51.80	539
	34	04/21/16	45.7	-	-	21.7	-	-	-	-	-	-	473	-	-	261	644	14.80	5.75	51.70	539
	35	10/13/16	39.7	21.5	67.9	26.3	7.3	1.6	0.09	0.029	21.7	21.4	473	<0.03	23.4	264	761	14.90	5.51	52.80	538.9
	36	04/27/17	62.8	-	-	19.7	-	-	-	-	-	-	446	-	-	239	715	14.70	5.68	50.60	540.2
	37	10/17/17	59.2	20.1	64.6	23.2	0	10.1	3.28	0.01	20.7	15.1	470	<.03	22.1	259	710	15.30	5.89	52.00	539.1
	38	06/06/18	61	-	-	22.6	-	-	-	-	-	-	482	-	-	102	719	14.80	5.85	50.80	540.3
	39	10/18/18	48.3	22.4	68.4	27.1	0.6	1.7	0.53	0.03	21.2	20.6	515	0.04	22	275	811	14.10	5.73	50.90	539.8
	40	04/22/19	41.9	-	-	27.3	-	-	-	-	-	-	542	-	-	288	787	14.30	5.59	48.40	541.3
	41	10/29/19	29.7	24	63.1	27.2	0.049	1.13	0.4	<0.05	22.3	21.7	544	0.03	24.1	303	724	14.60	5.52	52.20	540.8
	42	06/12/20	28.4	-	-	27.9	-	-	-	-	-	-	559	-	-	305	730	15.40	5.45	51.00	536.2
	43	10/23/20	24.9	26.7	74.8	26.1	-0.49	2.46	0.16	<0.05	24.4	25.2	573	0.07	22.7	315	763	14.20	5.52	52.20	538.9
	44	04/28/21	28.8	-	-	27.7	-	-	-	-	-	-	566	-	-	310	997	14.40	5.60	51.70	539.2
	45	10/19/21	31	27.4	73.6	27.5	0.791	0.83	0.03	<0.3	24.4	24.5	580	<0.5	24	316	796	15.70	5.64	52.60	539
	46	04/22/22	42	-	-	23.5	-	-	-	-	-	-	520	-	-	299	1148	16.70	5.62	50.30	540.9
	47	10/25/22	27	28	74.4	27	-0.37	0.62	0.04	<0.05	24.4	26	590	<0.09	23.5	355	790	14.90	5.63	52.80	537.1
	48	05/24/23	25	-	-	25.2	-	-	-	-	-	-	590	-	-	356	512	14.50	5.70	52.30	537.3
	49	10/19/23	26	27.4	75.8	26.2	1.29	1	0.09	0.08	26	26.5	610	0.04	24.1	363	734	14.60	5.64	52.60	539.4

OHIO VALLEY ELECTRIC CORPORATION
 KYGER CREEK FLY ASH POND CLOSURE PROJECT
 MONITORING WELL KC-9504
 SAMPLING RESULTS

B A C K G R O U N D	Round	Date	Alkalinity	Barium	Calcium	Chloride	Gross Alpha	Gross Beta	Iron	Lead	Magnesium	Manganese	Residue, Filterable, TDS	Selenium	Sodium	Sulfate	Conductivity	Temperature	pH	Well	River
			(total) mg/l	(diss) ug/l	(diss) mg/l	mg/l	pCi/l	pCi/l	(diss) mg/l	(diss) ug/l	(diss) mg/l	(diss) mg/l	(diss) mg/l	(diss) mg/l	(diss) ug/l	(diss) mg/l	(diss) mg/l	Field mhos/cm	Field °C	Field S.U.	Elev. ft.
	1	10/14/97	103	58	135	41	1.3	4.6	0.66	<2	17.9	0.85	683	<5	29.9	327	594	16.7	6.98	47.5	539
	2	01/06/98	98	52	135	40	2.8	4.3	0.41	3	15.3	0.7	667	<5	30.6	324	653	16.5	6.86	47.5	540
	3	05/22/98	101	55	139	38	<1	2.4	1.03	<2	16.9	0.83	727	<5	30.5	349	916	16.8	6.86	46.8	539
	4	07/21/98	94	54	145	40	<1	2.4	1.05	<2	16.7	0.8	704	<5	30.8	345	871	17.3	6.89	46.9	539
	5	10/21/98	95	53	150	37	<1	2.2	0.85	3	17.7	0.89	737	<5	30.4	369	915	16.6	6.78	47.9	539
	6	01/13/99	108	58	147	39	<1	2	1.06	2	17.8	0.81	744	<5	31.3	370	942	16.1	6.57	48	540
	7	04/21/99	89	45	138	32	28	29	0.33	<2	17.4	0.69	716	<5	28.6	371	1198	17.1	5.19	46.4	541
	8	07/27/99	118	49	179	35	4.3	5.8	0.85	<2	20.5	0.93	852	<5	32.1	421	1071	18.1	6.29	47.2	540
	95% Tol.	Upper	130	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	908	N/A	N/A	459	1528	N/A	N/A	N/A	N/A
	95% Tol.	Lower	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S E N U M I A L	1	10/13/99	117	45	184	32	12	15.6	0.91	<2	22.3	1.06	856	<5	32.2	440	1118	17.1	6.37	47.9	539
	2	05/04/00	124	44	186	58	0.8	4.8	1.17	2	22.2	1.05	919	<5	29.2	429	1182	16.4	5.92	48	538
	3	10/19/00	118	40	190	36	5.6	11.6	1.44	<2	24	0.92	928	<5	29.7	467	1161	16.44	6.06	48.75	539
	4	04/25/01	122	-	-	-	-	-	-	-	-	-	1070	-	-	537	968	17.42	6.04	48.25	539
	5	10/04/01	116	35	222	-	2.8	5.1	1.75	<2	27.9	0.91	1010	<5	27.9	527	1105	16.99	5.64	49.01	538
	6	06/05/02	104	-	-	36	-	-	-	-	-	-	1050	-	-	561	1205	16.85	6.83	48.00	538
	7	10/31/02	99	38	203	42	4.3	4	1.69	<2	29.3	1.16	1010	<5	24	559	1203	16.48	6.87	48.70	538
	8	04/08/03	97	-	-	-	-	-	-	-	-	-	1040	-	-	555	1301	16.47	6.92	46.50	541
	9	10/09/03	93	36	198	43	1.9	1	1.81	<2	31.2	1.22	979	<5	23.2	524	1186	16.28	7.40	49.20	538
	10	05/05/04	107	-	-	-	-	-	-	-	-	-	1040	-	-	532	1216	15.50	6.97	46.90	540
	11	10/21/04	82	32	185	38	2.6	1.7	1.93	<2	31.2	0.94	941	<5	23.3	519	1141	16.80	6.89	48.72	540
	12	04/26/05	78	-	-	-	-	-	-	-	-	-	977	-	-	519	1221	16.70	6.97	45.45	542
	13	10/19/05	75	26	175	41	1.8	4.6	2.05	<2	34	1.04	1000	12	25.9	525	1216	17.10	6.97	48.50	539
	14	04/18/06	79	-	-	-	-	-	-	-	-	-	1050	-	-	565	1285	16.80	6.98	48.24	539
	15	10/19/06	70	27	213	47	10.8	4	1.84	<10	33.9	1.06	986	<20	17.7	558	1233	17.20	6.86	47.20	541
	16	04/27/07	69	-	-	-	-	-	-	-	-	-	1050	-	-	585	1350	16.20	7.11	46.65	539
	17	11/05/07	69	29	187	-	1.5	3.7	1.83	<5	32.1	1.27	1020	<0.5	23	503	1258	16.40	7.00	48.29	539
	18	04/22/08	144	-	-	-	-	-	-	-	-	-	1480	-	-	790	1413	17.47	6.83	57.68	539
	19	11/04/08	124	37	286	29.4	2.23	2.97	4.46	<0.05	46	3.37	1430	<0.5	23.1	820	1149	17.44	6.76	48.31	539
	20	04/23/09	127	-	-	34.5	-	-	-	-	-	-	1470	-	-	778	1607	16.15	7.63	47.32	539
	21	10/21/09	129	29	273	33.8	1.5	0	3.38	<10	38.3	2.65	1390	<0.5	21.2	785	1598	17.00	6.83	48.75	539
	22	04/20/10	138	-	-	-	-	-	-	-	-	-	1420	-	-	744	946	16.90	5.85	47.51	539
	23	10/15/10	127	34	277	38	1.9	0.9	4.28	<10	39.6	3.32	1330	<0.5	21.8	775	1432	16.80	6.80	48.23	539
	24	06/07/11	127	-	-	-	-	-	-	-	-	-	1280	-	-	668	1428	16.80	7.03	46.75	539
	25	10/19/11	123	24	207	36.2	2.1	3.5	3.8	<10	28.9	2.96	1180	<0.5	19.1	666	1366	15.80	6.73	48.05	539
	26	04/25/12	117	-	-	37.3	-	-	-	-	-	-	1090	-	-	541	1184	16.50	6.77	48.48	539
	27	10/09/12	111	26.5	208	37.3	3.3	3.3	4.18	0.41	29.6	3.08	957	<0.1	19.4	459	1181	15.60	6.78	49.08	539
	28	04/24/13	111	-	-	39	-	-	-	-	-	-	965	-	-	542	1211	16.50	7.13	48.84	538
	29	10/24/13	97.9	25.9	195	40.5	3	10.6	3.7	0.11	25	2.69	903	<0.2	15.9	452	1119	15.40	6.74	49.10	539
	30	014/17/14	99.7	-	-	-	-	-	-	-	-	-	949	-	-	484	1170	16.20	7.16	48.00	540
	31	10/28/14	89.9	26.6	184	42.4	2	2.3	3.51	0.01	24.3	2.52	898	<0.1	15.8	460	1226	16.60	6.49	49.20	538
	32	05/21/15	94.6	-	-	44.5	-	-	-	-	-	-	896	-	-	481	1500	16.10	6.84	48.10	538
	33	10/29/15	85.1	26.7	192	48.9	4.7	5.1	3.76	0.03	26.7	2.67	784	<0.03	16.6	464	1130	16.30	7.00	48.80	539
	34	04/21/16	92.1	-	-	45.2	-	-	-	-	-	-	795	-	-	428	1013	16.80	6.88	48.70	539
	35	10/13/16	86.6	26.7	166	45.8	16.5	4.6	3.2	0.01	23.7	2.28	757	<0.03	14.7	423	1137	16.50	6.91	49.60	539
	36	04/27/17	12.5	-	-	54.1	-	-	-	-	-	-	295	-	-	103	446	16.50	6.21	47.50	540
	37	10/17/17	21.8	30.2	63.1	52.6	1.5	0.5	0.82	0.04	6.92	0.32	321	<0.3	17.9	128	485	17.10	6.25	49.20	539
	38	06/06/18	36.1	-	-	53.8	-	-	-	-	-	-	330	-	-	102	504	16.70	6.56	47.20	540
	39	10/18/18	14.7	28.9	55.9	63.9	0.9	0	0.82	<0.02	5.9	0.42	312	<0.03	17.7	114	557	14.10	6.12	47.80	540
	40	04/22/19	14.4	-	-	70.2	-	-	-	-	-	-	391	-	-	129	571	17.10	6.27	45.40	541
	41	10/29/19	10	29.4	75.4	85.2	0.8	1.82	0.3	<0.05	7.7	0.15	464	0.04	33	185	643	16.30	6.39	48.90	541
	42	06/12/20	20.7	-	-	79.3	-	-	-	-	-	-	490	-	-	202	550	18.20	6.74	47.50	536
	43	10/23/20	10	26	90.9	80.9	-0.13	2.55	0.18	0.07	8.83	0.27	575	0.03	36.5	226	738	16.00	6.39	49.10	539
	44	04/28/21	10	-	-	86.3	-	-	-	-	-	-	568	-	-	250	837	16.20	6.49	48.50	539
	45	10/19/21	14	23.3	88.2	85.4	0	0.27	1.31	<0.3	9.43	0.46	540	<0.5	52.1	249	882	17.00	6.31	49.20	539
	46	04/22/22	13	-	-	83.4	-	-	-	-	-	-	540	-	-	259	1200	16.30	6.82	47.10	541
	47	10/25/22	13	21.3	81.9	86.8	0.06	0.09	0.47	<0.05	8.41	0.17	540	<0.09	54.7	256	776	16.90	6.71	49.50	537
	48	05/24/23	22	-	-	78.7	-	-	-	-	-	-	550	-	-	243	490	16.1	6.25	49.2	537
	49	10/19/23	16	26.4	113	89.9	0.72	0.99	0.86	<0.05	11.4	0.36	650	<0.04	53.2	326	834	16.4	7.01	49.1	539

OHIO VALLEY ELECTRIC CORPORATION
 KYGER CREEK FLY ASH POND CLOSURE PROJECT
 MONITORING WELL KC-9507
 SAMPLING RESULTS

B A C K G R O U N D	Round	Date	Alkalinity	Barium	Calcium	Chloride	Gross Alpha	Gross Beta	Iron	Lead	Magnesium	Manganese	Residue, Filterable, TDS	Selenium	Sodium	Sulfate	Conductivity	Temperature	pH	Well	River
			(total) mg/l	(diss) ug/l	(diss) mg/l	mg/l	µCi/l	µCi/l	(diss) mg/l	(diss) ug/l	(diss) mg/l	(diss) mg/l	mg/l	(diss) ug/l	(diss) mg/l	mg/l	µmhos/cm	Field °C	Field S.U.	Field pH	Elev. ft.
	1	10/14/97	40	28	150	35	4.6	5.5	18.5	<2	55.5	6.73	1000	<5	29.9	629	842	17.3	5.61	47.32	538.6
	2	01/06/98	42	24	138	37	3.4	6.3	14.1	3	45.8	4.42	993	<5	30.1	586	868	17.2	5.59	47.38	539.5
	3	05/22/98	44	29	141	30	<1	3.3	16.8	2	49	5.15	1080	<5	29.2	583	499	17.4	5.61	46.63	538.8
	4	07/21/98	46	24	162	28	10.9	16.2	17.5	<2	51.8	5.55	1060	<5	29.9	618	1236	17.8	5.64	46.77	539
	5	10/21/98	50	23	153	30	<1	3.1	17	<2	51.5	5.14	1050	<5	26.3	610	1209	17.2	5.57	47.8	539
	6	01/13/99	46	24	152	26	1.7	6.4	17.3	3	52.9	4.8	1070	<5	27.8	632	1214	16.7	5.16	47.98	539.5
	7	04/21/99	41	24	157	30	5	7.8	19.2	2	52.8	5.21	1130	<5	27.3	672	931	16.9	6.18	46.36	541
	8	07/27/99	38	22	156	29	9.6	6.6	22.5	<2	53.8	5.91	1110	<5	27.2	637	1306	19.4	5.3	47.15	540
	95% Tol	Upper	56	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1214	N/A	N/A	713	1895	N/A	N/A	N/A	N/A
	95% Tol	Lower	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
A S S E M B L	1	10/13/99	39	20	147	33	2.5	1.8	18.6	<2	49.5	4.93	954	<5	27.6	579	1226	17.2	5.36	47.86	538.5
	2	05/04/00	37	19	131	46	1.5	0.5	12.9	<2	43.4	3.72	981	<5	26.1	518	1182	16.9	5.07	48.35	538
	3	10/19/00	33	18	130	26	3.7	1.3	15.6	<2	45.3	4.34	919	<5	24.7	531	1138	16.82	5.28	48.69	538.8
	4	04/25/01	32	-	-	-	-	-	-	-	-	-	967	-	-	536	1309	17.26	5.68	48.17	539
	5	10/04/01	27	20	128	-	0.7	1.7	13.6	<2	41.8	3.57	860	<5	25.6	485	1267	17.75	6.91	48.99	538
	6	06/05/02	25	-	-	34	-	-	-	-	-	-	1110	-	-	563	1124	16.90	5.62	48.00	538
	7	10/31/02	24	24	122	41	0.7	1.9	18.6	<2	41.1	4.32	853	<5	24.6	530	1051	16.70	5.75	48.60	538.4
	8	04/08/03	22	-	-	-	-	-	-	-	-	-	843	-	-	505	1051	16.65	5.67	46.40	540.7
	9	10/09/03	22	21	118	45	0.8	2.6	18.6	<2	38.9	4.06	820	<5	22.9	479	1048	16.49	5.95	48.10	538
	10	05/05/04	22	-	-	-	-	-	-	-	-	-	941	-	-	515	1112	16.56	5.79	46.80	540
	11	10/21/04	21	19	123	34	0.8	2.5	26.4	<2	39.2	5.28	810	<5	24.3	514	1074	16.90	5.67	48.35	540
	12	04/26/05	22	-	-	-	-	-	-	-	-	-	782	-	-	463	1053	16.70	5.62	45.40	542
	13	10/19/05	20	13	96	39	0.7	1.2	17	<2	31.4	3.12	707	<5	25.3	400	961	17.10	5.71	48.35	539
	14	04/18/06	20	-	-	-	-	-	-	-	-	-	755	-	-	448	976	16.90	5.66	48.15	539
	15	10/19/06	20	15	103	36.9	0.7	0.9	27.5	<10	32.7	4.71	724	<20	21.2	445	1015	17.20	5.52	47.28	541
	16	04/27/07	22	-	-	-	-	-	-	-	-	-	808	-	-	463	1072	16.30	5.73	46.64	539
	17	11/05/07	25	17	100	-	2	3	31.4	<5	31.2	5.59	810	<0.5	23.2	396	996	16.50	5.62	48.15	539
	18	04/22/08	31	-	-	-	-	-	-	-	-	-	1120	-	-	649	1121	17.68	6.29	57.67	539
	19	11/04/08	26	22	232	36.6	-0.21	0.84	8.31	<0.05	31.5	1.89	1040	<0.5	16.2	592	894	17.49	6.22	52.49	539
	20	04/23/09	28	-	-	-	41.5	-	-	-	-	-	997	-	-	560	1200	16.30	7.01	47.22	539
	21	10/21/09	28	<20	144	40.5	2.6	0	8.44	<10	18.8	1.65	827	0.5	14.1	492	1060	17.20	5.86	48.80	538.7
	22	04/20/10	24	-	-	-	-	-	-	-	-	-	698	-	-	408	1022	17.00	6.93	47.40	539
	23	10/15/10	21.2	21	122	51.6	0.6	0	5.19	<10	14.2	0.937	593	<0.5	13.6	382	770	16.60	6.08	48.10	539
	24	06/07/11	26.7	-	-	-	-	-	-	-	-	-	627	-	-	319	858	16.80	7.07	46.85	538.8
	25	10/19/11	20.2	<20	77.8	40.9	3.1	4.7	1.26	<10	8.66	0.395	433	<0.5	10.6	212	543	15.80	5.81	48.02	538.9
	26	04/25/12	17	-	-	43.7	-	-	-	-	-	-	489	-	-	207	604	16.50	6.10	48.42	538.7
	27	10/09/12	14	21.3	85.4	49	1.4	2.6	0.64	0.03	8.18	0.211	433	<0.1	11.4	171	577	15.60	5.66	48.97	538.5
	28	04/24/13	15	-	-	48.8	-	-	-	-	-	-	402	-	-	168	557	16.40	6.33	48.78	538.1
	29	10/24/13	14.2	24.8	73.7	50.1	0	3.5	1.26	0.09	7.47	0.392	349	<0.2	11.3	142	517	15.40	6.74	49.10	538.5
	30	04/17/14	14.6	-	-	-	-	-	-	-	-	-	393	-	-	135	537	16.10	6.19	48.10	540
	31	10/28/14	25	25.2	60.7	50.8	0	4.7	0.13	0.02	6.46	0.277	343	<0.1	11.5	128	520	16.60	6.56	49.10	538
	32	05/21/15	26.5	-	-	56	-	-	-	-	-	-	353	-	-	136	546	15.90	6.26	48.00	538.1
	33	10/29/15	13.2	26.4	60.8	56.3	0.5	13.1	1.02	0.02	6.17	0.264	348	<0.03	12.8	130	484	16.30	6.13	48.70	539
	34	04/21/16	14.3	-	-	53.9	-	-	-	-	-	-	320	-	-	121	443	16.50	6.01	48.60	539
	35	10/13/16	14.8	29.3	61.6	54.6	0	0	1.22	0.03	6.73	0.382	339	0.04	16.2	133	510	16.40	6.02	49.60	538.9
	36	04/27/17	93.1	-	-	46.5	-	-	-	-	-	-	724	-	-	360	1054	16.50	6.95	46.90	540.2
	37	10/17/17	93.9	25.3	146	46	1.4	3.7	2.61	0.01	21.1	1.79	651	<0.03	13.6	346	970	16.70	6.93	48.70	539.1
	38	06/06/18	102	-	-	49.6	-	-	-	-	-	-	694	-	-	343	1089	16.60	6.93	47.10	540.3
	39	10/18/18	93.8	27.1	141	55.3	4.6	1.2	2.4	<0.02	19.2	1.65	662	<0.03	12.4	319	1121	15.90	6.99	47.80	539.8
	40	04/22/19	87.1	-	-	64.4	-	-	-	-	-	-	825	-	-	383	1230	16.00	6.59	45.50	541.3
	41	10/29/19	89.2	38.4	173	65.6	1.24	1.48	3.36	<0.05	25.1	2.64	911	<0.03	28	462	1231	16.60	6.99	48.90	540.8
	42	06/12/20	75.5	-	-	71.6	-	-	-	-	-	-	1050	-	-	537	1280	18.10	6.74	47.50	536.2
	43	10/23/20	100	31.3	207	63.5	-0.43	1.16	2.98	<0.05	26.8	2.44	945	<0.03	23.3	479	1350	16.50	6.99	49.10	538.9
	44	04/28/21	87.9	-	-	74.7	-	-	-	-	-	-	1080	-	-	566	1474	15.80	6.99	48.50	539.2
	45	10/19/21	92	32.1	222	73.8	0.45	0.7	3.11	<0.3	29.7	3.08	1120	<0.5	35.3	592	1537	17.80	7.02	49.20	539
	46	04/22/22	91	-	-	90.1	-	-	-	-	-	-	1380	-	-	814	1662	16.60	7.06	47.20	540.9
	47	10/25/22	83	32.5	249	87.6	0	1.16	3.05	<0.05	31.6	3.14	1340	<0.09	55.6	777	1615	17.00	6.96	49.60	537.1
	48	05/24/23	58	-	-	102	-	-	-	-	-	-	1430	-	-	827	1068	16.40	6.92	49.20	537.3
	49	10/19/23	67	31	271	101	1.23	0.93	3.84	<0.05	33.2	3.26	1560	<0.04	73.7	876	1714	16.00	7.01	49.10	539

OHIO VALLEY ELECTRIC CORPORATION
 KYGER CREEK FLY ASH POND CLOSURE PROJECT
 MONITORING WELL KC-9508
 SAMPLING RESULTS

B A C K G R O U N D	Round	Date	Alkalinity	Barium	Calcium	Chloride	Gross Alpha	Gross Beta	Iron	Lead	Magnesium	Manganese	Residue, Filterable, TDS	Selenium	Sodium	Sulfate	Conductivity	Temperature	pH	Well	River	
			(total) mg/l	(diss) ug/l	(diss) mg/l	mg/l	pC/l	pC/l	(diss) mg/l	(diss) ug/l	(diss) mg/l	(diss) mg/l	mg/l	(diss) ug/l	(diss) mg/l	mg/l	Field mhos/c	Field °C	Field S.U.	Elev. ft.	Elev. ft.	
	1	10/14/97	237	99	132	21	5.6	8.6	1.07	<2	20	1.24	558	<5	14.7	190	512	15	6.94	23.5	539	
	2	01/06/98	244	90	124	21	5.5	9.1	1.17	2	17.1	0.92	568	<5	15.3	196	588	14.9	6.85	23.4	540	
	3	05/22/98	236	99	133	22	2.5	4.7	2.15	<2	19.6	0.88	607	<5	15.7	203	840	15.1	6.91	22.7	539	
	4	07/21/98	230	98	146	21	3.1	3.8	2.35	<2	20.7	0.97	598	<5	15.8	208	805	15.4	6.81	22.8	539	
	5	10/21/98	210	101	144	23	3.3	3.9	2.32	<2	20	0.89	621	<5	14.9	245	819	15.1	6.83	23.5	539	
	6	01/13/99	233	98	136	21	3.5	5.2	2.28	2	19.7	0.86	600	<5	15.3	221	824	14.9	6.4	23.6	540	
	7	04/21/99	224	101	138	20	5	5.7	1.99	<2	19.2	0.78	608	<5	15.5	230	975	16.1	6.33	22.4	541	
	8	07/27/99	228	102	151	23	1.2	3.4	2.08	<2	20.7	0.79	659	<5	16.2	235	893	16.5	6.44	23.2	540	
	95% Tol.	Upper	263	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	702	N/A	N/A	279	1275	N/A	N/A	N/A	N/A	
	95% Tol.	Lower	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
S E N S I T I V E	1	10/13/99	228	104	155	23	2.6	3.2	2.22	<2	20.8	0.78	631	<5	16.7	247	904	15.3	6.56	23.7	539	
	2	05/04/00	221	104	158	32	0	2.3	2.29	<2	21.2	0.79	660	<5	16.8	247	969	15.3	5.93	23.9	538	
	3	10/19/00	238	108	156	23	5.9	4	2.08	<2	21.8	0.94	645	<5	16.5	253	980	15.33	5.96	24.03	539	
	4	04/25/01	229	-	-	-	-	-	-	-	-	-	691	-	-	264	729	15.14	5.97	23.58	539	
	5	10/04/01	244	111	171	-	4	4.4	2.58	<2	22.6	1.1	681	<5	16.9	273	974	15.34	6.96	24.27	538	
	6	06/05/02	233	-	-	24	-	-	-	-	-	-	754	-	-	283	962	15.25	6.98	23.46	538	
	7	10/31/02	233	116	172	26	3.4	6.7	2.95	<2	24.4	0.95	736	<5	18.1	315	1002	14.79	7.01	24.31	538	
	8	04/08/03	224	-	-	-	-	-	-	-	-	-	807	-	-	357	1087	14.81	6.89	24.80	541	
	9	10/09/03	227	99	193	24	1.3	4.2	3.23	<2	27.2	1.04	827	<5	19.8	370	996	15.10	7.24	24.30	538	
	10	05/05/04	228	-	-	-	-	-	-	-	-	-	896	-	-	380	1157	14.78	7.14	22.40	540	
	11	10/21/04	227	78	216	13	3.3	5	4.08	<2	27.2	1.09	841	<5	20.9	372	1148	15.00	6.93	24.00	540	
	12	04/26/05	229	-	-	-	-	-	-	-	-	-	803	-	-	351	1103	15.00	6.91	21.00	542	
	13	10/19/05	231	60	171	22	1.9	3.3	4.02	<2	24.3	0.98	778	<5	20.5	320	1064	15.10	6.96	23.77	539	
	14	04/18/06	228	-	-	-	-	-	-	-	-	-	761	-	-	332	1056	15.30	6.89	23.52	539	
	15	10/19/06	226	68	194	23.4	0	0.5	3.94	<10	25.6	0.95	759	<20	18.1	325	1050	15.30	6.88	22.04	541	
	16	04/27/07	231	-	-	-	-	-	-	-	-	-	795	-	-	314	1134	14.30	6.99	22.25	539	
	17	11/05/07	164	65	178	-	2	0.5	3.82	<5	24.8	1.09	882	<0.5	20.9	326	1112	14.40	6.93	23.68	539	
	18	04/22/08	207	-	-	-	-	-	-	-	-	-	794	-	-	320	852	14.80	7.16	25.83	539	
	19	11/04/08	199	74	200	23.3	2.99	1.2	4.24	<0.05	28.5	1.43	820	<0.5	20.5	337	751	15.30	7.11	24.49	539	
	20	04/23/09	231	-	-	30.2	-	-	-	-	-	-	806	-	-	334	1078	14.10	7.49	22.68	539	
	21	10/21/09	229	68	165	27.4	0.7	3.2	4.2	<10	24.4	0.94	774	<0.5	24.8	326	1083	15.20	6.96	24.00	539	
	22	04/20/10	230	-	-	-	-	-	-	-	-	-	815	-	-	340	1005	14.90	7.02	23.20	539	
	23	10/15/10	235	71	169	29.2	0	2.1	4.59	<10	26.3	1	742	<0.5	20.9	395	970	15.00	6.93	23.60	539	
	24	06/07/11	241	-	-	-	-	-	-	-	-	-	738	-	-	288	1019	14.90	7.36	22.37	539	
	25	10/19/11	234	71	165	27.4	3.1	5	4.2	<10	25.4	0.98	796	<0.5	21.6	336	1037	14.20	6.75	23.01	539	
	26	04/25/12	242	-	-	26.5	-	-	-	-	-	-	834	-	-	330	1020	15.00	6.89	23.70	539	
	27	10/09/12	229	-	75.5	194	27.3	3.5	3.5	5.33	0.04	29.9	1.06	838	<0.1	25	336	1112	14.20	6.72	23.91	539
	28	04/24/13	237	-	-	27.7	-	-	-	-	-	-	825	-	-	399	1161	15.40	7.09	23.90	538	
	29	10/24/13	223	70.9	189	29.8	1	2.3	5.41	0.08	27.1	1	830	<0.2	21.7	346	1109	14.80	6.59	23.70	539	
	30	04/17/14	225	-	-	-	-	-	-	-	-	-	844	-	-	346	1131	15.10	7.04	23.20	540	
	31	10/28/14	223	64.7	178	28.7	2.3	4.1	5.34	0.01	25.7	1.04	836	<0.1	21.3	364	1195	16.00	6.65	23.90	538	
	32	05/21/15	216	-	-	-	-	-	-	-	-	-	847	-	-	394	1231	15.30	6.76	22.10	538	
	33	10/29/15	213	67	208	32.7	1.9	2.5	6.5	0.02	30.5	1.3	800	<0.03	25.4	384	1184	15.80	6.71	23.50	539	
	34	04/21/16	215	-	-	30.7	-	-	-	-	-	-	868	-	-	391	1106	16.50	6.85	23.80	539	
	35	10/13/16	234	67	192	31.8	2.5	2	5.95	0.01	27.6	1.31	866	<0.03	21.9	420	1296	16.20	6.84	24.30	539	
	36	04/27/17	210	-	-	31.9	-	-	-	-	-	-	834	-	-	381	1188	16.45	6.75	22.30	540	
	37	10/17/17	237	57.1	176	30.4	3	0.4	5.79	0.01	26.2	1.19	788	<0.03	20.4	370	1135	17.30	6.83	24.00	539	
	38	06/06/18	225	-	-	30.7	-	-	-	-	-	-	777	-	-	342	1122	16.00	6.85	22.70	540	
	39	10/18/18	237	55.9	162	29.7	3.4	1.4	5.32	0.06	22.7	1.19	391	<0.03	17.8	317	1208	15.70	6.84	22.90	540	
	40	04/22/19	215	-	-	31	-	-	-	-	-	-	810	-	-	352	1163	16.90	6.96	20.30	541	
	41	10/29/19	208	65.2	164	33	-0.66	2.83	6.51	<0.05	25.5	1.46	838	0.03	19.9	362	1061	17.40	6.82	23.90	541	
	42	06/12/20	228	-	-	31.1	-	-	-	-	-	-	793	-	-	338	1071	18.10	7.00	22.70	536	
	43	10/23/20	221	61.4	168	29.5	0.84	2.56	6.49	<0.05	24.2	1.73	783	<0.03	17.7	311	1198	17.60	6.98	23.80	539	
	44	04/28/21	208	-	-	30.7	-	-	-	-	-	-	735	-	-	297	1050	16.90	6.89	23.30	539	
	45	10/19/21	217	56	149	30.3	0.39	1.67	5.74	<0.3	21.9	1.68	680	<0.5	17.6	283	1068	17.60	6.90	24.10	539	
	46	04/22/22	224	-	-	31.8	-	-	-	-	-	-	670	-	-	295	1216	17.00	7.12	22.40	541	
	47	10/25/22	213	63.1	134	33.6	-0.13	0.44	5.55	<0.05	21.3	1.81	690	<0.09	16	284	966	16.40	6.83	24.40	537	
	48	05/24/23	208	-	-	33.2	-	-	-	-	-	-	680	-	-	272	806	16.90	6.98	24.30	537	
	49	10/19/23	203	61.7	147	32.5	1.04	0.89	2.83	<0.05	21.8	1.59	660	<0.04	16.7	266	863	16.80	7.02	49.10	539	

OHIO VALLEY ELECTRIC CORPORATION
KYGER CREEK FLY ASH POND CLOSURE PROJECT
MONITORING WELL KC-9509

SAMPLING RESULTS

B A C K D R A G R A T I O N D	Round	Date	Alkalinity (total) mg/l	Barium (diss) ug/l	Calcium (diss) mg/l	Chloride mg/l	Gross Alpha pCi/l	Gross Beta pCi/l	Iron (diss) mg/l	Lead (diss) ug/l	Magnesium (diss) mg/l	Manganese (diss) mg/l	Residue, Filterable, TDS mg/l	Selenium (diss) ug/l	Sodium (diss) mg/l	Sulfate mg/l	Conductivity Field mhos/cm	Temperature Field °C	pH Field S.U.	Well Elev. ft.	River Elev. ft.	
	95% Tol.	Upper Lower	241 N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	680 N/A	N/A N/A	279 N/A	1213 N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	
1	10/14/97	195	51	133	18	<1	2.7	2.65	<2	22.4	0.87	603	<5	17.2	241	485	14.9	6.62	23.8	539		
2	01/06/98	201	45	122	24	1.5	3.1	1.58	2	19.3	0.48	605	<5	17.4	235	597	14.9	6.59	23.7	540		
3	05/22/98	210	47	128	21	<1	2.2	2.41	<2	20.4	0.58	642	<5	16.4	225	832	15.1	6.65	23	539		
4	07/21/98	201	47	143	21	<1	2.8	2.6	<2	22.3	0.63	621	<5	17.2	245	814	15.4	6.36	23.1	539		
5	10/21/98	230	45	141	23	1.6	3	2.19	<2	21.4	0.59	618	<5	15.7	220	820	15	6.48	23.8	539		
6	01/13/99	206	48	135	21	<1	2.5	2.39	<2	21.2	0.56	624	<5	16.6	261	827	14.9	5.87	24	540		
7	04/21/99	212	45	133	24	3.2	2.4	1.56	4	19.7	0.44	589	<5	15.6	235	857	15.3	6.14	22.8	541		
8	07/27/99	207	45	144	16	4.3	4.1	1.76	<2	21.3	0.47	646	<5	16.1	244	869	16.1	6.14	23.6	540		
95% Tol.	Upper	241	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	680	N/A	N/A	279	1213	N/A	N/A	N/A	N/A	
95% Tol.	Lower	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
A S E N S I T I V E	1	10/13/99	204	48	147	21	0.5	2	3.3	<2	21.9	0.62	622	<5	17.5	255	885	15.2	6.27	23.9	539	
	2	05/04/00	197	59	152	30	0	0.3	4.75	2	22.3	0.81	694	<5	18.2	278	959	15.3	5.65	23.6	538	
	3	10/19/00	201	55	168	15	2.2	1.8	2.34	<2	25.2	0.62	736	<5	18.9	326	1017	15.21	5.76	24.45	539	
	4	04/25/01	200	-	-	-	-	-	-	-	-	-	831	-	-	383	787	15.14	5.50	23.83	539	
	5	10/04/01	206	63	175	-	2.3	3.3	2.48	<2	25	0.68	734	<5	19.1	324	1027	15.32	6.75	24.62	538	
	6	06/05/02	190	-	-	23	-	-	-	-	-	-	793	-	-	348	992	15.21	6.69	23.75	538	
	7	10/31/02	162	74	164	24	0	2.1	4.35	<2	27.7	1.08	803	<5	23.3	395	1040	14.75	6.56	24.70	538	
	8	04/08/03	151	-	-	-	-	-	-	-	-	-	894	-	-	457	1136	14.85	6.40	22.10	541	
	9	10/09/03	149	59	178	25	1.3	4.6	1.32	<2	30.1	1.07	864	<5	22	443	1020	15.05	6.78	24.60	538	
	10	05/05/04	151	-	-	-	-	-	-	-	-	-	876	-	-	426	1101	14.89	6.58	22.68	540	
	11	10/21/04	149	65	184	18	1.6	4.3	4.14	<2	28.3	2.48	849	<5	22.1	436	1127	14.90	6.21	23.23	540	
	12	04/26/05	162	-	-	-	-	-	-	-	-	-	863	-	-	420	1129	15.00	6.31	21.90	542	
	13	10/19/05	152	49	165	22	1.5	4.3	2.45	3	28.2	5.36	846	<5	24.1	430	1093	15.10	6.48	24.15	539	
	14	04/18/06	165	-	-	-	-	-	-	-	-	-	841	-	-	410	1050	15.40	6.52	24.05	539	
	15	10/19/06	155	53	172	25.1	0.7	3.9	1.83	<10	25.1	8.99	761	<20	17.9	394	1023	15.20	6.47	22.36	541	
	16	04/27/07	158	-	-	-	-	-	-	-	-	-	830	-	-	381	1131	14.40	6.71	22.60	539	
	17	11/05/07	180	51	170	-	3	5.6	2.52	<5	26.6	8.58	896	<0.5	22.5	398	1173	14.40	6.61	24.00	539	
	18	04/22/08	164	-	-	-	-	-	-	-	-	-	745	-	-	328	794	14.95	6.63	26.16	539	
	19	11/04/08	167	59	145	21.8	1.67	1.61	3.61	<0.05	23.3	9	664	<0.5	18.4	263	622	15.26	6.84	23.94	539	
	20	04/23/09	167	-	-	25.5	-	-	-	-	-	-	693	-	-	304	921	14.09	7.51	22.98	539	
	21	10/21/09	162	54	127	25.1	1.2	3.7	5.24	<10	22.6	10.2	742	<0.5	19.8	351	994	15.20	6.44	24.50	539	
	22	04/20/10	170	-	-	-	-	-	-	-	-	-	781	-	-	349	1069	15.00	6.59	23.49	539	
	23	10/15/10	177	58	162	34.1	4.9	2.9	2.82	<10	28.7	10.1	825	<0.5	22.8	451	1032	15.00	6.66	24.18	539	
	24	06/07/11	184	-	-	-	-	-	-	-	-	-	834	-	-	361	1058	14.80	7.11	22.85	539	
	25	10/19/11	177	44	156	27.8	4.4	6.2	2.29	<10	27	10	868	<0.5	23	432	1069	14.20	6.38	23.60	539	
	26	04/25/12	207	-	-	27	-	-	-	-	-	-	861	-	-	391	1013	14.80	6.47	23.25	539	
	27	10/09/12	147	63.1	63.6	25.3	3	3.1	3.16	0.1	20.2	14.8	923	<0.1	25.3	430	1160	14.20	6.22	24.42	539	
	28	04/24/13	176	-	-	26.5	-	-	-	-	-	-	900	-	-	471	1188	15.40	6.71	24.35	538	
	29	10/24/13	137	72.6	158	26.5	2.3	0	6.76	0.51	27.8	22.5	832	<0.2	22.8	401	1069	15.00	6.22	24.90	539	
	30	04/17/14	131	-	-	-	-	-	-	-	-	-	922	-	-	454	1173	15.40	6.59	23.70	540	
	31	10/28/14	118	63.6	155	29.4	2.2	0	2.21	0.01	28.2	29.1	915	<0.1	24.7	473	1260	16.10	6.44	24.30	538	
	32	05/21/15	143	-	-	31.7	-	-	-	-	-	-	918	-	-	478	1262	15.40	6.63	23.40	538	
	33	10/29/15	112	49.6	166	32	6.1	0	2.55	0.02	31.1	33.8	886	<0.03	26.5	497	1204	15.70	6.13	23.80	539	
	34	04/21/16	109	-	-	31.9	-	-	-	-	-	-	877	-	-	499	950	16.60	6.15	24.20	539	
	35	10/13/16	113	62	134	29.2	3.1	2.7	7.04	0.01	26	36.2	779	<0.03	23.5	460	1126	16.50	6.11	24.69	539	
	36	04/27/17	110	-	-	32.2	-	-	-	-	-	-	854	-	-	463	1155	16.44	6.19	22.80	540	
	37	10/17/17	134	41.8	157	31.3	2.8	0	1.72	0.01	29	30.6	828	<0.03	23.7	464	1043	17.30	6.83	24.00	539	
	38	06/06/18	168	-	-	32.7	-	-	-	-	-	-	824	-	-	414	1119	16.00	6.50	23.10	540	
	39	10/18/18	150	49.5	147	33.4	1.5	5.1	2.38	0.21	25.7	26.2	828	<0.03	20.9	405	1212	16.10	6.43	23.30	540	
	40	04/22/19	162	-	-	33	-	-	-	-	-	-	812	-	-	375	1103	17.20	6.68	20.70	541	
	41	10/29/19	126	49.4	132	40.1	0.93	2.53	1.95	<0.05	26.1	30.1	804	<0.03	21.9	402	1045	17.10	6.70	24.90	541	
	42	06/12/20	126	-	-	38.3	-	-	-	-	-	-	768	-	-	373	1068	17.20	6.93	23.20	536	
	43	10/23/20	136	54.9	132	37.3	-0.19	1.53	3.53	<0.05	23.6	26.7	783	<0.03	18.8	330	1172	16.70	6.70	24.20	539	
	44	04/28/21	158	-	-	35.6	-	-	-	-	-	-	720	-	-	324	1034	16.40	6.80	23.70	539	
	45	10/19/21	148	62.2	117	40.8	0	0.86	6.45	<0.3	21.2	23.7	660	<0.5	18.9	296	1063	16.90	6.73	24.60	539	
	46	04/22/22	144	-	-	44	-	-	-	-	-	-	670	-	-	325	980	16.60	6.82	22.90	541	
	47	10/25/22	144	67.5	119	45.8	0.6	1.02	3.45	<0.05	22	19	680	<0.09	17.6	324	952	17.40	6.51	24.80	537	
	48	05/24/23	150	-	-	39.8	-	-	-	-	-	-	690	-	-	310	600	16.50	6.62	24.30	537	
	49	10/19/23	150	49.4	122	41.4	0.91	0.84	2.46	<0.05	21.1	16.7	700	<0.04	16.6	305	868	16.30	6.62	24.60	539	



APPENDIX B 1998 AND 2017 OEPA INTEROFFICE
MEMORANDUM



State of Ohio Environmental Protection Agency

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George V. Voinovich
Governor

To: Dan Messerly through Bruce Goff, DSW-SEDO

From: David ^{DH}Hunt through Mike ^{MMP}Preston, DDAGW-SEDO

Subject: Ohio Valley Electric Corporation - Ground Water Quality Results for May 1998
(DDAGW #: 07/22/98-04-3-05-0 3757)

Date: August 28, 1998

Introduction

The Ohio Valley Electric Corporation (OVEC) site is located in Gallia County, Ohio on State Route 7 approximately five miles north of Gallipolis, Ohio. There are two fly ash ponds at the OVEC site: the north and the south ponds. The PTI for closure plan is only for the closure of the north pond, while the south pond will continue to be used for fly ash disposal. The PTI was approved without OVEC having to address DDAGW's comments on the proposed ground water monitoring plan. The geology of interest beneath the OVEC site consists of unconsolidated sand and gravel formations of the Ohio River Valley Aquifer. There are two industrial, nonpotable well fields up river and down river of the north and south ponds. The industrial well fields and the Ohio River are the major influence of the ground water flow patterns at the OVEC site.

There are ten ground water monitoring wells at the closure site (KC-9501 through KC-9510) However, only wells KC-9501, KC-9502, KC-9504, KC-9507, KC-9508 and KC-9509 have been selected by OVEC for ground water monitoring purposes. Dedicated bladder pumps have been installed in these six wells for sampling purposes. The ground water monitoring package submitted on July 10, 1998 included ground water data for these six wells. The package also included water level data for fourteen wells present at the site. The six wells are proposed to be sampled quarterly for two years. No up gradient well was sampled, which is necessary to determine if an intrawell statistical approach is appropriate. DDAGW has commented on this before, but OVEC maintains that they will implement the ground water monitoring program in the approved PTI, which does not include a background well being monitored.

In a previous IOC to DSW, DDAGW outlined that based upon a comparison of shallow wells verses deep wells it appears that the water quality at the OVEC site is being impacted. Please refer to the January 1998 IOC for further information on the November sampling results.

The following are DDAGW's comments on the ground water monitoring data results in the July 1998 submittal for the OVEC site.

Observations

1. Since no background well was sampled, DDAGW has made several comparisons with the ground water quality results to evaluate whether the north fly ash pond has impacted ground water. These comparisons include shallow wells to deep wells, the wells on site to two ambient stations within the Ohio River Valley Aquifer, and the two well clusters monitoring the north fly ash pond to the cluster on the southern side of the south fly ash pond. The following are several observations about the water quality.
 - a. The shallow wells tend to have lower pH and alkalinity than the deeper wells at two of the three locations. The shallow wells KC-9502 and KC-9507 show pH ranging between 5.61 to 5.75, while the deeper well at the respective clusters, KC-9501 and KC-9504, showed pH near 7.0. Alkalinity in the deeper well 9501 was 181 ug/l, while the shallower well 9502 was at 19 ug/l.
 - b. Shallow wells 9502 and 9507 have higher concentrations of manganese, and iron versus the deep wells 9501 and 9504. Well 9501 has a manganese concentration of 0.64 mg/l while the shallow well at the same cluster has a manganese concentration of 12.6 mg/l. Iron is 1.03 mg/l in the deep well (9504) but is 16.8 mg/l in shallow well (9507).
 - c. In addition to the iron and manganese, 9507 (shallow well) has slightly higher concentrations of magnesium (Mg), TDS and sulfate (SO₄) when compared to the deep well, 9504.
 - d. The water quality for the cluster 9508 and 9509 was very similar for all parameters.
 - e. There has been fairly good consistency in water quality between the three ground water sampling events that have been performed to date, with the following exceptions: well 9502 is showing an increasing trend of iron (3.79 in 10/97 to 6.67 in 5/98); conductivity in well 9507 dropped from 850 in 10/97 and 868 in 1/98 down to 499 in 5/98; 9508 is showing a slight increase in iron between the three events while manganese is slightly decreasing.
 - f. Shallow wells 9502 and 9507 are close to being directly down gradient of the north fly ash pond while 9508 is located side gradient, or southward, of the south fly ash pond. Since there is no real difference between the deep and shallow wells at the 9508/09 location it stands to reason that the differences in water quality between shallow and deep at the other two locations may be related to a release from the north fly ash pond. Alkalinity, barium, calcium and pH are higher in the shallow well 9508 than found in 9502 and 9507. Iron and manganese are much

higher in 9502 and 9507 verses 9508. TDS, sulfate, and magnesium are higher in 9507 than found at 9508.

- g. DDAGW maintains two ground water ambient stations within the Ohio River Valley Aquifer near the OVEC site. The Middleport Well #4 and the Gallia Rural Water #4 stations are located near the OVEC site. Water quality from July 1998 at these two ambient locations was compared to the water quality being found at the OVEC site. Magnesium, barium, sodium, calcium and chloride are all similar in concentration in the ambient wells as found at the OVEC site. However, iron and manganese levels are much higher (1 to 2 orders of magnitude higher) in all of the wells (shallow and deep) at the OVEC site when compared to the ambient water quality. Interestingly, the OVEC deep wells show very similar alkalinity to the ambient wells.

Comments

1. No water level map was submitted with the three water quality reports. A potentiometric map should be submitted with the water quality data report.
2. In the June 25, 1997 memo on the ground water quality SAP, DDAGW recommended the inclusion of the background well KC-9506 in the initial two year sampling. As noted, this is particularly important in determining if an intrawell statistical approach is the best method for evaluating whether a release has occurred. Given the water quality from the first three quarters of monitoring, it appears that there are differences in water quality between the shallow and deep wells in two of the three clusters. Other differences in water quality were also evaluated above. These differences in water quality may be reflective of a release to ground water from the north pond. If a release has occurred at the OVEC site, then intrawell statistics cannot be used to evaluate a release. In order for OVEC to effectively demonstrate that no release has occurred and that intrawell comparison is appropriate, DDAGW continues to recommend that KC-9506 be included in the sampling effort.
3. Based on the water quality data and the submitted water level depth data, DDAGW continues to recommend that another monitoring well cluster be installed between the clusters 9501/9502 and 9504/9507 on the east side of the north fly ash pond. OVEC declined to install this well cluster in 1997 given that OEPA approved the PTI without this well as a component of the proposed ground water monitoring program. If OVEC will not install this monitoring well as part of detection monitoring program, then the cluster would likely be installed during assessment activities. Based on the review of the water quality data it is likely that assessment activities will be necessary.

Conclusion

DDAGW has completed its review of the July 1998 Ground Water Quality Report for the North Pond closure at the OVEC site in Gallia County. DDAGW made several observations

concerning the water quality data generated to date. Based on the water quality data it appears that there is a difference in water quality between the shallow and deep portions of the Ohio River Valley Aquifer on the down gradient side of the site. This may be an indication of a release from the north or south ponds. Should you have any further questions regarding this review or the site in general, please contact me.

cc: Scott Sutcliffe, DDAGW-CO

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DDAGW #: 07/22/98-04-3-05-0 3757



Gallia Co, OIB00005*DD

Ohio Valley Electric
Corp Kyger creek

Interoffice Memo

To: Marco Deshaies DSW, SEDO.
From: Steve Lowry through Steve Williams DDAGW, SEDO.
Date: February 7, 2017
RE: Ohio Valley Electric Corporation (OVEC), Kyger Creek Station, North Fly Ash Pond Closure Project, Internal Technical Review, Ground Water Program, Gallia County, OIB00005*PD
Subject: Review of the December 2015, May 2016 and December 2016 North Fly Ash Pond Closure Project Semi-annual groundwater sampling results.

INTRODUCTION

The DDAGW has reviewed the December 14, 2015, May 25, 2016 and the December 2, 2016 dated submittals containing the semiannual groundwater sampling and statistical analysis results from the North Fly Ash Pond Closure Project. These reports include data from the corresponding October 2015, April 2016 and October 2016 sampling events.

Groundwater monitoring of the North Fly Ash Pond is required as part of a January 15, 1997 PTI. Groundwater monitoring at the site began in October of 1997. The North Pond is closed and located immediately north of the adjacent and open South Fly Ash Pond. The North Fly Ash Pond was first used in the 1950's.

The statistical evaluations of groundwater quality contained in the above noted submittals indicate that the upper tolerance limits for the following parameters were exceeded at the following wells:

Alkalinity at wells KC-9501 and KC-9502, exceeded during all three sampling events.

Sulfate at wells KC-9508 and KC-9509, exceeded during all three sampling events, and at well KC-9502 during both 2016 events and KC-9504 during the October 2015 event.

TDS at wells KC-9508 and KC-9509, exceeded during all three sampling events.

Conductivity at well KC-9508 exceeded during the October 2016 sampling event.

Statistical exceedances have been declared by the facility for at least one parameter per sampling event since the beginning of the statistical evaluations, in October of 1999. As with past submittals, OVEC contends that "these statistical exceedances are due to natural variation and not associated with the North Fly Ash Closure Project".

The PTI does not include any provisions for further investigations related to the statistical increases, or for an assessment of the groundwater quality.

BACKGROUND

The facility has been conducting semi-annual groundwater monitoring at the North Fly Ash Pond since 1997. The PTI "Groundwater Sampling and Analysis Plan" is a rather brief document. The plan outlines sampling protocols and parameters and requires a statistical analysis of the four indicator parameters and a requirement to notify Ohio EPA of any statistically significant increases within 15 days of receipt of the analysis. As noted above, the plan does not contain any requirements for additional investigations or for the implementation of a groundwater assessment.

Per the PTI, during the spring sampling event, the statistical parameters of Alkalinity, Specific Conductance, Sulfate and TDS are collected and analyzed. During each fall sampling event, the above four parameters and an additional 12 water quality parameters are collected. The above three noted submittals contain the field parameters for the six sampled wells, total water depth measurements, river stage measurements, the laboratory data sheets for the sampled parameters, and a table that shows the sampling results for each parameter and the intra-well 95% confidence interval value for each of the statistical parameters.

Groundwater flow maps were not included in the submitted documents. The groundwater flow direction at the site is difficult to accurately determine due to the limited number of water level measurements included in the submittals. The lack of a submitted water level from an upgradient well also hinders evaluation of groundwater flow directions. Additionally, clarification may be necessary as water level data appears to be reported as a depth to water, from the top of the monitoring well inner casing, as opposed to mean sea level.

The North Fly Ash Pond is monitored by six wells which represent three well clusters, each monitoring two separate units. These wells are screened in sand and gravel deposits associated with the Ohio River. The wells range in depth from approximately 34 feet to 94 feet below grade. The well screens of each well cluster are separated by a distance of approximately two to five feet. The well clusters (shallow listed first) are grouped as follows: KC-9502/KC-9501, KC-9507/KC-9504, and KC-9509/KC-9508. Groundwater monitoring was not initiated at the North Fly Ash Pond until approximately 40 years after waste placement was initiated.

Wells KC-9509/KC-9508 are located primarily downgradient of the South Fly Ash Pond. These wells show the most significant impact to groundwater. The shallow well KC-9509 is showing statistically significant increases in conductivity, TDS and sulfate. Conductivity has increased from 485 umohs/cm in 1997 to 1,126 umoh/cm in 2016. TDS has increased from 603 mg/l to 779 mg/l and sulfate has increased from 241 mg/l to 460 mg/l over the same time period. The deeper well KC-9508 is showing

statistically significant increases in TDS and sulfate along with a visually increasing trend in conductivity since 2010. TDS in well KC-9508 has increased from 558 mg/l in 1997 to 866 mg/l in 2016, sulfate has increased from 190 mg/l in 2010 to 420 mg/l in 2016 and conductivity has increased from 512 umohs/cm in 1997 to 1,296 umoh/cm over the same time period.

Wells KC-9501/9502, located at the northernmost portion of the North Fly Ash Pond, has shown a statistically significant increase in alkalinity in both wells. Alkalinity in well KC-9501 has increased from 169 mg/l to 260 mg/l, and well KC-9502 from 19 mg/l to 45.7 mg/l over the 1997 to 2016 time period.

Wells KC 9507/9504 located downgradient of the North Fly Ash Pond reveals mostly decreasing trends in all statistically evaluated parameters, with the exception of deep well KC-9504, which has a statistically increasing trend for sulfate. The sulfate concentration in well KC-9504 started out at a concentration of 327 mg/l in 1997 and is currently at 423 mg/l. The sulfate concentration in this well was as high as 820 mg/l in 2008. The trend for sulfate in this well has been decreasing since 2008. TDS in this well is currently at a concentration of 757 mg/l with a past high of 1480 mg/l in 2008.

For comparison purposes, un-impacted groundwater from Ohio River sand and gravel deposits, from the Proctorville Wellfield (Lawrence County), reveal the following average concentrations: Alkalinity 58.2 mg/l, Conductivity 320.1 umhos/cm, TDS 195.7 mg/l and Sulfate 46.1 mg/l.

The sampling of additional existing groundwater monitoring wells, such as background well KC-9506 and possibly the KC-9505/9503 cluster may provide additional information regarding groundwater quality, flow directions and the extent of impacted ground water in the area of the North Fly Ash Pond. The installation of additional appropriately placed downgradient wells would also allow for a more meaningful evaluation of groundwater quality and flow directions in the area of the North Fly Ash Pond.

As shown in the December 14, 2015, the May 25, 2016 and the December 2, 2016 dated submittals titled "North Fly Ash Pond Closure Project, Groundwater Semiannual Data Analysis" the drinking water health standard was exceeded in all six monitoring wells for the parameter manganese. DDAGW will conduct a detailed review of potential receptors in the area. However, a preliminary review shows no private wells or public well fields immediately down gradient of the Kyger Creek Station, North Fly Ash Pond Closure Project.

RECOMMENDATIONS

1. The DDAGW has reviewed the December 14, 2015, the May 25, 2016 and the December 2, 2016 dated submittals titled "North Fly Ash Pond Closure Project,

Groundwater Semiannual Data Analysis". In these documents OVEC has presented the results of a statistical analysis of groundwater and concluded that the nine statistical exceedances are due to "natural variation and not associated with the North Fly Ash Pond Closure Project". The DDAGW does not concur with OVEC's statement that "these statistical exceedances are due to natural variation and are not associated with the North Fly Ash Closure Project". OVEC has not undertaken any known field activities to demonstrate that the statistically elevated concentrations of sulfate, TDS, Conductivity or Alkalinity are not the result of the operation of the North Fly Ash Pond. The DDAGW recommends that an assessment of groundwater quality be conducted at the North Fly Ash Pond.

To better evaluate the declared statistical exceedances, the DDAGW recommends that OVEC make improvements to the groundwater monitoring system for the North Fly Ash Pond and then conduct an assessment of groundwater quality as outlined in Attachment "G" of Guidance Document GD0303.010 titled "Ground Water Monitoring Program Plan Requirements for Wastewater Facilities".

2. The DDAGW recommends the following improvements be made to the groundwater monitoring network at the North Fly Ash Pond:
 - a. That water level measurements and groundwater sampling results from background well KC-9506 be included in all future submittals. This sampling data point would represent background water quality for the North Fly Ash Pond and allow for a more meaningful evaluation of groundwater quality.
 - b. That water level measurements from well KC-9510, KC-9503 and KC-9505 also be included in all future submittals.
 - c. That OVEC evaluate the usefulness of including wells KC9503 and KC-9505 into the groundwater monitoring network.
 - d. That the 10 groundwater monitoring wells installed in the area of the North Fly Ash Pond (KC-9501 to KC-9510) be resurveyed to ensure that the collected water level measurements accurately reflect site conditions.
 - e. That future submittals include ground water flow maps derived from the above noted monitoring wells and that the water level measurements are recorded in reference to mean sea level.
 - f. That upon determining current groundwater flow directions in the area of the North Fly Ash Pond, OVEC evaluate the adequacy of the current groundwater monitoring network. At this time the installation of an additional shallow groundwater monitoring well between existing wells KC9502 and KC-9507 appears to be appropriate.

Conclusion

The DDAGW has reviewed the December 14, 2015, May 25, 2016 and the December 2, 2016 dated submittals titled North Fly Ash Pond Closure Project submittals. The DDAGW has recommended that OVEC make improvements to the groundwater monitoring network at the North Fly Ash Pond and that an assessment of groundwater quality be conducted.

44711, 44712, 44713



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APPENDIX E ANALYTICAL DATA SUMMARY

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date Sample Type		B-0904 2018-03-01 N	B-0904 2018-04-11 N	B-0904 2018-05-16 N	B-0904 2018-09-18 N	B-0904 2019-03-16 N	B-0904 2020-03-11 N	BAC-01 2016-08-26 N	BAC-01 2016-10-03 N	BAC-01 2016-11-28 N	BAC-01 2017-02-07 N	BAC-01 2017-03-28 N	BAC-01 2017-05-03 N	BAC-01 2017-06-13 N	BAC-01 2017-07-14 N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	12		11	9.4	15 B	11			222	214				
Aluminum	mg/L		0.14 F1									0.49	0.045 J	0.05 U	0.05 U
Antimony	mg/L	0.002 U	0.002 UF1	0.002 U	0.002 U	0.002 U	0.002 U	2E-05 J	2E-05 J	1E-05 J	2E-05 J	0.002 B	0.002 U	0.002 U	0.002 U
Arsenic	mg/L	0.005 U	0.005 UF1	0.005 U	0.005 U	0.005 U	0.005 U	0.00078	0.00042	0.0004	0.00106	0.0022 J	0.005 U	0.005 U	0.005 U
Barium	mg/L	0.024	0.018 F1	0.019	0.023	0.03	0.021	0.0725	0.0611	0.0641	0.0625	0.075 B	0.063	0.064	0.062
Beryllium	mg/L	0.001 U	0.001 UF1*	0.001 U	0.00044 J^+	0.001 U	0.001 U^-	1E-05 J	2E-05 U	2E-05 U	9E-06 J	0.001 U	0.001 U	0.001 U	0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L	12		11	9.4	15 B	11								
Boron	mg/L	3.7	4.1	4	4	4.2	3.7	0.104	0.095	0.11	0.162	0.11 J	0.12	0.13 J	0.13 JB
Bromide	mg/L		0.14 J							0.1 J	0.1 J	0.19 J	0.16 J	0.15 J	0.16 J
Cadmium	mg/L	0.00091 J	0.00098 JF1	0.00087 J	0.00087 J	0.00095 J	0.00074 J	2E-05 J	2E-05 J	2E-05 J	2E-05	0.001 U	0.001 U	0.001 U	0.001 U
Calcium	mg/L	47	52 F1	47	45	49	45	113	105	114	107	110 JB	100	110	110
Carbonate Alkalinity as CaCO3	mg/L	5 U		5 U	5 U	5 U	5 U								
Chloride	mg/L	24	21	20	21	20	19	20.4	21.5	22.2	23.4	23	22	22	23
Chromium	mg/L	0.0019 J	0.002 UF1	0.0017 J	0.0032	0.0023	0.0017 J	0.0004	0.0002	0.000207	0.000312	0.0013 JB	0.002 U	0.002 U	0.002 U
Cobalt	mg/L	0.01	0.0035 F1	0.0058	0.0098	0.0061	0.0028	0.00052	0.000168	0.000164	0.000439	0.00095 J	0.0002 J	0.001 U	0.001 U
Conductivity, Field	uS/cm			511			525	645	646	661	644				
Copper	mg/L		0.002 UF1									0.0014 JB	0.002 U	0.002 U	0.002 U
Dissolved Oxygen, Field	mg/L			0.92				0.76	0.16	0.78	0.76				
Dissolved Solids, Total	mg/L	390	360	360	380	360	350	434	402	380	360	420	400	420 J	420 J
Fluoride	mg/L	0.052	0.03 J	0.052	0.06	0.04 J	0.051	0.1 J	0.1 J	0.1 J	0.1 J	0.14	0.14	0.14	0.14
Iron	mg/L		0.64 F1									1.4 B	0.16	0.085 J	0.1 U
Lead	mg/L	0.00093 J	0.001 UF1	0.001 U	0.00099 J	0.00066 J	0.001 U	0.00244	0.000255	0.000283	0.00058	0.001 J	0.001 U	0.001 U	0.001 U
Lithium	mg/L	0.0059 J	0.0078 JF1^	0.0048 J	0.0079 J*+^+	0.0064 J	0.0033 J^-	0.008	0.0009 J	0.006	0.004	0.0034 J	0.0024 J	0.0035 J	0.0038 J
Magnesium	mg/L	21	19 F1	19	19	21	19			13.4	12.8	12 B	13	14	13
Manganese	mg/L		1.4 F1									0.19 JB	0.1	0.048	0.049
Mercury	mg/L		0.0002 U					5E-06 U	5E-06 U	5E-06 U	5E-06 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Molybdenum	mg/L	0.005 U	0.005 UF1	0.005 U	0.005 U	0.005 U	0.005 U	0.00037	0.00071	0.00055	0.00147	0.0014 J	0.01 U	0.01 U	0.01 U
Nickel	mg/L		0.035 F1									0.0018 JB	0.002 U	0.002 U	0.002 U
Oxidation-Reduction Potential, Field	mV														
pH, Field	pH units			5.04	5.08	5.22	5.26	6.82	6.83	6.85	6.75	6.82	6.79	6.76	6.67
Potassium	mg/L	0.79 J	0.44 JF1	0.46 J	0.72 J	0.63 J	0.55 J			1.57	1.74	1.6 B	1.4	1.4	1.4
Radium-226	pCi/L		0.13					0.244	0.323	0.186	0.173	0.0827 U	0.0201 U	0.418	0.0636 U
Radium-226/228	pCi/L		0.489					0.549	0.526	1.114	0.449	0.316	0.0267 U	0.559	0.195 U
Radium-228	pCi/L		0.359					0.305	0.203	0.928	0.276	0.233 U	0.00664 U	0.141 U	0.131 U
Redox Potential, Field	mV							148.6	166.8	93	135.6				
Selenium	mg/L	0.005 U	0.0012 JF1	0.005 U	0.005 U	0.005 U	0.005 U	0.0002	0.0002	0.0001	0.0001 J	0.0011 J	0.005 U	0.005 U	0.005 U
Silver	mg/L		6.6E-05 JF1									9.6E-05 J	0.001 U	0.001 U	0.001 U
Sodium	mg/L	20	20 F1	19	19	21	19			11.6	10.8	10 JB	11 B	11	11 J
Strontium	mg/L		0.14							0.19	0.174	0.18 B	0.16 B	0.17 B	0.17
Sulfate	mg/L	220	200	190	210	210	200	112	105	111	95.3	92	92	95	95
Temperature, Field	deg C			13.9			14	16.2	13.9	13.8	14.4				
Thallium	mg/L	0.001 U	0.001 UF1	0.001 U	0.001 U	0.001 U	0.001 U	1E-05 J	8.4E-05	2E-05 J	1E-05 J	0.001 U	0.001 U	0.001 U	0.001 U
Turbidity, Field	NTU			18.1	36.1		9.7	9.2	5.1	6.1	13.6	18.3	2.1	1.8	0.5
Vanadium	mg/L											0.0012 J			
Zinc	mg/L		0.015 JF1									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 = Millivolts
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.
F1 = MS and/or MSD Recovery is outside acceptance limits.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date Sample Type		BAC-01 2018-02-28 N	BAC-01 2018-05-16 N	BAC-01 2018-09-18 N	BAC-01 2019-03-16 N	BAC-01 2019-09-19 N	BAC-01 2020-03-11 N	BAC-01 2020-09-09 N	BAC-01 2021-03-13 N	BAC-01 2021-09-18 N	BAC-01 2022-03-31 N	BAC-01 2022-04-27 N	BAC-01 2022-06-28 N	BAC-01 2022-10-11 FD	BAC-01 2022-10-11 N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L		240	210	200 B	190	200	190	200	190	210	210	220	210	210
Aluminum	mg/L										0.047 J				
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	0.002 U	0.002 U		0.002 U
Arsenic	mg/L	0.0011 J	0.00089 J	0.005 U	0.005 U	0.005 U	0.005 U	0.0022 J	0.00099 J	0.005 U	0.002 U	0.005 U	0.0082		0.0018 J
Barium	mg/L	0.069	0.072	0.066	0.064	0.059	0.06	0.071	0.067	0.061	0.065	0.058	0.15		0.064
Beryllium	mg/L	0.00035 J	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	0.001 U		0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L	220	240	210	200 B	190	200	190	200	190	210	210	220	210	210
Boron	mg/L	0.12	0.12	0.12	0.11	0.096 J	0.11	0.15 J	0.093 J	0.1	0.2 U			0.098 J	0.098 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	0.001 U	0.001 U	0.0001 U	0.001 U	0.001 U		0.001 U
Calcium	mg/L	110	100	100	100	96	100	96	100	100	110			100	100
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	23	19	25	27	21	27	29	32	34	21			28	28
Chromium	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.001 J	0.005 U	0.005 U	0.005 U	0.005		0.005 U
Cobalt	mg/L	0.00046 J	0.0006 J	0.00031 J	0.00025 J	0.001 U	0.00019 J	0.001	0.00067 J	0.00038 J	0.00023 J	0.001 U	0.0043		0.00071 J
Conductivity, Field	uS/cm		621				633	612	622	618	610	605.4		632	632
Copper	mg/L										0.005 U				
Dissolved Oxygen, Field	mg/L		0.17								0.33	1.02		0.9	0.9
Dissolved Solids, Total	mg/L	410	380	410	390	350	380	360	440	420	360 J			400	390
Fluoride	mg/L	0.12	0.13 F2	0.12	0.12	0.12	0.13	0.046 J	0.096	0.13	0.14	0.13	0.12	0.13	0.13
Iron	mg/L										0.11				
Lead	mg/L	0.001 U	0.001	0.001 U	0.00079 J	0.001 U	0.001 U	0.001	0.00058 J	0.001 U	0.0006 J	0.001 U	0.0056		0.00072 J
Lithium	mg/L	0.002 J	0.008 U	0.0031 J*+^+	0.002 J	0.002 J	0.008 U^-	0.004 J	0.0033 J	0.0026 J	0.0029 J	0.0024 J	0.0064 J		0.0038 J
Magnesium	mg/L	12	12	12	13	12	13	13	13	13	12	12	13	13	13
Manganese	mg/L										0.12				
Mercury	mg/L										0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Molybdenum	mg/L	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	0.002 U	0.005 U	0.0013 J		0.005 U
Nickel	mg/L										0.005 U				
Oxidation-Reduction Potential, Field	mV										83.6			97.7	97.7
pH, Field	pH units		6.83	6.86	6.93	6.94	6.96	6.97	6.82	6.81	6.82	6.82		6.79	6.79
Potassium	mg/L	1.6	1.5	1.4	1.6	1.4	1.5	1.6	1.5	1.4	1.5 J	1.4	2.3	1.6	1.6
Radium-226	pCi/L										0.0525 U	0.0643 U	0.19 U	0.194 U	0.11 U
Radium-226/228	pCi/L										-0.0522 U	0.371 U	1.56	1.22 U	1.33 U
Radium-228	pCi/L										-0.105 U	0.307 U	1.37	1.03 U	1.22 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	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		0.005 U
Silver	mg/L										0.001 U				
Sodium	mg/L	11	11	11	11	9.6	11	11	11	13	13	11	12	12	12
Strontium	mg/L										0.18				
Sulfate	mg/L	91	84 F1	98	110	110	92	100	95	94	80			88	88
Temperature, Field	deg C		14.5				14	14	13	14	15	13.7		13.6	13.6
Thallium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00021 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U
Turbidity, Field	NTU		15.3	4.23		8	2	26.5	10.4	5.38	20.1	2.51		45.73	45.73
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 = Millivolts
 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.
 F1 = MS and/or MSD Recovery is outside acceptance limits.
 Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date	BAC-01	BAC-01	BAC-01	BAC-01	BAC-01	BAC-02	BAC-02	BAC-02	BAC-02	BAC-02	BAC-02	BAC-02	BAC-02	BAC-02	BAC-02
Sample Type	2022-12-13	2022-12-13	2023-03-01	2023-04-10	2023-10-02	2016-08-25	2016-10-03	2016-11-28	2017-02-07	2017-02-28	2017-05-03	2017-06-13	2017-06-13	2017-06-13	2017-07-19
Analyte	FD	N	N	N	N	N	N	N	N	N	N	FD	N	N	N
Unit															
Alkalinity, Total as CaCO3	mg/L	210	210	200	220 J	210			285	273					
Aluminum	mg/L										0.15	0.078	0.041 J	0.035 J	0.1
Antimony	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	6E-05	3E-05 J	4E-05 J	2E-05 J	0.00035 JB	0.002 U	0.002 U	0.002 U	0.002 U
Arsenic	mg/L	0.0045 J	0.0046 J	0.0036 J	0.004 J	0.00083 J	0.00159	0.00124	0.00146	0.00067	0.00072 J	0.00075 J	0.005 U	0.00075 J	0.00078 J
Barium	mg/L	0.097	0.094	0.09	0.084	0.059	0.0515	0.0489	0.0492	0.0358	0.05 B	0.048	0.049	0.051	0.052
Beryllium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	3.5E-05	2.3E-05	2.6E-05	7E-06 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L	210	210	200	220 J	210									
Boron	mg/L				0.11	0.13	1.72	1.92	2.17	2.08	2.5 J	2.4	2.6 J	2.7 J	2.7 JB
Bromide	mg/L								0.624	0.483	0.73	0.12 J	0.74	0.74	0.77
Cadmium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0003	0.00031	0.0003	0.00025	0.00035 J	0.00032 J	0.00043 J	0.00041 J	0.00036 J
Calcium	mg/L				91	96	149	156	168	161	170 JB	180	180	180	190
Carbonate Alkalinity as CaCO3	mg/L	5 U	5 U	5 U	5 U	5 U									
Chloride	mg/L				27	26	82.8	91.8	95	97.3	100	21	110	110	110
Chromium	mg/L	0.0028 J	0.0026 J	0.005 U	0.0019 J	0.005 U	0.0013	0.0008	0.00129	0.00432	0.0012 JB	0.0015 J	0.0016 J	0.002 U	0.0011 J
Cobalt	mg/L	0.0023	0.0023	0.0021	0.0018	0.00037 J	0.00333	0.00257	0.00266	0.00178	0.0019	0.0018	0.0018	0.0017	0.0025
Conductivity, Field	uS/cm	623	623	638	591	570	1279	1355	1436	1434					
Copper	mg/L										0.0014 JB	0.002 U	0.002 U	0.002 U	0.002 U
Dissolved Oxygen, Field	mg/L	0.52	0.52	0.39	0.59	1.2	0.63	0.39	0.94	1.18					
Dissolved Solids, Total	mg/L				400	350	824	858	896	860	1000	1000	1100 J	1000 J	1100 J
Fluoride	mg/L	0.13	0.13	0.13	0.12	0.13	0.19	0.1 J	0.08 J	0.17	0.17	0.032 J	0.17	0.17	0.16
Iron	mg/L										0.39 B	0.27	0.15	0.11	0.39
Lead	mg/L	0.0031	0.0028	0.0023	0.0023	0.00072 J	0.00284	0.00184	0.00158	0.000589	0.0008 J	0.00068 J	0.0006 J	0.00068 J	0.00089 J
Lithium	mg/L	0.0051 J	0.0045 J	0.0052 J	0.0062 J	0.0045 J	0.01	0.004	0.005	0.001 U	0.0022 J	0.008 U	0.008 U	0.008 U	0.0025 J
Magnesium	mg/L	13	13	13	11	12			43.9	43.9	46 B	51	51	52	49
Manganese	mg/L										4.1 JB	4.3	4.4	4.5	4.7
Mercury	mg/L	0.00014 JB	0.00014 JB	0.0002 U	0.0002 U	0.0002 U	3E-06 J	7E-06	5E-06 U	3E-06 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Molybdenum	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.00109	0.00044	0.00081	0.00201	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Nickel	mg/L										0.022 B	0.022	0.02	0.021	0.024
Oxidation-Reduction Potential, Field	mV	15.5	15.5	210.5	181	127.3									
pH, Field	pH units	7.03	7.03	6.7	6.54	6.84	6.2	6.19	6.14	6.1	6.18	6.13		6.08	6.02
Potassium	mg/L	1.9	1.9	1.7	1.6	1.4			3.66	3.43	3.6 B	3.7	3.6	3.6	4
Radium-226	pCi/L	0.089 U	0.07 U	0.123 U	0.207 U	-0.033 U	0.934	0.233	0.12	0.204	0.0599 U	0.0438 U	0.113	0.072 U	0.0813 U
Radium-226/228	pCi/L	1.24 U	1.35 U	0.976	0.259 U	1.15	1.073	0.855	0.0347	0.1452	0.298 U	0.375 U	0.29 U	0.305 U	-0.104 U
Radium-228	pCi/L	1.15 U G	1.28 U G	0.853 U	0.0517 U	1.19	0.139	0.622	-0.0853	-0.0588	0.238 U	0.331 U	0.177 U	0.233 U	-0.186 U
Redox Potential, Field	mV						112.3	164.6	115.3	143.3					
Selenium	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0003	0.0002	0.0002	6E-05 J	0.00048 J	0.005 U	0.005 U	0.005 U	0.005 U
Silver	mg/L										0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Sodium	mg/L	13	13	12	11	12			67.3	64.6	68 JB	74 B	73	74	73 JB
Strontium	mg/L								0.499	0.479	0.55 B	0.56 B	0.51 B	0.53 B	0.63
Sulfate	mg/L				91	89	288	341	359	346	410	80	430	420	440
Temperature, Field	deg C	13.5	13.5	14.9	13.8	14.6	19.9	17.2	16	16.2					
Thallium	mg/L	0.001 U	0.001 U	0.00087 J	0.001 U	0.001 U	0.000128	3E-05 J	9.3E-05	3E-05 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Turbidity, Field	NTU	91.76	91.76	54.26	51.35	10.96	8.1	9.6	9.3	5.4	2.2	2.5		2	7.4
Vanadium	mg/L										0.005 U				
Zinc	mg/L										0.02 U	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 = Millivolts
 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.
 F1 = MS and/or MSD Recovery is outside acceptance limits.
 Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date Sample Type		BAC-02 2018-02-28 N	BAC-02 2018-05-15 FD	BAC-02 2018-05-15 N	BAC-02 2018-09-18 FD	BAC-02 2018-09-18 N	BAC-02 2019-03-16 N	BAC-02 2019-09-18 N	BAC-02 2020-03-11 N	BAC-02 2020-09-09 N	BAC-02 2021-03-13 N	BAC-02 2021-09-18 N	BAC-02 2022-03-31 N	BAC-02 2022-04-27 N	BAC-02 2022-06-28 N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L		300	310	280	280	290 B	250	280	240	250	230	260	260	270
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	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	0.005 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	0.005 U	0.005 U	0.002 U	0.005 U	0.017
Barium	mg/L	0.035	0.043	0.046	0.044	0.042	0.038	0.031	0.036	0.027	0.031	0.031	0.036	0.035	0.32
Beryllium	mg/L	0.001 U	0.00043 J	0.00073 J	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	0.00069 J
Bicarbonate Alkalinity as CaCO3	mg/L	260	300	310	280	280	290 B	250	280	240	250	230	260	260	270
Boron	mg/L	2	2.3	2.4	2.5	2.5	2.3	1.4	1.9	1.3	1.7	1.4	1.9 J		
Bromide	mg/L														
Cadmium	mg/L	0.00034 J	0.00045 J	0.00055 J	0.00038 J	0.00037 J	0.00034 J	0.00026 J	0.00025 J	0.001 U	0.001 U	0.001 U	0.00028	0.00026 J	0.00047 J
Calcium	mg/L	160	160	170	170	160	150	130	140	110	130	130	170		
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	97	110	110	100	100	96	68	82	62	76	69	78		
Chromium	mg/L	0.014	0.002 U	0.0012 J	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.005 U	0.005 U	0.005 U	0.022
Cobalt	mg/L	0.0018	0.0018	0.0021	0.0015	0.0015	0.0011	0.00069 J	0.00078 J	0.00058 J	0.00067 J	0.00082 J	0.00079	0.0008 J	0.01
Conductivity, Field	uS/cm			1469					1361	1091	1292	1177	1431	1383	
Copper	mg/L												0.005 U		
Dissolved Oxygen, Field	mg/L			0.26									0.35	0.72	
Dissolved Solids, Total	mg/L	900	950	980	970	980	920	580	880	690	930	860	900 J		
Fluoride	mg/L	0.16	0.16	0.16	0.16	0.2	0.15	0.15	0.18	0.12	0.14	0.19	0.19	0.19	0.23
Iron	mg/L												0.1 U		
Lead	mg/L	0.001 U	0.00085 J	0.0014	0.001 U	0.001 U	0.00053 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0005 U	0.001 U	0.017
Lithium	mg/L	0.008 U	0.008 U	0.008 U	0.0023 J*+^+	0.0025 J*+^+	0.008 U	0.008 U	0.008 U^-	0.008 U	0.008 U	0.008 U	0.01 U	0.0022 J	0.012
Magnesium	mg/L	41	44	47	44	45	44	36	43	33	36	37	42	44	42
Manganese	mg/L												3.9		
Mercury	mg/L												0.0002 U	0.0002 U	0.00017 J
Molybdenum	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0012 J	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0016 J
Nickel	mg/L												0.014		
Oxidation-Reduction Potential, Field	mV												78.9	63.7	
pH, Field	pH units			6.18		6.2	6.33	6.43	6.43	6.5	6.3	6.48	6.25	6.33	
Potassium	mg/L	3.8	3.8	3.9	3.6	3.6	3.8	2.6	3.5	2.6	2.6	2.8	3.5	3.5	4.8
Radium-226	pCi/L												0.168 U	0.0517 U	0.453
Radium-226/228	pCi/L												0.175 U	0.374 U	0.319 U
Radium-228	pCi/L												0.00741 U	0.323 U	-0.134 U
Redox Potential, Field	mV														
Selenium	mg/L	0.005 U	0.005 U	0.00099 J	0.005 U	0.00093 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												0.001 U		
Sodium	mg/L	63	66	70	68	68	69	56	70	58	63	65	78	80	72
Strontium	mg/L												0.53		
Sulfate	mg/L	360	390	390	390	400	370	310	340	260	360	340	400		
Temperature, Field	deg C			17.5					15	17	16	17	16	16.1	
Thallium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00022 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Turbidity, Field	NTU			17.3		2.02		5	1	0.6	10.6	0.4	7	0.19	
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 = Millivolts
 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.
 F1 = MS and/or MSD Recovery is outside acceptance limits.
 Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date Sample Type		BAC-02 2022-10-17 N	BAC-02 2022-12-07 N	BAC-02 2023-03-02 N	BAC-02 2023-04-10 N	BAC-02 2023-09-27 FD	BAC-02 2023-09-27 N	BAC-03 2016-08-26 N	BAC-03 2016-10-03 N	BAC-03 2016-11-28 N	BAC-03 2017-02-07 N	BAC-03 2017-03-28 N	BAC-03 2017-05-02 FD	BAC-03 2017-05-02 N	BAC-03 2017-06-13 N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	13	260	260	290 J	260	250			96.6	88.2				
Aluminum	mg/L											0.059	0.049 J	0.042 J	0.05 U
Antimony	mg/L	0.002 U	0.002 U	0.002 U	0.00099 J	0.002 U	0.002 U	5E-05	2E-05 J	2E-05 J	3E-05 J	0.00048 JB	0.002 U	0.002 U	0.002 U
Arsenic	mg/L	0.0063	0.01	0.008	0.0045 J	0.0041 J	0.0043 J	0.00027	0.00024	0.00016	0.00031	0.005 U	0.005 U	0.005 U	0.005 U
Barium	mg/L	0.13	0.18	0.17	0.091	0.091	0.13	0.0469	0.045	0.0422	0.0426	0.05 B	0.048	0.048	0.045
Beryllium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	1E-05 J	2E-05 U	2E-05 U	8E-06 J	0.001 U	0.001 U	0.001 U	0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L	13	260	260	290 J	260	250								
Boron	mg/L	1.3			1.6	1.3	1.1	2.14	2.06	2.07	2.24	2.3 J	2.1	2.1	2 J
Bromide	mg/L									0.151	0.1 J	0.17 J	0.15 J	0.15 J	
Cadmium	mg/L	0.0003 J	0.00048 J	0.00079 J	0.00067 J	0.00036 J	0.00032 J	0.00015	9E-05	8E-05	8E-05	0.001 U	0.001 U	0.001 U	0.001 U
Calcium	mg/L	130			140	140	130	97.8	93.7	90.4	95.7	97 JB	96	96	89
Carbonate Alkalinity as CaCO3	mg/L	5 U	5 U	5 U		5 U	5 U								
Chloride	mg/L	69			76 J	62	63	52.1	52.8	48.2	52.2	68	72	72	62
Chromium	mg/L	0.0087	0.013	0.013	0.0068	0.0055	0.0057	0.0007	0.0006	0.000458	0.00115	0.00054 JB	0.002 U	0.002 U	0.002 U
Cobalt	mg/L	0.0044	0.0075	0.0063	0.0033	0.0032	0.0032	0.000468	0.00026	0.000169	0.000317	0.00027 J	0.00024 J	0.00025 J	0.001 U
Conductivity, Field	uS/cm	1345	1389	1364	1352		1202	767	752	749	762				
Copper	mg/L											0.0031 B	0.002 B	0.0019 JB	0.0017 JB
Dissolved Oxygen, Field	mg/L	0.76	1.06	0.59	0.99		0.94	1.1	0.2	0.68	0.83				
Dissolved Solids, Total	mg/L	940 J			890 J	800	690	528	476	416	514	520	510	510	500 J
Fluoride	mg/L	0.15	0.17	0.17	0.16 J	0.22	0.23	0.07 J	0.09 J	0.07 J	0.07 J	0.071	0.071	0.071	0.071
Iron	mg/L											0.14 B	0.13	0.1	0.1 U
Lead	mg/L	0.0064	0.0089	0.0095	0.0041	0.0049	0.0048	0.00184	0.000641	0.00048	0.00168	0.00093 J	0.00096 J	0.00083 J	0.00055 J
Lithium	mg/L	0.0063 J	0.0077 J	0.0082	0.0067 J	0.0047 J	0.0041 J	0.009	0.006	0.007	0.006	0.0056 J	0.0049 J	0.0049 J	0.0033 J
Magnesium	mg/L	37	42	40	38	39	36				16.2	17.6	17	18	17
Manganese	mg/L											0.24 JB	0.23	0.22	0.19
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	5E-06 U	1.6E-05	5E-06 U	5E-06 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Molybdenum	mg/L	0.005 U	0.0011 J	0.005 U	0.0015 J	0.005 U	0.005 U	0.00031	0.00138	0.0005	0.0006	0.01 U	0.01 U	0.01 U	0.01 U
Nickel	mg/L											0.0044 B	0.0042	0.048	0.0035
Oxidation-Reduction Potential, Field	mV	93.3	43.3	198.1	202		60.7								
pH, Field	pH units	6.59	6.58	6.17	6.23		6.64	6.12	6.03	6.04	6.05	6.07	6.05	6.05	5.89
Potassium	mg/L	3.2	4.3	3.7	3.2	3.2	3.1			1.9	2.12	1.9 B	1.9	1.9	1.8
Radium-226	pCi/L	0.68	0.288	0.613 U	0.113 U	0.414 U	0.194 U	0.0989	0.13	0.0518	0.281	0.0181 U	0.065 U	-0.0333 U	0.0442 U
Radium-226/228	pCi/L	1.46	0.772 U	4.12	2.62	1.98	1.9	0.2129	-0.14	0.3818	0.17	0.102 U	0.345	0.271 U	0.0882 U
Radium-228	pCi/L	0.776 U	0.484 U G	3.51	2.51	1.56	1.7	0.114	-0.27	0.33	-0.111	0.0838 U	0.28 U	0.304 U	0.044 U
Redox Potential, Field	mV						213.7	236.8	192.3	248.5					
Selenium	mg/L	0.0011 J	0.005 U	0.005 U	0.0012 J	0.005 U	0.005 U	7E-05 J	6E-05 J	0.0001 U	4E-05 J	0.005 U	0.005 U	0.005 U	0.005 U
Silver	mg/L											3.3E-05 J	0.001 U	0.001 U	0.001 U
Sodium	mg/L	66	71	70	68	71	71			30.5	31.2	31 JB	34 B	34 B	33
Strontium	mg/L									0.211	0.222	0.22 B	0.22 B	0.22 B	0.2 B
Sulfate	mg/L	340			390 J	310	310	211	204	200	196	180	180	180	190
Temperature, Field	deg C	15.5	15.7	15.4	15.8		16.6	18.6	15.4	14.5	14.8				
Thallium	mg/L	0.001 U	0.001 U	0.001 U	0.00061 J	0.001 U	0.001 U	3E-05 J	2E-05 J	1E-05 J	3E-05 J	0.001 U	0.001 U	0.001 U	0.001 U
Turbidity, Field	NTU	260.27	203.14	283.04	119.14		110.51	3.9	8.1	7.6	5.1	2.1		4.2	2.3
Vanadium	mg/L											0.005 U			
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 = Millivolts
 NTU = Nephelometric Turbidity Unit
 uS/cm = Microsiemens per centimeter
 pCi/L = Picouries 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.
 F1 = MS and/or MSD Recovery is outside acceptance limits.
 Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date Sample Type	BAC-03 2017-07-14 N	BAC-03 2018-02-28 N	BAC-03 2018-05-15 N	BAC-03 2018-09-18 N	BAC-03 2019-03-16 N	BAC-03 2019-09-19 N	BAC-03 2020-03-12 FD	BAC-03 2020-03-12 N	BAC-03 2020-09-10 N	BAC-03 2021-03-13 N	BAC-03 2021-09-18 FD	BAC-03 2021-09-18 N	BAC-03 2022-04-01 N	BAC-03 2022-04-28 N	
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L			100	93	91 B	85	100	100	86	89	85	86	81	84
Aluminum	mg/L	0.05 U												0.04 J	
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	0.002 U	0.002 U	0.002 U	0.002 U
Arsenic	mg/L	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	0.005 U	0.005 U	0.005 U	0.002 U	0.005 U
Barium	mg/L	0.044	0.047	0.045	0.042	0.044	0.04	0.046	0.045	0.037	0.045	0.042	0.041	0.042	0.039
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^-	0.001 U	0.001 U	0.001 U	0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L		90	100	93	91 B	85	100	100	86	89	85	86	81	84
Boron	mg/L	2 JB	2.3	2.5	2.2	2.2	2	1.6	1.6	1.7	1.9	1.8	1.8	2.3	
Bromide	mg/L	0.16 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	0.001 U	0.001 U	0.001 U	0.0001 U	0.001 U
Calcium	mg/L	88	95	96	92	91	87	100	100	73	83	84	84	88	
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	61	62	56	57	59	52	78	78	63	79	64	64	51	
Chromium	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.001 J	0.002 U	0.002 U	0.002 U	0.005 U	0.005 U	0.0012 J	0.005 U
Cobalt	mg/L	0.001 U	0.001 U	0.0002 J	0.00024 J	0.0003 J	0.001 U	0.001 U	0.001 U	0.0003 J	0.00052 J	0.00031 J	0.00029 J	0.00022 J	0.001 U
Conductivity, Field	uS/cm			731				819	819	684	750	681	681	730	684
Copper	mg/L	0.002 U												0.0025 J	
Dissolved Oxygen, Field	mg/L			0.15										0.27	0.39
Dissolved Solids, Total	mg/L	500 J	500	540	500	480	480	560	550	420	560	510	470	440	
Fluoride	mg/L	0.07	0.072	0.085	0.073	0.12	0.062	0.068	0.081	0.037 J	0.045 J	0.066	0.065	0.063	0.064
Iron	mg/L	0.1 U												0.1	
Lead	mg/L	0.001 U	0.001 U	0.0017	0.00067 J	0.0027	0.00049 J	0.00081 J	0.00073 J	0.0016	0.0025	0.001	0.00096 J	0.00097	0.001 U
Lithium	mg/L	0.0067 J	0.0043 J	0.0031 J	0.0053 J*+^+	0.0043 J	0.0046 J	0.0021 J^-	0.0023 J^-	0.0059 J	0.0057 J	0.0055 J	0.0062 J	0.0068 J	0.0067 J
Magnesium	mg/L	17	17	17	16	18	16	20	19	15	16	17	16	16	16
Manganese	mg/L	0.15												0.12	
Mercury	mg/L	0.0002 U												0.0002 U	0.0002 U
Molybdenum	mg/L	0.01 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0041 J	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.002 U	0.005 U
Nickel	mg/L	0.0035												0.0024 J	
Oxidation-Reduction Potential, Field	mV													118.5	81.1
pH, Field	pH units	5.93		6.16	6.12	6.26	6.19	6.19	6.19	6.27	6.05	6.09	6.09	5.97	6.04
Potassium	mg/L	1.8	1.8	1.7	1.8	2	1.7	2	2	1.8	1.8	1.9	1.9	1.8	1.8
Radium-226	pCi/L	0.235												0.0737 U	0.0646 U
Radium-226/228	pCi/L	0.506												0.244 U	0.275 U
Radium-228	pCi/L	0.272												0.171 U	0.21 U
Redox Potential, Field	mV														
Selenium	mg/L	0.0011 JB	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	0.005 U	0.005 U	0.005 U	0.005 U
Silver	mg/L	0.001 U												0.001 U	
Sodium	mg/L	34 J	31	30	31	32	29	35	34	37	32	34	34	29	28
Strontium	mg/L	0.21												0.23	
Sulfate	mg/L	190 J	210	200	200	200	210	200	200	170	180	180	180	190	
Temperature, Field	deg C			16.5				15	15	16	15	17	17	14	15.2
Thallium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00054 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Turbidity, Field	NTU	1.9		1.03	1.36		2	0.9	0.9	2.9	8	2.4	2.4	6.7	1.1
Vanadium	mg/L														
Zinc	mg/L	0.02 U												0.01 J	

Notes:
 FD = Field duplicate sample
 N = Normal environmental sample
 deg C = Degree Celcius
 mg/L = Milligrams per liter
 mV = Millivolts
 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.
 F1 = MS and/or MSD Recovery is outside acceptance limits.
 Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date Sample Type		BAC-03 2022-06-21 N	BAC-03 2022-10-13 N	BAC-03 2022-12-14 N	BAC-03 2023-03-03 N	BAC-03 2023-04-07 N	BAC-03 2023-10-02 N	BAC-04 2016-08-26 N	BAC-04 2016-10-03 N	BAC-04 2016-11-28 N	BAC-04 2017-02-07 N	BAC-04 2017-03-28 N	BAC-04 2017-05-02 N	BAC-04 2017-06-13 N	BAC-04 2017-07-19 N	
Analyte	Unit															
Alkalinity, Total as CaCO3	mg/L	96	86	89	82	95	81				107	111				
Aluminum	mg/L												0.041 J	0.76	0.63	1.6
Antimony	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	9E-05	7E-05	4E-05 J	7E-05	0.00046 JB	0.002 U	0.00071 J	0.002 U	
Arsenic	mg/L	0.005 U	0.011	0.0071	0.0011 J	0.0013 J	0.00081 J	0.00183	0.00134	0.00212	0.0017	0.002 J	0.0033 J	0.0045 J	0.0086	
Barium	mg/L	0.038	0.18	0.13	0.052	0.054	0.043	0.0624	0.0583	0.059	0.0597	0.06 B	0.07	0.065	0.077	
Beryllium	mg/L	0.001 U	0.00064 J	0.001 U	0.001 U	0.001 U	0.001 U	2E-05 J	6E-06 J	9E-06 J	2.1E-05	0.001 U	0.001 U	0.00059 J	0.001 U	
Bicarbonate Alkalinity as CaCO3	mg/L	96	86	89	82	95	81									
Boron	mg/L		1.8			1.8	2.1	2.56	2.53	2.61	2.7	2.7 J	2.5	2.7 J	2.5 JB	
Bromide	mg/L									0.1 J	0.1 J		0.17 J	0.16 J	0.17 J	
Cadmium	mg/L	0.001 U	0.00022 J	0.001 U	0.001 U	0.001 U	0.001 U	0.00011	4E-05	2E-05	9E-05	0.001 U	0.001 U	0.00036 J	0.00022 J	
Calcium	mg/L		81			75	85	99.1	98.2	96.7	99.6	94 JB	94	83	86	
Carbonate Alkalinity as CaCO3	mg/L	5 U	5 U	5 U	5 U	5 U	5 U									
Chloride	mg/L		57			54	55	42.6	44.5	40.9	40		48	47	49	
Chromium	mg/L	0.005 U	0.016	0.012	0.005 U	0.0023 J	0.005 U	0.0006	0.0009	0.000238	0.00081	0.00034 JB	0.005	0.0029	0.0039	
Cobalt	mg/L	0.001 U	0.014	0.0093	0.0016	0.0018	0.00063 J	0.00807	0.00627	0.00577	0.00553	0.0066	0.0083	0.0087	0.0095	
Conductivity, Field	uS/cm		695	648	724	653	745	696	761	751	765					
Copper	mg/L											0.00037 JB	0.0088 B	0.0055 B	0.0064	
Dissolved Oxygen, Field	mg/L		1.46	0.69	0.22	1.34	1.02	0.77	0.4	0.67	0.98					
Dissolved Solids, Total	mg/L		460 J			460	440	516	488	448	498		530	520 J	520 J	
Fluoride	mg/L	0.054	0.058	0.047 J	0.062	0.05 U	0.064	0.08 J	0.09 J	0.08 J	0.09 J		0.11	0.079	0.077	
Iron	mg/L											1.8 B	3.8	4.6	8.7	
Lead	mg/L	0.00052 J	0.026	0.024	0.0037	0.0045	0.0027	0.00106	0.000367	0.000277	0.00102	0.00037 J	0.0035	0.0037	0.0064	
Lithium	mg/L	0.0031 J	0.013	0.012	0.0064 J	0.0079 J	0.0079 J	0.007	0.006	0.01	0.006	0.0067 J	0.0068 J	0.0048 J	0.0082	
Magnesium	mg/L	17	17	17	16	15	17			17.7	18	18 B	19	18	17	
Manganese	mg/L											1.4 JB	2	1.4	1.4	
Mercury	mg/L	0.0002 U	0.0002 U	0.00014 JB	0.0002 U	0.0002 U	0.0002 U	5E-06 U	1.9E-05	5E-06 U	5E-06 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	
Molybdenum	mg/L	0.005 U	0.0011 J	0.005 U	0.005 U	0.005 U	0.005 U	0.00057	0.00465	0.00037	0.00365	0.00061 J	0.01 U	0.01 U	0.01 U	
Nickel	mg/L											0.012 B	0.013	0.0088	0.012	
Oxidation-Reduction Potential, Field	mV		129.7	142.5	204.4	165.6	127									
pH, Field	pH units		6	5.99	5.89	5.99	6.07	6.41	6.17	6.19	6.23	6.18	6.2	6.04	5.94	
Potassium	mg/L	1.9	4.3	3.1	2	2	2			1.95	2	1.9 B	2	1.8	2.1	
Radium-226	pCi/L	0.0577 U	0.586 U	0.41 U	0.197	0.0535 U	0.0328 U	0.764	0.226	0.235	0.19		0.17	0.152	0.274	
Radium-226/228	pCi/L	0.711	2.44 U	4.61	0.954 U	0.555 U	0.719 U	0.8152	0.467	0.34	0.017		0.641	0.178 U	0.576	
Radium-228	pCi/L	0.653	1.85 U	4.2 G	0.758 U	0.501 U	0.686 U	0.0512	0.241	0.105	-0.173		0.47	0.0263 U	0.302 U	
Redox Potential, Field	mV							330.2	59.6	24	24.3					
Selenium	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0001	6E-05 J	8E-05 J	0.0001 J	0.005 U	0.005 U	0.005 U	0.005 U	
Silver	mg/L											0.00011 J	0.002	0.00026 J	0.00042 J	
Sodium	mg/L	30	29	30	30	29	33			28.7	27.9	27 JB	29 B	27	27 JB	
Strontium	mg/L									0.218	0.218	0.21 B	0.21 B	0.16 B	0.19	
Sulfate	mg/L		190			190	200	215	214	209	200		220 J	230	220	
Temperature, Field	deg C		15.2	13.5	14.2	14.5	16.1	19.35	16.6	15.1	15					
Thallium	mg/L	0.001 U	0.0002 J	0.001 U	0.001 U	0.001 U	0.001 U	7.2E-05	4E-05 J	3E-05 J	5.3E-05	0.001 U	0.001 U	0.001 U	0.001 U	
Turbidity, Field	NTU		632.99	254.9	53.77	50.14	17.9	9.1	5	9	9.2	0.8	44.7	58.9	108.1	
Vanadium	mg/L															
Zinc	mg/L											0.02 U	0.016 J	0.02 U	0.016 J	

Notes:
 FD = Field duplicate sample
 N = Normal environmental sample
 deg C = Degree Celcius
 mg/L = Milligrams per liter
 mV = Millivolts
 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.
 F1 = MS and/or MSD Recovery is outside acceptance limits.
 Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date Sample Type		BAC-04 2018-03-01 FD	BAC-04 2018-03-01 N	BAC-04 2018-05-15 N	BAC-04 2018-09-18 N	BAC-04 2019-03-16 FD	BAC-04 2019-03-16 N	BAC-04 2019-09-18 FD	BAC-04 2019-09-18 N	BAC-04 2020-03-12 N	BAC-04 2020-09-10 N	BAC-04 2021-03-13 N	BAC-04 2021-09-18 N	BAC-04 2022-04-01 FD	BAC-04 2022-04-01 N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	92	91	96	91	100 B	100 B	96	96	100	89	96	94	98	96
Aluminum	mg/L													0.038 J	0.05 U
Antimony	mg/L	0.002 U	0.0013 J	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	0.002 U	0.002 U
Arsenic	mg/L	0.00089 J	0.0018 J	0.0036 J	0.0034 J	0.0014 J	0.0021 J	0.0023 J	0.0029 J	0.0041 J	0.0079	0.0049 J	0.0034 J	0.002 U	0.0012 J
Barium	mg/L	0.041	0.04	0.052	0.049	0.041	0.042	0.043	0.044	0.043	0.044	0.04	0.041	0.038	0.038
Beryllium	mg/L	0.001 U	0.0004 J	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	0.001 U	0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L	92	91	96	91	100 B	100 B	96	96	100	89	96	94	98	96
Boron	mg/L	2.8	2.8	2.9	2.8	3	2.9	2.7	2.6	2.4	2.4	2.4	2.4	2.9 J	2.8 J
Bromide	mg/L														
Cadmium	mg/L	0.00028 J	0.0004 J	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	5.6E-05 J	0.0001 U
Calcium	mg/L	94	94	95	92	95	96	90	91	92	89	79	92	86	93
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	52	52	49	40	41	41	37	37	45	48	41	42	44	44
Chromium	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	0.002 U	0.005 U	0.005 U	0.005 U
Cobalt	mg/L	0.0018	0.0018	0.0044	0.0043	0.0018	0.0017	0.0026	0.0025	0.0021	0.0027	0.0023	0.002	0.00022 J	0.0013 J
Conductivity, Field	uS/cm			721						736	730	705	693	743	743
Copper	mg/L													0.005 U	0.005 U
Dissolved Oxygen, Field	mg/L			0.93										0.71	0.71
Dissolved Solids, Total	mg/L	500	490	540	490	520	520	470	480	490	490	550	560	460 J	430 J
Fluoride	mg/L	0.087	0.084	0.085	0.082	0.082	0.078	0.082	0.08	0.087	0.04 J	0.061	0.087	0.077	0.078
Iron	mg/L													0.096 J	0.78 J
Lead	mg/L	0.001 U	0.001 U	0.0012	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00048 J	0.0017	0.00083 J	0.001 U	0.00094 J	0.0005 UJ
Lithium	mg/L	0.0048 J	0.0058 J	0.0046 J	0.0085 *+^+	0.0049 J	0.005 J	0.0045 J	0.0052 J	0.0024 J^-	0.0071 J	0.0055 J	0.0065 J	0.005 J	0.0052 J
Magnesium	mg/L	18	18	18	17	18	18	17	17	18	19	17	19	18	14
Manganese	mg/L													0.11 J	0.26 J
Mercury	mg/L													0.0002 U	0.0002 U
Molybdenum	mg/L	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	0.005 U	0.005 U	0.005 U	0.002 U	0.002 U
Nickel	mg/L													0.0026 J	0.0036 J
Oxidation-Reduction Potential, Field	mV													41.6	41.6
pH, Field	pH units			6.17	6.24		6.46		6.39	6.37	6.39	6.2	6.26	6.16	6.16
Potassium	mg/L	1.8	1.8	1.8	1.8	1.9	2	1.7	1.8	1.8	1.8	1.7	1.8	1.7	1.6
Radium-226	pCi/L													0.168 U	0.113 U
Radium-226/228	pCi/L													0.423 U	0.629
Radium-228	pCi/L													0.256 U	0.517 U
Redox Potential, Field	mV														
Selenium	mg/L	0.005 U	0.00089 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	0.005 U	0.005 U	0.0011 J
Silver	mg/L													0.001 U	0.00091 J
Sodium	mg/L	29	28	28	27	28	28	26	27	28	28	25	26	26	26
Strontium	mg/L													0.22	0.22
Sulfate	mg/L	210	220	220	220	220	220	230	230	210	230	220	230	210	210
Temperature, Field	deg C			19.6						15	19	15	18	14	14
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	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00047 J
Turbidity, Field	NTU			33.2	21.5				28	34.8	32	30	10	10	10
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 = Millivolts
 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.
 F1 = MS and/or MSD Recovery is outside acceptance limits.
 Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date		BAC-04	BAC-04	BAC-04	BAC-04	BAC-04	BAC-04	BAC-04	BAC-05	BAC-05	BAC-05	BAC-05	BAC-05	BAC-05	BAC-05	
Sample Type		2022-04-28	2022-06-21	2022-10-12	2022-12-09	2023-03-02	2023-04-07	2023-10-03	2016-08-26	2016-10-03	2016-11-28	2017-02-07	2017-03-28	2017-05-03	2017-06-13	
Analyte		N	N	N	N	N	N	N	N	N	N	N	N	N	N	
	Unit															
Alkalinity, Total as CaCO3	mg/L	97	100	96		100	110	100			144	105				
Aluminum	mg/L												0.11	0.17	0.43	
Antimony	mg/L	0.002 U	0.002 U	0.002 U	0.00057 J	0.002 U	0.002 U	0.002 U	0.00023	7E-05	9E-05	3E-05 J	0.00048 JB	0.00057 J	0.002 U	
Arsenic	mg/L	0.0016 J	0.0038 J	0.0013 J	0.0015 J	0.0013 J	0.0015 J	0.0019 J	0.00298	0.00143	0.00177	0.00065	0.00086 J	0.00097 J	0.0013 J	
Barium	mg/L	0.035	0.047	0.038	0.042 F1F2	0.042	0.041	0.042	0.0585	0.0478	0.0459	0.0495	0.04 B	0.052	0.039	
Beryllium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.000118	4.7E-05	5.9E-05	1E-05 J	0.001 U	0.001 U	0.001 U	
Bicarbonate Alkalinity as CaCO3	mg/L	97	100	96		100	110	100								
Boron	mg/L			2.3				2.3	2.5	3.32	3.72	3.99	2.78	4.5 J	3.2	4.5 J
Bromide	mg/L										0.09 J	0.1 J	0.13 J	0.14 J	0.1 J	
Cadmium	mg/L	0.001 U	0.00023 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00033	9E-05	5E-05	8E-05	0.001 U	0.001 U	0.001 U	
Calcium	mg/L			88				83	96	93.4	90.8	97.7	89	94 JB	100	90
Carbonate Alkalinity as CaCO3	mg/L	5 U	5 U	5 U		5 U	5 U	5 U								
Chloride	mg/L			44				42	39	31.6	28.5	24.6	36.2	24	34	21
Chromium	mg/L	0.027	0.005 U	0.005 U	0.005 U	0.005 U	0.0016 J	0.005 U	0.0048	0.0018	0.00208	0.000652	0.0016 JB	0.0013 J	0.0027	
Cobalt	mg/L	0.0016	0.0026	0.0016	0.002	0.0022	0.0021	0.0018	0.0111	0.00814	0.00536	0.00852	0.004	0.0078	0.0042	
Conductivity, Field	uS/cm	691		750	721	739	738	727	730	706	702	751				
Copper	mg/L													0.0013 JB	0.002 U	0.0023 B
Dissolved Oxygen, Field	mg/L	0.84		0.57	0.71	0.3	0.69	1.02	3.43	1.19	0.59	0.86				
Dissolved Solids, Total	mg/L			490 J			480	470	522	468	452	494	480	540	460 J	
Fluoride	mg/L	0.082	0.07	0.07	0.086	0.083	0.032 J	0.084	0.1 J	0.15	0.17	0.1 J	0.21	0.17	0.22	
Iron	mg/L													0.63 B	0.78	1.7
Lead	mg/L	0.001 U	0.0027	0.001 U	0.00054 J	0.00098 J	0.001 U	0.001 U	0.0066	0.00248	0.0021	0.000631	0.0008 J	0.0012	0.0019	
Lithium	mg/L	0.0059 J	0.0042 J	0.0067 J	0.0068 J	0.0059 J	0.0074 J	0.0064 J	0.015	0.007	0.01	0.006	0.0042 J	0.0048 J	0.0021 J	
Magnesium	mg/L	16	19	20	20	19	18	21			16.9	17.9	16 B	20	16	
Manganese	mg/L													3.4 JB	7.7	3
Mercury	mg/L	0.00023	0.00013 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	3E-06 J	1.4E-05	3E-06 J	5E-06 U	0.0002 U	0.0002 U	0.0002 U	
Molybdenum	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.00147	0.00118	0.00139	0.00237	0.0011 J	0.01 U	0.01 U	
Nickel	mg/L													0.0095 B	0.02	0.008
Oxidation-Reduction Potential, Field	mV	74.9		-4.5	-47.7	18.5	-30.1	29.9								
pH, Field	pH units	6.18		6.07	6.04	6.05	6.23	6.14	6.58	6.63	6.64	6.2	6.72	6.47	6.63	
Potassium	mg/L	1.6	2	1.8	2	1.9	1.7	1.8			1.7	1.7	1.4 B	1.6	1.4	
Radium-226	pCi/L	0.0871 U	0.0773 U	0.133 U	0.042 U	0.144 U	0.151 U	0.0597 U	0.41	1.12	0.378	0.0928	0.123	-0.0279 U	0.0494 U	
Radium-226/228	pCi/L	0.346 U	0.00318 U	0.582 U		0.641 U	0.692 U	0.851 J	0.127	2.056	0.554	0.2258	0.241 U	0.253 U	0.0636 U	
Radium-228	pCi/L	0.259 U	-0.0742 U	0.449 U	0.418 U	0.497 U	0.541 U	0.791 J	-0.283	0.936	0.176	0.133	0.118 U	0.281 U	0.0142 U	
Redox Potential, Field	mV								9.9	111.5	14	68.6				
Selenium	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0004	0.0002	0.0002	4E-05 J	0.005 U	0.0011 J	0.005 U	
Silver	mg/L													0.0011	5.7E-05 J	0.00011 J
Sodium	mg/L	23	27	27	28	26	25	28			22.9	28.3	21 JB	28 B	22	
Strontium	mg/L										0.16	0.162	0.15 B	0.17 B	0.13 B	
Sulfate	mg/L			230 J			210	210	200	190	184	216	170	220 J	170	
Temperature, Field	deg C	15.4		17	14.8	15.3	14.6	17.4	20.4	18.5	15.4	15.5				
Thallium	mg/L	0.001 U	0.001 U	0.001 U	0.00034 J	0.001 U	0.001 U	0.0002 J	7.3E-05	5E-05 J	4E-05 J	5.4E-05	0.001 U	0.001 U	0.001 U	
Turbidity, Field	NTU	8.31		5.15	8.54	12.8	6.64	3.83	96.7	72.3	50.1	7.8	6.2	5.3	26.6	
Vanadium	mg/L													0.005 U		
Zinc	mg/L												0.015 J	0.02 U	0.015 J	

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Millivolts
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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F1 = MS and/or MSD Recovery is outside acceptance limits.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date Sample Type	BAC-05 2017-07-19 N	BAC-05 2018-03-01 N	BAC-05 2018-05-16 N	BAC-05 2018-06-20 N	BAC-05 2018-09-18 N	BAC-05 2019-03-16 N	BAC-05 2019-09-18 N	BAC-05 2020-03-11 N	BAC-05 2020-09-10 N	BAC-05 2021-03-13 N	BAC-05 2021-09-18 N	BAC-05 2022-04-01 N	BAC-05 2022-04-28 N	BAC-05 2022-06-21 N	
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L		160	90	65	79	64 B	84	88	61	93	140	82	66	64
Aluminum	mg/L	0.43											0.049 J		
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	0.002 U	0.002 U	0.002 U	0.002 U
Arsenic	mg/L	0.00084 J	0.0013 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	0.00081 J	0.002 U	0.005 U	0.005 U
Barium	mg/L	0.041	0.038	0.057	0.053	0.053	0.048	0.04	0.04	0.039	0.031	0.031	0.034	0.031	0.041
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^-	0.001 U	0.001 U	0.001 U	0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L		160	90	65	79	64 B	84	88	61	93	140	82	66	64
Boron	mg/L	4.3 JB	3.9	2.9	2.8	2.8	2.5	2.5	2.8	2.5	2.9	3	2.8 J		
Bromide	mg/L	0.1 J													
Cadmium	mg/L	0.001 U	0.001 U	0.00031 J	0.00029 J	0.00044 J	0.00041 J	0.00023 J	0.00038 J	0.00038 J	0.001 U	0.001 U	0.00025	0.00025 J	0.00046 J
Calcium	mg/L	87	84	74	70	76	70	69	79	68	73	100	80		
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	21	21	32	31	37	37	32	29	38	29	22	22		
Chromium	mg/L	0.0092	0.0034	0.0013 J	0.0022	0.002 U	0.0011 J	0.002 U	0.0015 J	0.002 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U
Cobalt	mg/L	0.0037	0.0031	0.013	0.01	0.012	0.0092	0.0076	0.0056	0.0071	0.0038	0.0028	0.0045	0.005	0.0074
Conductivity, Field	uS/cm			673					694	709	674	699	667	651	
Copper	mg/L	0.0042											0.005 U		
Dissolved Oxygen, Field	mg/L			0.5									0.55	0.57	
Dissolved Solids, Total	mg/L	460 J	420	470	470	480	470	450	440	480	540	520	420 J		
Fluoride	mg/L	0.21	0.22	0.11	0.091	0.092	0.084	0.094	0.13	0.041 J	0.1	0.2	0.12	0.1	0.087
Iron	mg/L	1.4											0.91		
Lead	mg/L	0.0015	0.002	0.0011	0.0013	0.00058 J	0.001 U	0.00064 J	0.001 U	0.001 U	0.001 U	0.001 U	0.0005 U	0.001 U	0.001 U
Lithium	mg/L	0.0045 J	0.0033 J	0.0072 J	0.011	0.0095 *+^+	0.0084	0.0066 J	0.0029 J^-	0.0091	0.0055 J	0.0036 J	0.0056 J	0.0072 J	0.0072 J
Magnesium	mg/L	15	16	18	19	19	20	19	19	20	17	21	17	15	22
Manganese	mg/L	2											7.2		
Mercury	mg/L	0.0002 U											0.0002 U	0.00021	0.0002 U
Molybdenum	mg/L	0.01 U	0.0012 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	0.002 U	0.005 U	0.005 U
Nickel	mg/L	0.012											0.029		
Oxidation-Reduction Potential, Field	mV												99.1	89.2	
pH, Field	pH units	6.53		6.06		6.09	6.1	6.31	6.33	6.15	6.26	6.69	5.98	5.98	
Potassium	mg/L	1.5	1.4	1.6	1.7	1.6	1.8	1.4	1.6	1.5	1.2	1.4	1.3	1.3	1.6
Radium-226	pCi/L	0.0901 U											0.05 U	0.125	0.0585 U
Radium-226/228	pCi/L	0.13 U											0.276 U	0.255 U	1.01
Radium-228	pCi/L	0.0398 U											0.226 U	0.131 U	0.953
Redox Potential, Field	mV														
Selenium	mg/L	0.005 U	0.005 U	0.005 U	0.00091 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	0.005 U
Silver	mg/L	0.00013 J											0.001 U		
Sodium	mg/L	21 JB	21	25	25	25	26	23	24	26	21	21	20	19	26
Strontium	mg/L	0.13											0.15		
Sulfate	mg/L	160	150	220	210	230	240	230	220	250	240	210	220		
Temperature, Field	deg C			16.6					15	16	15	17	14	14.9	
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	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Turbidity, Field	NTU	25.1		21.3		16.1		37	9.6	7.5	7.2	10.2	6.7	3.84	
Vanadium	mg/L														
Zinc	mg/L	0.031										0.02 U			

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Millivolts
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.
F1 = MS and/or MSD Recovery is outside acceptance limits.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date	BAC-05	BAC-05	BAC-05	BAC-05	BAC-05	BAC-06	BAC-06	BAC-06	BAC-06	BAC-06	BAC-06	BAC-06	BAC-06	BAC-06	
Sample Type	2022-10-12	2022-12-09	2023-03-02	2023-04-07	2023-10-03	2020-09-10	2021-03-13	2021-09-18	2022-03-31	2022-04-28	2022-06-28	2022-10-17	2022-12-07	2022-12-07	
Analyte	Unit	N	N	N	N	N	N	N	N	N	N	N	FD	FD	
Alkalinity, Total as CaCO3	mg/L	110		57	79	61	180	140	170	180	180	190		190	180
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	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U		0.002 U
Arsenic	mg/L	0.005 U	0.0013 J	0.001 J	0.00083 J	0.00098 J	0.00091 J	0.00091 J	0.00093 J	0.0008 J	0.005 U	0.005 U	0.005 U		0.00092 J
Barium	mg/L	0.032	0.036	0.045	0.041	0.037	0.09	0.084	0.097	0.12	0.11	0.11	0.076		0.1
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	0.001 U	0.001 U		0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L	110		57	79	61	180	140	170	180	180	190	180	190	180
Boron	mg/L	2.7			2.3	2.4	1.7	1.4	1.7	1.9 J	1.6	1.7	1.7	1.8	
Bromide	mg/L														
Cadmium	mg/L	0.00023 J	0.00025 J	0.00048 J	0.00032 J	0.00052 J	0.001 U	0.001 U	0.001 U	0.0001 U	0.001 U	0.001 U	0.001 U		0.001 U
Calcium	mg/L	80			74	79	100	84	120	120	120	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 U	5 U	5 U	5 U
Chloride	mg/L	26			35	38	25	26	25	26	25	25	24	24	
Chromium	mg/L	0.005 U	0.005 U	0.005 U	0.002 J	0.005 U	0.0017 J	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		0.005 U
Cobalt	mg/L	0.006	0.0044	0.0081	0.0081	0.0079	0.0054	0.0043	0.0047	0.0034	0.0035	0.0037	0.0037		0.0036
Conductivity, Field	uS/cm	720	691	794	697	766	772	747	768		803	789		815	817
Copper	mg/L									0.005 U					
Dissolved Oxygen, Field	mg/L	0.57	0.85	0.3	1.39	1.29				0.6	0.49		0.64	0.96	
Dissolved Solids, Total	mg/L	470 J			520	520	510	560	570	520 J	500	510	560 J	550	
Fluoride	mg/L	0.12	0.17	0.11	0.048 J	0.11	0.048 J	0.067	0.11	0.093	0.093	0.089		0.093	0.094
Iron	mg/L									7.5					
Lead	mg/L	0.001 U	0.0014	0.0015	0.0016	0.00062 J	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	0.0078 J	0.0068 J	0.01	0.011	0.013 J	0.007 J	0.0049 J	0.006 J	0.0055 J	0.0055 J	0.0051 J	0.0049 J		0.0057 J
Magnesium	mg/L	21	21	23	20	24	25	20	28	24	26	26		27	27
Manganese	mg/L									2.1					
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	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0012 J	0.005 U	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U		0.005 U
Nickel	mg/L									0.0039 J					
Oxidation-Reduction Potential, Field	mV	44.2	85.9	102.8	65	146				-98.9	-30.2		-49.6	-36.3	
pH, Field	pH units	6.14	6.28	5.8	6.07	5.89	6.81	6.66	6.76	6.58	6.7		6.56	6.62	
Potassium	mg/L	1.4	1.7	1.7	1.6	1.6	1.5	1.5	1.5	1.3 J	1.4	1.4		1.6	1.5
Radium-226	pCi/L	0.126 U	0.127 U	0.234 U	0.0139 U	0.123 U				0.179 U	0.265	0.289	0.221		0.2
Radium-226/228	pCi/L	0.495 U		-0.862 U	0.0549 U	1.11 J				0.599	0.533 U	0.809	1.11		0.478 U
Radium-228	pCi/L	0.369 U	0.492 U	-1.1 U	0.041 U	0.986 J				0.42 U	0.268 U	0.52	0.89		0.278 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	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		0.005 U
Silver	mg/L									0.001 U					
Sodium	mg/L	20	21	28	25	29	15	13	17	16	16	16		16	16
Strontium	mg/L									0.14					
Sulfate	mg/L	230 J			270	270	200	190	220	210	220	210		220	
Temperature, Field	deg C	16	14.6	15.1	14.5	16	16	14	15	15	14.6		14.4	14.6	
Thallium	mg/L	0.001 U	0.001 U	0.00069 J	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
Turbidity, Field	NTU	14.23	29.71	27.17	41.53	13.45	15	7.4	3.5	8.5	2.97		7.59	4.01	
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 = Millivolts
 NTU = Nephelometric Turbidity Unit
 uS/cm = Microsiemens per centimeter
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Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date Sample Type		BAC-06 2022-12-07 N	BAC-06 2022-12-07 N	BAC-06 2023-03-02 N	BAC-06 2023-03-02 N	BAC-06 2023-04-12 FD	BAC-06 2023-04-12 N	BAC-06 2023-04-12 N	BAC-06 2023-04-12 N	BAC-06 2023-04-12 N	BAC-06 2023-06-13 N	BAC-06 2023-08-17 N	BAC-06 2023-09-27 N	BAC-07 2020-09-09 N	BAC-07 2021-03-13 FD	BAC-07 2021-03-13 N
Analyte	Unit															
Alkalinity, Total as CaCO3	mg/L	190	200	190	190	190	190	110 U	110 U	200	200	200	120	120	110	
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	0.002 U	0.002 U	0.002 U
Arsenic	mg/L		0.0009 J	0.005 U			0.005 U	0.00095 J		0.00085 J	0.005 U	0.001 J	0.005 U	0.0018 J	0.0012 J	0.0011 J
Barium	mg/L		0.097	0.09			0.096	0.097		0.094	0.072	0.091	0.086	0.061	0.054	0.055
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	0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L	190	200	190	190	190	190	110 U	110 U	200	200	200	120	120	110	
Boron	mg/L	1.8			1.9	1.9	1.9	1.8				1.8	1.3	1.1	1.1	
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	0.001 U	0.001 U	0.001 U
Calcium	mg/L	120			120	120	120	110				110	85	75	76	
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	5 U
Chloride	mg/L	24			24	24	24	24				24	27	26	26	
Chromium	mg/L		0.005 U	0.005 U			0.005 U	0.005 U		0.005 U	0.005 U	0.005 U	0.005 U	0.0012 J	0.002 U	0.002 U
Cobalt	mg/L		0.0037	0.0031			0.0041	0.0042		0.0039	0.0032	0.0041	0.0033	0.013	0.0046	0.0046
Conductivity, Field	uS/cm	817		840			814				770	807	792	654	632	632
Copper	mg/L															
Dissolved Oxygen, Field	mg/L	0.96		0.68			0.69				1.1	1.15	1.1			
Dissolved Solids, Total	mg/L	560			560	530	540	550				560	450	490	460	
Fluoride	mg/L	0.09	0.094	0.098	0.098	0.098	0.097	0.098	0.098	0.091	0.092	0.092	0.1	0.05 U	0.049 J	0.044 J
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	0.0012	0.001 U	0.001 U
Lithium	mg/L		0.006 J	0.0053 J			0.0066 J	0.0079 J		0.0076 J	0.0034 J	0.0079 J	0.008 U	0.0084	0.0052 J	0.0055 J
Magnesium	mg/L	27	27	25	27	26	26	26	26	25	22	27	26	21	18	18
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			
Molybdenum	mg/L		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	0.005 U	0.005 U
Nickel	mg/L															
Oxidation-Reduction Potential, Field	mV	-36.3		-46.9			-56.5				89.1	61.1	16.7			
pH, Field	pH units	6.62		6.59			6.57				6.56	6.56	6.62	6.51	6.17	6.17
Potassium	mg/L	1.6	1.5	1.4	1.5	1.4	1.4	1.4	1.4	1.4	1.2	1.5	1.4	1.4	1.4	1.4
Radium-226	pCi/L		0.233	0.142			0.226	0.284		0.182	0.177	0.111 U	0.304			
Radium-226/228	pCi/L		0.331 U	1.02			0.844	0.174 U		0.189 U	7.53	0.768	0.695			
Radium-228	pCi/L		0.0976 U	0.875			0.618	-0.11 U		0.0079 U	7.36	0.657	0.391 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	0.005 U	0.005 U	0.005 U	0.005 U
Silver	mg/L															
Sodium	mg/L	16	16	15	16	16	16	16	16	15	13	17	16	16	14	14
Strontium	mg/L															
Sulfate	mg/L	220			220	230	230	210					230	200	190	190
Temperature, Field	deg C	14.6		14.2			15.4				15.3	16	15.2	17	14	14
Thallium	mg/L		0.001 U	0.001 U			0.001 U	0.001 U		0.001 U	0.001 U	0.0013	0.001 U	0.001 U	0.001 U	0.001 U
Turbidity, Field	NTU	4.01		5.09			11.02				6.83	7.32	6.71	23.8	2.3	2.3
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 = Millivolts
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.
F1 = MS and/or MSD Recovery is outside acceptance limits.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date Sample Type		BAC-07 2021-09-18 N	BAC-07 2022-03-31 N	BAC-07 2022-04-28 N	BAC-07 2022-06-28 N	BAC-07 2022-10-14 FD	BAC-07 2022-10-14 N	BAC-07 2022-12-07 N	BAC-07 2022-12-07 N	BAC-07 2023-03-02 FD	BAC-07 2023-03-02 FD	BAC-07 2023-03-02 N	BAC-07 2023-03-02 N	BAC-07 2023-04-12 N	BAC-07 2023-04-12 N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	110	120	130	140	130	140	140	140	130	130	130	130	130	5 U
Aluminum	mg/L		0.028 J												
Antimony	mg/L	0.002 U	0.002 U	0.002 U	0.002 U		0.00081 J		0.002 U	0.002 U		0.002 U		0.002 U	
Arsenic	mg/L	0.001 J	0.002 U	0.005 U	0.005 U		0.005 U		0.005 U	0.005 U		0.005 U		0.005 U	
Barium	mg/L	0.053	0.057	0.056	0.049		0.047		0.047	0.047		0.048		0.045	
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	110	120	130	140	130	140	140	140	130	130	130	130	130	5 U
Boron	mg/L	1.1	1.4 J	1.2	1.2	0.96		1			1.1		1.1	1.2	1.1
Bromide	mg/L														
Cadmium	mg/L	0.001 U	7E-05 J	0.001 U	0.001 U		0.001 U		0.001 U	0.001 U		0.001 U		0.001 U	
Calcium	mg/L	87	100	90	82	86		89			94		95	90	91
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	27	25	25	25	24		26			25		25	26	26
Chromium	mg/L	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	
Cobalt	mg/L	0.0026	0.002	0.0019	0.0017		0.0015		0.0013	0.0015		0.0015		0.0017	
Conductivity, Field	uS/cm	619	681	649		634	634	680				689		616	
Copper	mg/L		0.005 U												
Dissolved Oxygen, Field	mg/L		1.01	0.54		2.99	2.99	2.34				1.65		0.76	
Dissolved Solids, Total	mg/L	510	450 J	780	370	440 J	420 J	450			450		440	440	440
Fluoride	mg/L	0.082	0.081	0.082	0.073	0.076	0.076	0.076	0.077	0.081	0.083	0.08	0.079	0.076	0.075
Iron	mg/L		0.31												
Lead	mg/L	0.001 U	0.0005 U	0.001 U	0.001 U		0.001 U		0.001 U	0.001 U		0.001 U		0.001 U	
Lithium	mg/L	0.0063 J	0.0057 J	0.006 J	0.0053 J		0.0049 J		0.0056 J	0.0062 J		0.0062 J		0.0077 J	
Magnesium	mg/L	20	20	21	19	19	20	20	20	21	22	21	22	20	20
Manganese	mg/L		0.21												
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	
Molybdenum	mg/L	0.005 U	0.002 U	0.005 U	0.005 U		0.0018 J		0.005 U	0.005 U		0.005 U		0.005 U	
Nickel	mg/L		0.0028 J												
Oxidation-Reduction Potential, Field	mV		92.4	71.6		81.6	81.6	155.7				205.9		164.6	
pH, Field	pH units	6.32	6.23	6.29		6.29	6.29	6.3				6.22		6.15	
Potassium	mg/L	1.3	1.4 J	1.3	1.2	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.3
Radium-226	pCi/L		0.167 U	0.0366 U	0.0744 U	0.064 U	0.101 U		0.00268 U	0.124		0.0841 U		0.0649 U	
Radium-226/228	pCi/L		0.314 U	0.252 U	0.56	0.436 U	-0.028 U		-0.174 U	1.12		0.498 U		0.174 U	
Radium-228	pCi/L		0.147 U	0.215 U	0.486	0.372 U	-0.129 U		-0.177 U	0.992		0.414 U		0.109 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		0.005 U		0.005 U	
Silver	mg/L		0.001 U												
Sodium	mg/L	16	15	15	15	14		15	15	16	16	16	16	16	16
Strontium	mg/L		0.12												
Sulfate	mg/L	180	190	190	180	170	170	190			190		190	200	190
Temperature, Field	deg C	15	15	14.3		14.6	14.6	14.4				14		14.7	
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		0.001 U	
Turbidity, Field	NTU	2.6	6.4	1.27		4.97	4.97	3.64				6.7		2.47	
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 = Millivolts
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.
F1 = MS and/or MSD Recovery is outside acceptance limits.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date Sample Type		BAC-07 2023-04-12 N	BAC-07 2023-06-13 N	BAC-07 2023-08-17 N	BAC-07 2023-09-27 N	BAC-08 2022-10-12 N	BAC-08 2022-12-07 N	BAC-08 2022-12-07 N	BAC-08 2023-03-01 N	BAC-08 2023-03-01 N	BAC-08 2023-04-11 N	BAC-08 2023-04-11 N	BAC-08 2023-04-11 N	BAC-08 2023-06-12 N	BAC-08 2023-06-12 N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	140 U	120	130	130	200	190	180	190	200	210	240 J	210	210	210
Aluminum	mg/L														
Antimony	mg/L	0.002 U	0.00079 J	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	0.005 U	0.005 U	0.005 U	0.005 U	0.0028 J		0.0018 J	0.0041 J		0.0033 J		0.0036 J		0.0022 J
Barium	mg/L	0.045	0.037	0.04	0.037 J	0.14		0.12	0.16		0.18		0.18		0.14
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	140 U	120	130	130	200	190	180	190	200	210	240 J	210	210	210
Boron	mg/L				1.1	0.098 J	0.13			0.12	0.11	0.11		0.11	
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		0.001 U		0.001 U
Calcium	mg/L				82	86	88			91	93	93		96	
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				25	19	20			21	24	22		23	
Chromium	mg/L	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		0.005 U
Cobalt	mg/L	0.0017	0.0015	0.0016	0.0013	0.0028		0.0042	0.0025		0.0026		0.0026		0.0021
Conductivity, Field	uS/cm		601	576	586	580	570		600		555			533	
Copper	mg/L														
Dissolved Oxygen, Field	mg/L		1.15	1.37	1.17	0.5	0.54		1.13		0.78			0.92	
Dissolved Solids, Total	mg/L				410	370	360			350	350	350		350	
Fluoride	mg/L	0.084	0.11	0.069	0.078	0.14	0.11	0.15	0.15	0.12	0.19	0.13	0.13	0.12	0.12
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 U		0.001 U
Lithium	mg/L	0.007 J	0.0044 J	0.0063 J	0.006 J	0.0046 J		0.003 J	0.0045 J		0.0056 J		0.0051 J		0.0022 J
Magnesium	mg/L	20	18	20	20	12	14	14	12	13	12	12	12	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		0.0002 U		0.0002 U		0.0002 U
Molybdenum	mg/L	0.005 U	0.0015 J	0.005 U	0.005 U	0.0031 J		0.0022 J	0.002 J		0.0023 J		0.0018 J		0.0021 J
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV		37.3	171.6	174.3	-127.8	-190.3		-72.1		-72.1			27	
pH, Field	pH units		6.21	6.14	6.19	6.68	6.83		6.53		6.77			6.6	
Potassium	mg/L	1.3	1.2	1.3	1.3	1.2	1.3	1.3	1.4	1.4	1.3	1.3	1.2	1.6	1.5
Radium-226	pCi/L	0.0631 U	0.00868 U	0.0279 U	-0.0123 U	0.256 U		0.053 U	0.161		0.0283 U		0.0642 U		0.0425 U
Radium-226/228	pCi/L	0.158 U	1.59	1.61	0.393 U	0.537 U		0.427 U	0.125 U		-0.135 U		0.195 U		0.338 U
Radium-228	pCi/L	0.0948 U	1.58	1.59	0.406 U	0.281 U		0.374 U	-0.0363 U		-0.164 U		0.131 U		0.296 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		0.005 U		0.005 U		0.005 U
Silver	mg/L														
Sodium	mg/L	16	14	16	16	11	16	15	13	13	12	12	12	13	13
Strontium	mg/L														
Sulfate	mg/L				170	79	100			83	89	86		80	
Temperature, Field	deg C		14.9	15.6	15.1	15.7	14.4		15.9		14.5			14.5	
Thallium	mg/L	0.001 U	0.00042 J	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U		0.00029 J		0.001 U		0.001 U
Turbidity, Field	NTU		2.31	2.6	1.73	15.25	5.59		2.45		2.54			9.58	
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 = Millivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picouries 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.
F1 = MS and/or MSD Recovery is outside acceptance limits.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date Sample Type		BAC-08 2023-08-17 N	BAC-08 2023-08-17 N	BAC-08 2023-09-28 N	BAC-08 2023-10-10 N	BAC-08 2023-10-10 N	BAC-09 2022-10-11 N	BAC-09 2022-12-13 N	BAC-09 2022-12-13 N	BAC-09 2023-04-06 FD	BAC-09 2023-04-06 N	BAC-09 2023-10-02 N	BAC-10 2022-10-13 N	BAC-10 2022-12-14 N	BAC-10 2022-12-14 N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	190	200	190	190	190	73	45	51	120	120	170	230	230	240
Aluminum	mg/L														
Antimony	mg/L		0.002 U	0.002 U			0.002 U	0.001 J	0.00072 J		0.004 U	0.004 U	0.002 U	0.00057 J	0.002 U
Arsenic	mg/L		0.0023 J	0.001 J			0.0014 J	0.0015 J	0.0012 J		0.0022 J	0.0023 J	0.0016 J	0.0078	0.0048 J
Barium	mg/L		0.13	0.11			0.11	5.7	16		2.3	2.1	2.6	0.11	0.079
Beryllium	mg/L		0.001 U	0.001 U			0.001 U	0.001 U	0.001 U		0.002 U	0.002 U	0.001 U	0.0018	0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L	190	200	190	190	190	73	45	51	120	120	170	230	230	240
Boron	mg/L	0.11		0.1	0.11		0.26		0.23	0.25	0.25	0.25	0.67		0.79
Bromide	mg/L														
Cadmium	mg/L		0.001 U	0.001 U			0.001 U	0.001 U	0.001 U		0.002 U	0.002 U	0.001 U	0.00038 J	0.00024 J
Calcium	mg/L	99		90	92		760		980	450	440	260	110		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 U	5 U	5 U	5 U	5 U
Chloride	mg/L	24		23	24		6700			4600	4700	1600	51		
Chromium	mg/L		0.0013 J	0.005 U			0.005 U	0.0065	0.0073		0.006 J	0.0076 J	0.0063	0.0092	0.0072
Cobalt	mg/L		0.002	0.0014			0.0016	0.0022	0.0024		0.0024	0.0023	0.0019	0.01	0.0056
Conductivity, Field	uS/cm	540		488.3	568		18188	20063				109.33	4430	1010	1023
Copper	mg/L														
Dissolved Oxygen, Field	mg/L	1.59		1.01	1.33		1.7	0.37				0.69	1.63	1.18	1.04
Dissolved Solids, Total	mg/L	350		350	390		9500		11000	6800	6900	2900 J	650 J		640
Fluoride	mg/L	0.12	0.12	0.09	0.14	0.11	0.73	0.46		0.87	0.85	1.6	0.16	0.12	
Iron	mg/L														
Lead	mg/L		0.00047 J	0.001 U			0.001 U	0.0017	0.002		0.0021	0.0022	0.0024	0.0069	0.0046
Lithium	mg/L		0.005 J	0.0021 J			0.0049 J	0.11	0.11		0.1	0.098	0.06	0.0089	0.0074 J
Magnesium	mg/L	13	13	13	12	12	180	230	230	110	100	63	26	32	32
Manganese	mg/L														
Mercury	mg/L		0.0002 U	0.0002 U			0.0002 U	0.0002 U	0.00013 JB		0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00015 JB
Molybdenum	mg/L		0.0013 J	0.005 U			0.005 U	0.052	0.014		0.086	0.085	0.068	0.0014 J	0.005 U
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV	137.6		-2.4	-8.7		-55.4	-129.4				-166.5	-143.3	-2	57.5
pH, Field	pH units	6.62		6.61	6.65		7.31	7.14				7.79	7.72	6.37	6.35
Potassium	mg/L	1.5	1.5	1.4	1.5	1.4	10	11	11	6.8	6.6	4.9	2.3	2.8	2.8
Radium-226	pCi/L		0.205	0.203 U			0.139 U	3.68 J	7.53		2.1	11.9	2.46	0.738	0.215 U
Radium-226/228	pCi/L		0.487 U	0.471 U			0.515 U	9.36 J	16.2		3.7	13.3	7.14	4.79 J	2.3
Radium-228	pCi/L		0.282 U	0.268 U			0.375 U	5.69 J	8.68 G		1.6	1.42	4.68	4.05 J	2.08 U G
Redox Potential, Field	mV														
Selenium	mg/L		0.005 U	0.005 U			0.005 U	0.005 U	0.005 U		0.01 U	0.01 U	0.005 U	0.0019 J	0.005 U
Silver	mg/L														
Sodium	mg/L	12	13	13	12	12	2300	2800	2800 F2	1600	1500	1200	52	61	61
Strontium	mg/L														
Sulfate	mg/L	82		78	83		42			64		62	74	240	
Temperature, Field	deg C	15.2		15.4	15		14.8	12.8				13.1	14.8	16	14.8
Thallium	mg/L		0.001 U	0.001 U			0.001 U	0.001 U	0.001 U		0.002 U	0.002 U	0.001 U	0.0017	0.001 U
Turbidity, Field	NTU	6.81		9.94	15.49		101.41	124.81				82.52	88.03	131.31	143.22
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 = Millivolts
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.
F1 = MS and/or MSD Recovery is outside acceptance limits.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date Sample Type		BAC-10 2023-02-27 N	BAC-10 2023-02-27 N	BAC-10 2023-04-11 FD	BAC-10 2023-04-11 FD	BAC-10 2023-04-11 N	BAC-10 2023-04-11 N	BAC-10 2023-04-11 N	BAC-10 2023-06-14 N	BAC-10 2023-06-14 N	BAC-10 2023-08-15 FD	BAC-10 2023-08-15 FD	BAC-10 2023-08-15 N	BAC-10 2023-08-15 N	BAC-10 2023-09-26 N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	220	220	240 J	240 J	240	5 U	240	200	210	220	220	220	220	220
Aluminum	mg/L														
Antimony	mg/L		0.002 U			0.002 U	0.0007 J			0.00074 J		0.002 U		0.00069 J	0.002 U
Arsenic	mg/L		0.003 J			0.0052	0.0047 J			0.0047 J		0.002 J		0.0035 J	0.0043 J
Barium	mg/L		0.057			0.078	0.078			0.075		0.041		0.052	0.055
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	220	220	240 J	240 J	240	5 U	240	200	210	220	220	220	220	220
Boron	mg/L	0.71		0.73		0.75	0.73			0.45		0.51		0.49	0.55
Bromide	mg/L														
Cadmium	mg/L		0.00059 J			0.00024 J	0.00031 J			0.00026 J		0.001 U		0.001 U	0.00028 J
Calcium	mg/L	110		120		120	120			100		110		100	110
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	45		52		51	51			41		47		47	48
Chromium	mg/L		0.0033 J			0.0061	0.0063			0.0058		0.0028 J		0.0045 J	0.0053
Cobalt	mg/L		0.0031			0.0052	0.0051			0.005		0.0021		0.0032	0.0037
Conductivity, Field	uS/cm	1010				1022				700				892	895
Copper	mg/L														
Dissolved Oxygen, Field	mg/L	0.15				0.97				1.58				1.72	1.87
Dissolved Solids, Total	mg/L	640		690		680	700			510		580		560	580
Fluoride	mg/L	0.16	0.14	0.22	0.22	0.13	0.21	0.23	0.15	0.15	0.15	0.15	0.15	0.15	0.097
Iron	mg/L														
Lead	mg/L		0.0024			0.0037	0.0035			0.0035		0.0018		0.0033	0.0035
Lithium	mg/L		0.0039 J			0.0067 J	0.0072 J			0.0068 J		0.0031 J		0.0065 J	0.0073 J
Magnesium	mg/L	27	28	29	30	30	30	29	25	24	28	27	27	27	29
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		0.005 U			0.005 U	0.0017 J			0.0016 J		0.005 U		0.005 U	0.005 U
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV	70.5				135.4				134.5				134.9	155.2
pH, Field	pH units	6.26				6.41				6.35				6.64	6.42
Potassium	mg/L	2.2	2.3	2.6	2.5	2.6	2.7	2.4	1.8	1.7	2	1.9	1.9	1.9	1.8
Radium-226	pCi/L		0.155 U			0.288 U	0.345 U			0.263 U		0.0864 U		0.292 U	0.325
Radium-226/228	pCi/L		1.93 U			1.25 U	-0.269 U			0.0376 U		0.952 U		1 U	0.905
Radium-228	pCi/L		1.78 U			0.963 U	-0.614 U			-0.225 U		0.866 U		0.708 U	0.725 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	0.0009 J
Silver	mg/L														
Sodium	mg/L	52	54	55	56	57	56	55	43	41	49	48	47	47	50
Strontium	mg/L														
Sulfate	mg/L	230		270		310	270			170		220 J		120 J	200
Temperature, Field	deg C	15.3				15.2				15.5				16.9	16.4
Thallium	mg/L		0.001 U			0.001 U	0.00062 J			0.00053 J		0.00022 J		0.001 U	0.0015
Turbidity, Field	NTU	66.46				99.16				49.77				66.2	29.94
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 = Millivolts
 NTU = Nephelometric Turbidity Unit
 uS/cm = Microsiemens per centimeter
 pCi/L = Picocuries per liter
 B: Compound was found in the blank and sample.
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 U: Indicates the analyte was analyzed for but not detected.
 F1 = MS and/or MSD Recovery is outside acceptance limits.
 Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date Sample Type		BAC-10 2023-10-11 N	BAC-10 2023-10-11 N	BAC-11 2022-10-17 N	BAC-11 2022-12-07 N	BAC-11 2022-12-07 N	BAC-11 2022-12-16 N	BAC-11 2022-12-16 N	BAC-11 2023-04-06 N	BAC-11 2023-09-27 N	BAC-12 2022-10-17 N	BAC-12 2022-12-14 N	BAC-12 2022-12-14 N	BAC-12 2023-02-27 N	BAC-12 2023-02-27 N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	220	220	190	16	15	23	25	39	32	120	110	110	93	92
Aluminum	mg/L														
Antimony	mg/L		0.002 U	0.002 U		0.002 U		0.00078 J^1+	0.02 U	0.002 U	0.002 U	0.0012 J			0.002 U
Arsenic	mg/L		0.0014 J	0.005 U		0.001 J		0.005 U	0.05 U	0.005 U	0.017	0.026			0.015
Barium	mg/L		0.039	130		170		140	140	160	0.36	0.35			0.2
Beryllium	mg/L		0.001 U	0.001 U		0.001 U		0.001 U	0.01 U	0.001 U	0.001 U	0.00069 J			0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L	220	220	190	16	15	23	25	39	32	120	98	110	93	92
Boron	mg/L	0.51		0.25	0.29		0.28		0.38	0.4	2.3		2.3	2.2	
Bromide	mg/L														
Cadmium	mg/L		0.001 U	0.001 U		0.001 U		0.001 U	0.01 U	0.001 U	0.00034 J	0.00041 J			0.00021 J
Calcium	mg/L	110		2900	2400		2500		2200	2600	73		67	77	
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	13	5 U	5 U	5 U
Chloride	mg/L	48		27000	27000		26000		23000	33000	50		56		
Chromium	mg/L		0.0015 J	0.011		0.0095		0.005 U	0.05 U	0.0037 J	0.0082	0.015			0.0074
Cobalt	mg/L		0.0014	0.0027		0.0032		0.00083 J	0.0027 J	0.0012	0.033	0.039			0.02
Conductivity, Field	uS/cm	792		59168	56038				48189	39301	694	611		727	
Copper	mg/L														
Dissolved Oxygen, Field	mg/L	1.88		0.36	0.27				0.3	0.71	0.6	0.45		0.06	
Dissolved Solids, Total	mg/L	580		41000 J	33000		32000		38000	38000	390 J		430	440	
Fluoride	mg/L	0.17	0.15	0.63 J	2.5 U	0.67 J	1 U	1.3 U	2.5 U	5 U	0.083	0.067		0.068	0.095
Iron	mg/L														
Lead	mg/L		0.0012	0.0028		0.0018		0.001 UF1	0.01 U	0.00091 J	0.018	0.028			0.014
Lithium	mg/L		0.0059 J	0.33		0.29		0.28	0.32	0.35	0.013	0.018			0.011
Magnesium	mg/L	27	26	750	720	900	770	750	660	770	17	16	17	17	17
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	0.00018 JB			0.0002 U
Molybdenum	mg/L		0.005 U	0.002 J		0.002 J		0.002 J	0.05 U	0.0021 J	0.0052	0.004 J			0.0021 J
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV	143.8		-439	-450				-484.7	-450.1	-22.9	8.6		26.9	
pH, Field	pH units	6.4		7.08	7.28				7.31	7.09	6.57	6.18		5.94	
Potassium	mg/L	1.6	1.6	25	26	25	24	23	22	25	3.4	3.8	4	3.3	3.3
Radium-226	pCi/L		0.0435 U	57 J		49.3		31.5	49.3 J	42.4 J	1.43	1.03			0.7
Radium-226/228	pCi/L		0.652	197 J		200		106	214 J	234 J	3.8	13.7			3.39
Radium-228	pCi/L		0.608 U	140 J		151		74.1 *	165 J	192 J	2.36	12.7 G			2.69 U
Redox Potential, Field	mV														
Selenium	mg/L		0.005 U	0.0018 J		0.005 U		0.005 U	0.05 U	0.0011 J	0.0012 J	0.005 U			0.005 U
Silver	mg/L														
Sodium	mg/L	47	45	10000	10000	12000	10000	10000	9200	11000	27	25	27	28	28
Strontium	mg/L														
Sulfate	mg/L	210		25 U	50 U		20 U		50 U	72 J	180			180	
Temperature, Field	deg C	16.3		15.5	15.7				15	17.4	15.2	14.4		15.3	
Thallium	mg/L		0.001 U	0.001 U		0.001 U		0.0002 JF1	0.01 U	0.001 U	0.001 U	0.001 U			0.001 U
Turbidity, Field	NTU	34.81		196.2	141.6				116.72	38.27	241.64	384.21		158.14	
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 = Millivolts
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.
F1 = MS and/or MSD Recovery is outside acceptance limits.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date	BAC-12 2023-04-11	BAC-12 2023-04-11	BAC-12 2023-04-11	BAC-12 2023-06-14	BAC-12 2023-06-14	BAC-12 2023-08-18	BAC-12 2023-08-18	BAC-12 2023-08-18	BAC-12 2023-08-18	BAC-12 2023-08-18	BAC-12 2023-09-29	BAC-12 2023-10-12	BAC-12 2023-10-12	BAC-13 2022-10-12	BAC-13 2022-12-09
Sample Type	N	N	N	N	N	FD	FD	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	100	110 J	100	96	98	84	84	85	83	83	86	86	54	70
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	
Arsenic	mg/L	0.016		0.0065		0.01		0.0094		0.0095	0.0051		0.006	0.0014 J	
Barium	mg/L	0.21		0.13		0.15		0.13		0.13	0.1		0.11	2.5	
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	
Bicarbonate Alkalinity as CaCO3	mg/L	100	110 J	100	96	98	84	84	85	83	83	86	86	54	70
Boron	mg/L	2	2		1.9		1.9		1.9		1.9	1.9		0.29	0.35
Bromide	mg/L														
Cadmium	mg/L	0.00023 J		0.001 U		0.00022 J		0.001 U		0.001 U	0.00023 J		0.00021 J	0.001 U	
Calcium	mg/L	77	78		84		79		80		82	82		170	230
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	58	59		66		68		68		65	64		1800	2600
Chromium	mg/L	0.008		0.0041 J		0.0058		0.0036 J		0.0037 J	0.0024 J		0.0029 J	0.0056	
Cobalt	mg/L	0.022		0.0088		0.011		0.011		0.01	0.0076		0.008	0.0019	
Conductivity, Field	uS/cm	654			724				703		647	773		6188	7287
Copper	mg/L														
Dissolved Oxygen, Field	mg/L	0.71			0.82				1.02		1.44	1.07		15.77	0.4
Dissolved Solids, Total	mg/L	460	460		490		510		510		500	500 J		2900	3300
Fluoride	mg/L	0.082	0.082	0.086 J	0.068	0.069	0.065	0.066	0.065	0.062	0.067	0.095	0.061	0.65	0.67
Iron	mg/L														
Lead	mg/L	0.015		0.0047		0.0092		0.0065		0.0062	0.0038		0.0045	0.00091 J	
Lithium	mg/L	0.014		0.0098		0.0093		0.011		0.011	0.012		0.011 J	0.052	
Magnesium	mg/L	17	18	17	20	20	20	21	20	20	20	20	20	37	50
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	
Molybdenum	mg/L	0.0024 J		0.002 J		0.0015 J		0.0012 J		0.0012 J	0.005 U		0.005 U	0.02	
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV	32.8			61.1				63.7		51.2	43.3		-54.8	-128.9
pH, Field	pH units	6.08			5.86				5.85		5.93	5.96		7.45	7.21
Potassium	mg/L	3.2	3.2	2.7	3.1	3.3	3.1	3.2	3.1	3.1	2.8	3.1	3	6.9	7.6
Radium-226	pCi/L	0.406 UJ		-0.0255 U		0.363		0.33		0.358	0.266		0.245 U	1.85	
Radium-226/228	pCi/L	-1.02 UJ		0.298 U		1.09 U		0.377 U		1.22 U	0.921		1.15 U	5.57 J	
Radium-228	pCi/L	-1.43 UJ		0.324 U		0.729 U		0.047 U		0.858 U	0.655 U		0.902 U	3.72 J	
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	0.005 U	
Silver	mg/L														
Sodium	mg/L	28	29	28	32	33	31	33	32	32	32	32	32	840	1200
Strontium	mg/L														
Sulfate	mg/L	200	200		190		230		240		220 J	190		3.1	2 U
Temperature, Field	deg C	16.1			15.6				16.1		16.4	15.8		16.6	15
Thallium	mg/L	0.00022 J		0.001 U		0.001 U		0.001 U		0.001 U	0.00028 J		0.001 U	0.001 U	
Turbidity, Field	NTU	137.24			80.64				114.23		60.78	68.54		131.79	5.39
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 = Millivolts
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 E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date Sample Type		BAC-13 2022-12-09 N	BAC-13 2023-04-07 N	BAC-13 2023-10-03 FD	BAC-13 2023-10-03 N	BAC-14 2022-10-18 N	BAC-14 2022-12-14 N	BAC-14 2022-12-14 N	BAC-14 2023-02-27 N	BAC-14 2023-02-27 N	BAC-14 2023-04-11 N	BAC-14 2023-04-11 N	BAC-14 2023-04-11 N	BAC-14 2023-06-14 FD	BAC-14 2023-06-14 FD
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L		52	67	67	81	77	74	77	64	89	220 J	82	97	88
Aluminum	mg/L														
Antimony	mg/L	0.002 U	0.004 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	0.0009 J	0.0026 J	0.003 J	0.0033 J	0.0081	0.0069				0.0045 J	0.0039 J		0.0049 J	0.0032 J
Barium	mg/L	3.6	5.1	5.6	5.8	0.12	0.12				0.11	0.11		0.11	0.1
Beryllium	mg/L	0.001 U	0.002 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		52	67	67	81	77	74	77	64	89	220 J	82	97	88
Boron	mg/L		0.35	0.36	0.35	2.6		2.7	2.9		2.8	2.7		2.9	
Bromide	mg/L														
Cadmium	mg/L	0.001 U	0.002 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		300	340	350	74		73	78		77	74		77	
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		3100	3300	3300	36			34		34	34		31	
Chromium	mg/L	0.005 U	0.01 U	0.005 U	0.005 U	0.0046 J	0.0041 J				0.0025 J	0.0016 J		0.002 J	0.0014 J
Cobalt	mg/L	0.00095 J	0.00058 J	0.00069 J	0.00076 J	0.0032	0.0029				0.0023	0.0021		0.0023	0.0021
Conductivity, Field	uS/cm		7128		6713	672	628		708			631			
Copper	mg/L														
Dissolved Oxygen, Field	mg/L		0.9		1.71	0.84	0.37			0.13		0.47			
Dissolved Solids, Total	mg/L		4600	4900	5000	430		470	440		470	470		450	
Fluoride	mg/L	0.7	0.46	0.85	0.85	0.055	0.047 J		0.051	0.073	0.067	0.066	0.068	0.057	0.058
Iron	mg/L														
Lead	mg/L	0.001 U	0.002 U	0.001 U	0.00056 J	0.0031	0.0032				0.002	0.00076 J		0.0011	0.0011
Lithium	mg/L	0.056	0.063	0.068	0.064	0.0079 J	0.0079 J				0.007 J	0.0066 J		0.0069 J	0.0046 J
Magnesium	mg/L	49	63	70	72	20	22	22	21	21	21	20	20	22	22
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 U
Molybdenum	mg/L	0.02	0.016	0.017	0.017	0.0023 J	0.005 U				0.0011 J	0.005 U		0.005 U	0.005 U
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV		-158.8		-149	-9.8	-39.1		-30.7			-17.7			
pH, Field	pH units		7.34		7.32	5.99	6.07		5.96		6.08				
Potassium	mg/L	7.6	8	8.5	8.6	1.9	2	2	1.9	1.8	1.6	1.6	1.6	1.7	1.6
Radium-226	pCi/L	2.14	3.56	2.35	3.05	0.504	0.315				0.121 U	0.354		0.438	0.196
Radium-226/228	pCi/L		7.06	4.93	6.42	1.02 U	2.2				1.61 U	0.0335 U		0.507 U	0.702 U
Radium-228	pCi/L	3.06	3.51	2.58	3.37	0.515 U	1.89 G				1.48 U	-0.32 U		0.0693 U	0.506 U
Redox Potential, Field	mV														
Selenium	mg/L	0.005 U	0.01 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														
Sodium	mg/L	1100	1400	1400	1500	21	23	23	23	23	23	22	22	22	23
Strontium	mg/L														
Sulfate	mg/L		5 U	5 U	5 U	220			210			220 J		230	
Temperature, Field	deg C		14.3		16.9	14	13.4		14.4			15.1			
Thallium	mg/L	0.001 U	0.002 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
Turbidity, Field	NTU		5.29		3.14	78.23	63.88		28.27			22.1			
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 = Millivolts
 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.
 F1 = MS and/or MSD Recovery is outside acceptance limits.
 Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date Sample Type		BAC-14 2023-06-14 N	BAC-14 2023-06-14 N	BAC-14 2023-08-18 N	BAC-14 2023-08-18 N	BAC-14 2023-09-29 N	BAC-14 2023-10-12 FD	BAC-14 2023-10-12 FD	BAC-14 2023-10-12 N	BAC-14 2023-10-12 N	BAC-15 2022-10-13 N	BAC-15 2022-12-05 N	BAC-15 2022-12-05 N	BAC-15 2023-04-06 N	BAC-15 2023-10-03 N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	97	97	81	81	83	82	81	82	82	98	74	74	71	51
Aluminum	mg/L														
Antimony	mg/L		0.002 U		0.002 U	0.00085 J		0.002 U		0.002 U	0.0011 J		0.0026 F1F2	0.002 U	0.00091 J
Arsenic	mg/L		0.0033 J		0.0039 J	0.0025 J		0.0021 J		0.0019 J	0.042		0.11 F1F2	0.0028 J	0.0036 J
Barium	mg/L		0.1		0.096	0.099		0.1		0.099	0.4		1.1 F1F2	0.071	0.085
Beryllium	mg/L		0.001 U		0.001 U	0.001 U		0.001 U		0.001 U	0.0037		0.0095 F1F2	0.001 U	0.00075 J
Bicarbonate Alkalinity as CaCO3	mg/L	97	97	81	81	83	82	81	82	82	98	74	74	71	51
Boron	mg/L	2.8		2.8		2.8	2.8		2.7		0.44	0.43		0.39	0.51
Bromide	mg/L														
Cadmium	mg/L		0.001 U		0.001 U	0.00021 J		0.001 U		0.001 U	0.00077 J		0.0017 F1F2	0.00033 J	0.00058 J
Calcium	mg/L	76		75		77	76		75		42	40		31	32
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	31		32		33	33		33		1.2	0.99 J		0.95 J	0.92 J
Chromium	mg/L		0.0014 J		0.0015 J	0.005 U		0.0016 J		0.0015 J	0.077		0.23 F1F2	0.0067	0.0076
Cobalt	mg/L		0.002		0.0021	0.0019		0.002		0.002	0.046		0.12 F1F2	0.0051	0.0091
Conductivity, Field	uS/cm	583		671		602			624		387.6	375		330.9	358.3
Copper	mg/L														
Dissolved Oxygen, Field	mg/L	0.85		1.01		1.17			1.18		1.26	1.57		2.04	6.37
Dissolved Solids, Total	mg/L	450		460		470	440 J		430 J		260 J	260		210	190
Fluoride	mg/L	0.057	0.057	0.06	0.057	0.065	0.07	0.046 J	0.066	0.056 J	0.049 J	0.063	0.05	0.033 J	0.044 J
Iron	mg/L														
Lead	mg/L		0.001		0.00078 J	0.00091 J		0.00099 J		0.00093 J	0.069		0.19 F1F2	0.0041	0.0056
Lithium	mg/L		0.0044 J		0.0063 J	0.0081		0.008 U		0.008 U	0.05		0.17 F1F2	0.0068 J	0.0072 J
Magnesium	mg/L	22	21	20	21	22	22	22	22	21	16	18	38 F1F2	11	12
Manganese	mg/L														
Mercury	mg/L		0.0002 U		0.0002 U	0.0002 U		0.0002 U		0.0002 U	0.00022		0.0005	0.0002 U	0.0002 U
Molybdenum	mg/L		0.005 U		0.005 U	0.005 U		0.005 U		0.005 U	0.0075		0.017 F1F2	0.005 U	0.0014 J
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV	58.7		32.1		4.4			-6		112.8	177.3		147.9	150.1
pH, Field	pH units	5.97		5.91		6			6.03		5.82	5.79		6.09	5.83
Potassium	mg/L	1.7	1.6	1.6	1.8	1.6	1.7	1.6	1.6	1.6	4.1	6.8	22 F1	1.7	1.8
Radium-226	pCi/L		0.199 U		0.332	0.246		0.382		0.25 U	0.791		4.24 G	0.593 U	1.4
Radium-226/228	pCi/L		0.54 U		1.02	1.08		1.39		0.995 U	2.68		12 G	1.64 U	4.68
Radium-228	pCi/L		0.341 U		0.685 U	0.836		1.01		0.745 U	1.89 U		7.79 U G	1.05 U	3.28
Redox Potential, Field	mV														
Selenium	mg/L		0.005 U		0.005 U	0.005 U		0.005 U		0.005 U	0.0039 J		0.0034 JF1F2	0.005 U	0.005 U
Silver	mg/L														
Sodium	mg/L	23	23	22	23	24	23	23	23	22	12	11	11 F1F2	11	12
Strontium	mg/L														
Sulfate	mg/L	230		250		220	230		220		98	100		89	100
Temperature, Field	deg C	14.3		14.8		15.2			14.4		15.7	13.9		13.2	16.6
Thallium	mg/L		0.001 U		0.001 U	0.0011		0.001 U		0.001 U	0.00079 J		0.002 F1F2	0.001 U	0.00099 J
Turbidity, Field	NTU	21.65		26.74		19.47			4.73		784.73	767.78		79.2	84.31
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 = Millivolts
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.
F1 = MS and/or MSD Recovery is outside acceptance limits.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date Sample Type		BAC-16 2022-10-13 N	BAC-16 2022-12-05 N	BAC-16 2022-12-05 N	BAC-16 2023-02-27 FD	BAC-16 2023-02-27 FD	BAC-16 2023-02-27 N	BAC-16 2023-02-27 N	BAC-16 2023-04-12 N	BAC-16 2023-04-12 N	BAC-16 2023-04-12 N	BAC-16 2023-06-14 N	BAC-16 2023-06-14 N	BAC-16 2023-08-17 N	BAC-16 2023-08-17 N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	170	150	170	160	150	160	160	160	200 J	200 J	160	170	160	160
Aluminum	mg/L														
Antimony	mg/L	0.002 U		0.0014 J		0.002 U		0.002 U	0.002 U		0.002 U		0.002 U		0.002 U
Arsenic	mg/L	0.008		0.0071		0.0035 J		0.0035 J	0.0011 J		0.0017 J		0.005 U		0.0012 J
Barium	mg/L	0.12		0.1		0.084		0.082	0.062		0.063		0.051		0.051
Beryllium	mg/L	0.00086 J		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	170	150	170	160	150	160	160	160	200 J	200 J	160	170	160	160
Boron	mg/L	1.4	1.3		1.5		1.5		1.5	1.5		1.6		1.4	
Bromide	mg/L														
Cadmium	mg/L	0.00023 J		0.00025 J		0.001 U		0.001 U	0.001 U		0.001 U		0.001 U		0.001 U
Calcium	mg/L	92	95		100		100		100	100		120		100	
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	25	26		26		26		26	27		26		28	
Chromium	mg/L	0.013		0.0099		0.006		0.006	0.005 U		0.005 U		0.0013 J		0.0015 J
Cobalt	mg/L	0.0099		0.0074		0.0046		0.0048	0.0023		0.0024		0.0018		0.0021
Conductivity, Field	uS/cm	706	686				731		730			579		628	
Copper	mg/L														
Dissolved Oxygen, Field	mg/L	0.8	0.54				0.11		0.43			0.86		0.99	
Dissolved Solids, Total	mg/L	460 J	500		470		460		490	470		480		460	
Fluoride	mg/L	0.051	0.066	0.059	0.046 J	0.066	0.044 J	0.071	0.06	0.06	0.061	0.054	0.054	0.053	0.054
Iron	mg/L														
Lead	mg/L	0.0078		0.0061		0.0036		0.0037	0.001 U		0.001 U		0.00083 J		0.0012
Lithium	mg/L	0.011		0.01		0.0081		0.0088	0.0069 J		0.0069 J		0.0038 J		0.0083
Magnesium	mg/L	20	21	23	22	22	22	23	22	21	21	25	23	23	23
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
Molybdenum	mg/L	0.0031 J		0.0033 J		0.0012 J		0.0013 J	0.005 U		0.005 U		0.005 U		0.005 U
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV	-37.9	-41.7				-14.5		-7			68.9		129	
pH, Field	pH units	6.42	6.45				6.33		6.38			6.26		6.34	
Potassium	mg/L	2.6	2.6	2.6	2.5	2.3	2.3	2.4	1.6	1.6	1.6	1.9	1.7	1.8	1.7
Radium-226	pCi/L	0.418 U		0.307		0.213 U		0.123 U	0.0691 U		0.178		0.0532 U		-0.0187 U
Radium-226/228	pCi/L	4.37 J		1.53		1.91		1.8	0.00257 U		0.556 U		0.473 U		1.17
Radium-228	pCi/L	3.96 J		1.22 U G		1.69		1.68	-0.0666 U		0.377 U		0.42 U		1.19
Redox Potential, Field	mV														
Selenium	mg/L	0.0014 J		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	14	14	15	15	15	15	15	15	15	15	17	16	15	16
Strontium	mg/L														
Sulfate	mg/L	190	190		190		180		200	200		180		190	
Temperature, Field	deg C	14.3	13.5				13.5		15.1			14.6		15.2	
Thallium	mg/L	0.00027 J		0.0006 J		0.001 U		0.001 U	0.001 U		0.001 U		0.001 U		0.001 U
Turbidity, Field	NTU	204.33	120.27				92.19		19.96			6.01		42.15	
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 = Millivolts
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.
F1 = MS and/or MSD Recovery is outside acceptance limits.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date Sample Type		BAC-16 2023-10-02 FD	BAC-16 2023-10-02 N	BAC-16 2023-10-11 N	BAC-16 2023-10-11 N	BAC-17 2022-10-13 N	BAC-17 2022-12-08 N	BAC-17 2022-12-08 N	BAC-17 2023-04-06 N	BAC-17 2023-10-02 N	BAC-18 2022-10-14 N	BAC-18 2022-12-06 N	BAC-18 2022-12-06 N	BAC-18 2023-03-02 N	BAC-18 2023-03-02 N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	160	160	160	160	54	48		58	39	92	100	98	100	96
Aluminum	mg/L														
Antimony	mg/L	0.002 U	0.002 U		0.002 U	0.002 U		0.00061 J	0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	
Arsenic	mg/L	0.005 U	0.0011 J		0.0011 J	0.0013 J		0.00085 J	0.00084 J	0.005 U	0.0018 J		0.0018 J	0.0015 J	
Barium	mg/L	0.045	0.043		0.046	0.045		0.037	0.041	0.032	0.055		0.045	0.039	
Beryllium	mg/L	0.001 U	0.001 U		0.001 U	0.0013		0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	
Bicarbonate Alkalinity as CaCO3	mg/L	160	160	160	160	54	48		58	39	92	100	98	100	96
Boron	mg/L	1.5	1.5	1.5		4.2	4.1		3.6	4	1.4	1.3			1.4
Bromide	mg/L														
Cadmium	mg/L	0.001 U	0.001 U		0.001 U	0.00027 J		0.00022 J	0.0002 J	0.00028 J	0.001 U		0.001 U	0.001 U	
Calcium	mg/L	100	97	97		49	49		45	45	77	76			79
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	28	28	28		21	21		20	21	26	26			25
Chromium	mg/L	0.005 U	0.005 U		0.005 U	0.005 U		0.005 U	0.0029 J	0.005 U	0.0032 J		0.005 U	0.005 U	
Cobalt	mg/L	0.0012	0.0014		0.0016	0.041		0.037	0.034	0.044	0.0059		0.0039	0.0034	
Conductivity, Field	uS/cm		641	640		613	616		614	576	618	625		636	
Copper	mg/L														
Dissolved Oxygen, Field	mg/L		0.97	1.12		1.31	0.87		1.14	1.28	0.47	0.45		0.06	
Dissolved Solids, Total	mg/L	480	470	560		420 J	390		400	400	400 J	400			420
Fluoride	mg/L	0.061	0.062	0.065	0.044 J	0.074	0.061	0.081	0.038 J	0.056	0.042 J	0.057	0.052	0.063	0.064
Iron	mg/L														
Lead	mg/L	0.00069 J	0.00067 J		0.0011	0.0015		0.00086 J	0.0013	0.00085 J	0.0031		0.0011	0.0014	
Lithium	mg/L	0.0066 J	0.007 J		0.0078 J	0.0055 J		0.0047 J	0.0064 J	0.0058 J	0.0075 J		0.0068 J	0.0066 J	
Magnesium	mg/L	23	22	22	22	29	30	29	26	28	20	19	21	20	21
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 U	
Molybdenum	mg/L	0.005 U	0.005 U		0.005 U	0.005 U		0.005 U	0.005 U	0.005 U	0.0012 J		0.0015 J	0.005 U	
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV		138.8	129.8		-1.2	13.9		1	99.1	-31.3	27.8		50.2	
pH, Field	pH units		6.4	6.38		5.74	5.85		6.17	5.58	5.98	6.03		5.91	
Potassium	mg/L	1.6	1.5	1.8	1.6	1.2	1.1	1.2	1.1	0.95 J	1.5	1.4	1.5	1.4	1.5
Radium-226	pCi/L	0.0389 U	0.0636 U		0.111 U	0.247 U		0.173 U	0.291 U	0.0479 U	0.213 U		0.101 U	0.0983 U	
Radium-226/228	pCi/L	3.49 J	1.66 J		0.79 U	4.04 J			0.0672 U	0.559 U	2.48 J		0.527 U	0.791 U	
Radium-228	pCi/L	3.45 J	1.6 J		0.679 U	3.8 J		0.255 U	-0.224 U	0.511 U	2.27 J		0.427 U	0.693 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	0.005 U		0.005 U	0.005 U	
Silver	mg/L														
Sodium	mg/L	16	15	15	15	20	22	21	20	22	14	14	15	14	15
Strontium	mg/L														
Sulfate	mg/L	190	190	190		240	220		220	240	200	190			190
Temperature, Field	deg C		14.8	14.4		14.5	13.6		13.1	15.7	15.3	14.3		14.3	
Thallium	mg/L	0.001 U	0.001 U		0.001 U	0.00053 J		0.00051 J	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	
Turbidity, Field	NTU		9.43	41.01		53.14	38.13		67.13	36.11	69.8	26.19		33.27	
Vanadium	mg/L														
Zinc	mg/L														

Notes:
 FD = Field duplicate sample
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 mg/L = Milligrams per liter
 mV = Millivolts
 NTU = Nephelometric Turbidity Unit
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Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date Sample Type		BAC-18 2023-04-12 N	BAC-18 2023-04-12 N	BAC-18 2023-04-12 N	BAC-18 2023-06-13 N	BAC-18 2023-06-13 N	BAC-18 2023-08-17 N	BAC-18 2023-08-17 N	BAC-18 2023-09-27 N	BAC-18 2023-10-11 FD	BAC-18 2023-10-11 FD	BAC-18 2023-10-11 N	BAC-18 2023-10-11 N	BAC-19 2022-10-14 N	BAC-19 2022-12-06 N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	95	140	110 U	95	94	88	90	86	88	88	87	88	140	150
Aluminum	mg/L														
Antimony	mg/L	0.002 U		0.002 U				0.002 U	0.002 U			0.002 U		0.002 U	0.0016 J
Arsenic	mg/L	0.0012 J		0.001 J				0.00086 J	0.005 U			0.005 U		0.005 U	0.005 U
Barium	mg/L	0.039		0.037				0.029	0.024 J			0.024		0.026	0.42
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	95	140	110 U	95	94	88	90	86	88	88	87	88	140	150
Boron	mg/L	1.5	1.4		1.5		1.4		1.4	1.4		1.3		0.19	0.22
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	81	79		83		79		72	77		76		78	80
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	25	25		25		25		25	25		25		780	900
Chromium	mg/L	0.0013 J		0.005 U				0.005 U	0.005 U			0.005 U		0.005 U	0.005 U
Cobalt	mg/L	0.0029		0.0027				0.0019	0.0008 J			0.0011		0.0012	0.00022 J
Conductivity, Field	uS/cm	593			551		566		565			580		2724	3007
Copper	mg/L														
Dissolved Oxygen, Field	mg/L	1.29			0.83		1		1.18			1.19		0.56	0.4
Dissolved Solids, Total	mg/L	410	410		400		400		390	380 J		390 J		930 J	1200
Fluoride	mg/L	0.057	0.058	0.059	0.051	0.053	0.054	0.054	0.061	0.064	0.051	0.075	0.03 J	0.6	0.53
Iron	mg/L														
Lead	mg/L	0.00073 J		0.001 U				0.0012	0.001 U			0.001 U		0.001 U	0.001 U
Lithium	mg/L	0.0077 J		0.0079 J				0.0076 J	0.0062 J			0.0074 J		0.0082	0.024
Magnesium	mg/L	20	20	20	21	19	21	21	19	20	18	20	20	14	16
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	0.005 U		0.005 U				0.005 U	0.005 U			0.005 U		0.005 U	0.016
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV	37.7			69.8		145.2		119.8			96.6		-215.8	-153
pH, Field	pH units	6.02			5.94		5.89		5.99			5.95		7.47	7.56
Potassium	mg/L	1.3	1.2	1.3	1.4	1.3	1.4	1.3	1.2	1.3	1.2	1.2	1.3	3	2.8
Radium-226	pCi/L	0.244 U		0.109 U				0.148 U	0.0718 U			0.0855 U		-0.004 U	0.346
Radium-226/228	pCi/L	0.46 U		0.349 U				0.847 U	0.0479 U			0.93 U		0.438 U	3.87 J
Radium-228	pCi/L	0.217 U		0.239 U				0.699 U	-0.0238 U			0.845 U		0.442 U	3.53 J
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	15	15	15	17	15	16	16	16	16	15	16	16	380	410
Strontium	mg/L														
Sulfate	mg/L	200	190		180		190		190	190		190		3.7	10
Temperature, Field	deg C	15.2			15.1		15.6		15.7			14.9		15.3	14.2
Thallium	mg/L	0.001 U		0.001 U				0.001 U	0.001 U			0.001 U		0.001 U	0.001 U
Turbidity, Field	NTU	18.93			9.42		23.4		5.15			6.73		6.91	3.18
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 = Millivolts
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.
F1 = MS and/or MSD Recovery is outside acceptance limits.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date Sample Type		BAC-19 2022-12-06 N	BAC-19 2023-04-05 N	BAC-19 2023-09-27 N	BAC-21 2022-10-10 N	BAC-21 2022-12-14 N	BAC-21 2022-12-14 N	BAC-21 2023-02-24 N	BAC-21 2023-02-24 N	BAC-21 2023-04-10 N	BAC-21 2023-04-10 N	BAC-21 2023-04-10 N	BAC-21 2023-06-12 FD	BAC-21 2023-06-12 FD	BAC-21 2023-06-12 N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	140	160	150	230	240	240	230	240	250 J	250 J	250 J	240	240	250
Aluminum	mg/L														
Antimony	mg/L	0.00074 J	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	0.0013 J	0.005 U	0.005 U	0.0091	0.0086			0.0038 J	0.003 J		0.0031 J		0.0075	
Barium	mg/L	0.57	0.59	0.57	0.18	0.18			0.16	0.15		0.15		0.19	
Beryllium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U			0.001 U	0.00077 J		0.00067 J		0.001 U	
Bicarbonate Alkalinity as CaCO3	mg/L	140	160	150	230	240	240	230	240	250 J	250	250 J	240	240	250
Boron	mg/L		0.22	0.22	0.33			0.3	0.37		0.37	0.32		0.42	0.42
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		0.001 U	
Calcium	mg/L		84	91	130		120	130		120	120		140		140
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		870	920	72			66		74	65		68		73
Chromium	mg/L	0.005 U	0.005 U	0.005 U	0.01	0.01			0.005 U	0.005 U		0.005 U		0.0057	
Cobalt	mg/L	0.00038 J	0.00033 J	0.00026 J	0.0039	0.0036			0.00094 J	0.00051 J		0.00076 J		0.0025	
Conductivity, Field	uS/cm		3023	2703	977	796		971		936					899
Copper	mg/L														
Dissolved Oxygen, Field	mg/L		0.79	1.17	0.42	0.43		0.06		0.48					0.81
Dissolved Solids, Total	mg/L		1500	1500	550		530	530		560	500		540		550
Fluoride	mg/L	0.58	0.54	0.56	0.059	0.093		0.068	0.058	0.074 J	0.096 J	0.11	0.078	0.079	0.075
Iron	mg/L														
Lead	mg/L	0.001 U	0.001 U	0.001 U	0.0069	0.0066			0.0015	0.0007 J		0.0007 J		0.0042	
Lithium	mg/L	0.028	0.027	0.03	0.011	0.01			0.006 J	0.0077 J		0.006 J		0.0059 J	
Magnesium	mg/L	16	17	19	16	16	16	15	16	14	14	14	16	16	16
Manganese	mg/L														
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00013 JB			0.0002 U	0.0002 U		0.0002 U		0.0002 U	
Molybdenum	mg/L	0.013	0.0084	0.0075	0.0016 J	0.0011 J			0.005 U	0.0015 J		0.0015 J		0.0012 J	
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV		-174.1	-71.2	-152	-148.3		-129.7		-141					-80.7
pH, Field	pH units		7.4	7.31	6.87	6.88		6.79		6.85					6.81
Potassium	mg/L	2.9	2.8	2.9	3.3	3.2	3.5	2.4	2.5	2.1	2.1	2	2.9	2.7	2.7
Radium-226	pCi/L	0.767	0.717	0.475	1.18	0.502			0.397	0.308 U		0.239		0.419 U	
Radium-226/228	pCi/L	1.99	1.12	1.47	2.78 J	3.4			0.871 U	0.807 U		0.34 U		1.89 U	
Radium-228	pCi/L	1.22	0.404 U	0.99	1.6 J	2.9 G			0.474 U	0.499 U		0.1 U		1.47 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	0.001 J		0.001 J		0.005 U	
Silver	mg/L														
Sodium	mg/L	440	440	470	29	27	29	28	30	27	25	25	31	29	30
Strontium	mg/L														
Sulfate	mg/L		7.3	9.4	140			130		140	120		120		130
Temperature, Field	deg C		15.6	15.5	15	12.9		13.1		14.1					13.9
Thallium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U			0.00026 J	0.00044 J		0.00048 J		0.001 U	
Turbidity, Field	NTU		5.1	3.09	195.41	208.19		16.38		13.89					70.7
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 = Millivolts
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.
F1 = MS and/or MSD Recovery is outside acceptance limits.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date Sample Type		BAC-21 2023-06-12 N	BAC-21 2023-08-16 N	BAC-21 2023-08-16 N	BAC-21 2023-09-28 N	BAC-21 2023-10-11 N	BAC-21 2023-10-11 N	BAC-22 2022-10-12 N	BAC-22 2022-12-14 N	BAC-22 2022-12-14 N	BAC-22 2023-02-24 N	BAC-22 2023-02-24 N	BAC-22 2023-04-10 N	BAC-22 2023-04-10 N	BAC-22 2023-04-10 N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	250	240	240	240	240	240	230	230	250	220 J	220 J	240 J	230 J	230 J
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		0.002 U
Arsenic	mg/L	0.0057		0.0075	0.005		0.006	0.0019 J	0.0029 J			0.0024 J	0.0023 J		0.0017 J
Barium	mg/L	0.18		0.19	0.18		0.17	0.15	0.15			0.14	0.13		0.13
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	250	240	240	240	240	240	230	230	250	220	220	240 J	230 J	230 J
Boron	mg/L		0.39		0.39	0.37		0.2		0.2	0.24		0.22	0.23	
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		0.001 U
Calcium	mg/L		140		140	130		140		140	150		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	5 U	5 U	5 U	5 U
Chloride	mg/L		77		74	77		49			36		36	35	
Chromium	mg/L	0.0047 J		0.0076	0.0042 J		0.0038 J	0.005 U	0.003 J			0.005 U	0.005 U		0.005 U
Cobalt	mg/L	0.0022		0.0029	0.0016		0.0017	0.00055 J	0.0015			0.00066 J	0.00073 J		0.00059 J
Conductivity, Field	uS/cm		947		722	1004		990	933			984		950	
Copper	mg/L														
Dissolved Oxygen, Field	mg/L		1.06		0.89	1.25		0.41	0.44			0.28		0.46	
Dissolved Solids, Total	mg/L		540		530	550		640		600	540		750	610	
Fluoride	mg/L	0.087 J	0.069	0.076	0.052	0.1	0.1	0.077	0.068		0.079	0.076	0.084	0.25 U	0.083
Iron	mg/L														
Lead	mg/L	0.0033		0.005	0.0029		0.0029	0.001 U	0.0017			0.00055 J	0.00061 J		0.0005 J
Lithium	mg/L	0.0059 J		0.0099	0.0062 J		0.0087	0.0054 J	0.0059 J			0.0044 J	0.0059 J		0.0053 J
Magnesium	mg/L	15	17	15	16	16	15	18	20	19	19	19	18	19	18
Manganese	mg/L														
Mercury	mg/L	0.0002 U		0.0002 U	0.0002 U		0.0002 U	0.0002 U	0.00013 JB			0.0002 U	0.0002 U		0.0002 U
Molybdenum	mg/L	0.0023 J		0.0012 J	0.005 U		0.005 U	0.0011 J	0.005 U			0.005 U	0.005 U		0.005 U
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV		-94.4		-138.6	-134.4		-143.1	-124			-94		-126.3	
pH, Field	pH units		6.86		6.82	6.81		6.76	6.8			6.69		6.81	
Potassium	mg/L	2.6	2.8	2.8	2.6	2.8	2.4	2.5	3.1	3.1	2.8	2.9	2.6	2.9	2.6
Radium-226	pCi/L	0.65		0.567 U	1.14		0.527	0.206 U	0.251 U			0.288	0.351		0.236
Radium-226/228	pCi/L	2.32 U		2.05 U	1.23 U		1.84	0.8 J	2.86			0.421 U	1.74		0.668
Radium-228	pCi/L	1.67		1.48 U	0.0899 U		1.31	0.594 J	2.61 G			0.133 U	1.39		0.432 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	0.005 U		0.005 U
Silver	mg/L														
Sodium	mg/L	28	32	30	32	30	27	21	23	22	21	21	18	19	20
Strontium	mg/L														
Sulfate	mg/L		130		130	130		220				230		290	260
Temperature, Field	deg C		14.8		14.1	13.5		13.5	12.6			13.4		14.1	
Thallium	mg/L	0.001 U		0.001 U	0.001 U		0.001 U	0.00032 J	0.001 U			0.001 U	0.001 U		0.001 U
Turbidity, Field	NTU		91.81		58.11	90.87		13.03	60.34			7.7		20.39	
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 = Millivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picouries 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.
F1 = MS and/or MSD Recovery is outside acceptance limits.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date Sample Type		BAC-22 2023-06-12 N	BAC-22 2023-06-12 N	BAC-22 2023-08-16 N	BAC-22 2023-08-16 N	BAC-22 2023-09-28 N	BAC-22 2023-10-11 N	BAC-22 2023-10-11 N	BAC-23 2022-10-11 N	BAC-23 2022-10-13 N	BAC-23 2022-12-13 N	BAC-23 2023-03-01 N	BAC-23 2023-03-01 N	BAC-23 2023-04-11 FD	BAC-23 2023-04-11 N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	230	230	220	220	220	230	230	220	220	230	220	220	230	230
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		0.00075 J	0.002 U
Arsenic	mg/L		0.0025 J		0.0029 J	0.004 J		0.0023 J	0.0017 J	0.0024 J		0.0018 J		0.0019 J	0.0017 J
Barium	mg/L		0.14		0.13	0.19		0.14	0.12	0.13		0.14		0.14	0.14
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	230	230	220	220	220	230	230	220	220	230	220	220	230	230
Boron	mg/L	0.23		0.23		0.28	0.22		0.25		0.24		0.28	0.29	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		0.001 U	0.001 U
Calcium	mg/L	160		160		210	150		120		130		130	130	130
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	33		32		35	38		44				46	44	43
Chromium	mg/L		0.0019 J		0.0031 J	0.0033 J		0.0013 J	0.005 U	0.005 U		0.005 U		0.005 U	0.005 U
Cobalt	mg/L		0.0013		0.0022	0.0022		0.0012	0.0013	0.0016		0.0011		0.0011	0.001
Conductivity, Field	uS/cm	880		776		689	963		846	766		824			795
Copper	mg/L														
Dissolved Oxygen, Field	mg/L	0.87		1.3		1.12	1.2		0.4	1.28		0.15			0.6
Dissolved Solids, Total	mg/L	600		610		630	580		490		520		500	500	490
Fluoride	mg/L	0.082	0.081	0.078	0.076	0.061	0.09	0.07	0.13	0.15		0.14	0.11	0.14	0.14
Iron	mg/L														
Lead	mg/L		0.0014		0.0025	0.0025		0.0014	0.001 U	0.00085 J		0.001 U		0.001 U	0.001 U
Lithium	mg/L		0.0036 J		0.0068 J	0.0066 J		0.0068 J	0.0032 J	0.0033 J		0.0026 J		0.0056 J	0.0046 J
Magnesium	mg/L	19	20	20	18	26	19	19	15	16	16	16	16	15	15
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
Molybdenum	mg/L		0.005 U		0.005 U	0.005 U		0.005 U	0.005 U	0.005 U		0.005 U		0.0019 J	0.005 U
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV	-31.3		-55.9		-103.1	-107.6		-76	-107.7		-71.4			-55.8
pH, Field	pH units	6.69		6.81		6.77	6.79		7.2	7.04		6.78			6.95
Potassium	mg/L	3.1	3	3.1	2.8	3.9	2.9	2.8	1.8	2.1	2.1	2	2	1.9	1.9
Radium-226	pCi/L		0.345		0.243	0.648		0.176 U	0.326	0.275		0.141		0.242	0.243
Radium-226/228	pCi/L		0.815 U		0.404 U	1.4		1.23	1.05 J	1.69		0.596		0.0252 U	0.159 U
Radium-228	pCi/L		0.47 U		0.161 U	0.749		1.05	0.719 J	1.42		0.455 U		-0.216 U	-0.084 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		0.005 U	0.005 U
Silver	mg/L														
Sodium	mg/L	21	21	20	19	26	19	19	19	19	20	19	20	19	18
Strontium	mg/L														
Sulfate	mg/L	230		240		240	240		140				150	150	150
Temperature, Field	deg C	13.7		14.3		14	13.8		15	13.2		14.8		150	14.4
Thallium	mg/L		0.001 U		0.001 U	0.001 U		0.001 U	0.001 U	0.001 U		0.001 U		0.00086 J	0.001 U
Turbidity, Field	NTU	27.03		62.11		36.12	28.35		7.79	34.88		5.79			5.25
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 = Millivolts
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.
F1 = MS and/or MSD Recovery is outside acceptance limits.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date		BAC-23	BAC-23	BAC-23	BAC-23	BAC-23	BAC-23	BAC-23	BAC-23	BAC-23	MW-1	MW-1	MW-1	MW-1	MW-1
Sample Type		2023-04-11	2023-04-11	2023-06-12	2023-06-12	2023-08-16	2023-08-16	2023-09-28	2023-10-10	2023-10-10	2016-08-25	2016-10-03	2016-11-28	2017-02-07	2017-03-28
Analyte		N	N	N	N	N	N	N	N	N	N	N	N	N	FD
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	240 J	240 J	240	230	230	230	230	230	230			249	245	
Aluminum	mg/L														0.068
Antimony	mg/L		0.002 U		0.002 U		0.002 U	0.002 U		0.002 U	2E-05 J	2E-05 J	2E-05 J	2E-05 J	0.00063 JB
Arsenic	mg/L		0.002 J		0.0014 J		0.0018 J	0.0012 J		0.0019 J	0.00102	0.00087	0.00073	0.00087	0.00061 J
Barium	mg/L		0.13		0.12		0.13	0.12		0.13	0.0982	0.0914	0.0985	0.0899	0.1 B
Beryllium	mg/L		0.001 U		0.001 U		0.001 U	0.001 U		0.001 U	2E-05 J	1E-05 J	6E-06 J	7E-06 J	0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L	240 J	240 J	240	230	230	230	230	230	230					
Boron	mg/L	0.28		0.27		0.27		0.24	0.27		0.053	0.044	0.058	0.048	0.074 J
Bromide	mg/L												0.119	0.099	0.14 J
Cadmium	mg/L		0.001 U		0.001 U		0.001 U	0.001 U		0.001 U	2E-05 J	1E-05 J	5E-06 J	8E-06 J	0.001 U
Calcium	mg/L	130		130		130		120	130		114	113	124	121	120 JB
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	44		43		44		42	45		19.4	19.9	19.5	20	20
Chromium	mg/L		0.005 U		0.005 U		0.005 U	0.005 U		0.005 U	0.0007	0.0003	0.000175	0.000219	0.00027 JB
Cobalt	mg/L		0.001		0.0009 J		0.0011	0.00087 J		0.00094 J	0.000964	0.000769	0.000672	0.000763	0.0007 J
Conductivity, Field	uS/cm			755		670		732	736		714	712	717	707	
Copper	mg/L														0.002 U
Dissolved Oxygen, Field	mg/L			0.95		1.24		1.08	1.18		0.57	0.54	0.75	0.75	
Dissolved Solids, Total	mg/L	500		500		470		520	490		466	440	447	455	460
Fluoride	mg/L	0.14	0.14	0.13	0.13	0.13	0.13	0.096	0.15	0.12	0.09	0.09	0.01	0.1	0.11
Iron	mg/L														0.24 B
Lead	mg/L		0.001 U		0.001 U		0.001 U	0.001 U		0.001 U	0.000495	0.000355	0.000124	0.000214	0.00031 J
Lithium	mg/L		0.0046 J		0.008 U		0.0041 J	0.0032 J		0.0049 J	0.008	0.004	0.006	0.006	0.0041 J
Magnesium	mg/L	15	15	15	14	16	16	15	16	15			14.1	14.2	13 B
Manganese	mg/L														0.48 JB
Mercury	mg/L		0.0002 U		0.0002 U		0.0002 U	0.0002 U		0.0002 U	5E-06 U	1.3E-05	5E-06 U	5E-06 U	0.0002 U
Molybdenum	mg/L		0.005 U		0.005 U		0.005 U	0.005 U		0.005 U	0.00045	0.00023	0.00022	0.00042	0.01 U
Nickel	mg/L														0.00053 JB
Oxidation-Reduction Potential, Field	mV			21.5		14.1		-54.6	-61.3						
pH, Field	pH units			6.85		6.9		6.92	6.95		7.21	7.2	7.16	7.09	
Potassium	mg/L	1.9	1.8	2	1.8	2	2	1.8	2	1.9			1.57	1.82	1.4 B
Radium-226	pCi/L		0.125 U		0.227		0.166	0.441		0.252	1.63	0.285	0.309	0.248	0.119 U
Radium-226/228	pCi/L		0.297 U		0.566		0.336 U	1.24		0.981	2.081	2.045	0.2551	0.918	0.567
Radium-228	pCi/L		0.172 U		0.339 U		0.17 U	0.801		0.729	0.451	1.76	-0.0539	0.67	0.449
Redox Potential, Field	mV										-85.8	-29.2	-37.6	-37.5	
Selenium	mg/L		0.005 U		0.005 U		0.005 U	0.005 U		0.005 U	0.0001	7E-05 J	4E-05 J	5E-05 J	0.005 U
Silver	mg/L														0.00014 J
Sodium	mg/L	19	18	19	17	20	20	19	20	19			16	13.5	15 JB
Strontium	mg/L												0.218	0.219	0.2 B
Sulfate	mg/L	150		140		140		140	150		125	126	127	119	120
Temperature, Field	deg C			14.4		14.8		14.6	14.6		15.1	13.7	12.6	12.9	
Thallium	mg/L		0.001 U		0.001 U		0.001 U	0.001 U		0.001 U	3E-05 J	2E-05 J	1E-05 J	3E-05 J	0.001 U
Turbidity, Field	NTU			4.77		5.15		5.71	3.32		8.6	7	9	8.8	
Vanadium	mg/L														0.005 U
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 = Millivolts
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.
F1 = MS and/or MSD Recovery is outside acceptance limits.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date Sample Type		MW-1 2017-03-28 N	MW-1 2017-05-03 N	MW-1 2017-06-13 N	MW-1 2017-07-14 FD	MW-1 2017-07-14 N	MW-1 2018-02-28 N	MW-1 2018-05-15 N	MW-1 2018-09-18 N	MW-1 2019-03-16 N	MW-1 2019-09-17 N	MW-1 2020-03-11 N	MW-1 2020-09-10 N	MW-1 2021-03-13 N	MW-1 2021-09-20 N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L							230	220	220 B	220	220	220	230	240
Aluminum	mg/L	0.092	0.085	0.061	0.05 U	0.05 U									
Antimony	mg/L	0.0006 JB	0.002 U	0.002 U	0.002 U	0.002 U	0.0012 J	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	0.00064 J	0.005 U	0.005 U	0.005 U	0.00094 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
Barium	mg/L	0.1 B	0.1	0.11	0.1	0.1	0.11	0.11	0.12	0.11	0.11	0.11	0.11	0.11	0.12
Beryllium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00036 J	0.00031 J	0.001 U^+	0.001 U	0.001 U	0.00036 J^-	0.001 U	0.001 U^-	0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L						220	230	220	220 B	220	220	220	230	240
Boron	mg/L	0.081 J	0.06 J	0.066 J	0.067 JB	0.068 JB	0.054 J	0.054 J	0.076 J	0.054 J	0.056 J	0.066 J	0.093 J	0.052 J	0.069 J
Bromide	mg/L	0.14 J	0.12 J	0.13 J	0.13 J	0.13 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	0.001 U	0.0002 J	0.001 U	0.001 U	0.001 U
Calcium	mg/L	120 JB	120	120	120	120	120	120	120	120	120	120	120	110	130
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	20	21	22	22	22	24	25	27	30	28	37	38	41	41
Chromium	mg/L	0.00049 JB	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.00098 J	0.001 J	0.002 U	0.002 U	0.002 U	0.002 U	0.005 U
Cobalt	mg/L	0.00072 J	0.00072 J	0.0007 J	0.00069 J	0.00078 J	0.00085 J	0.00085 J	0.00084 J	0.00069 J	0.00054 J	0.00083 J	0.00059 J	0.00054 J	0.00083 J
Conductivity, Field	uS/cm							717				779	756	767	782
Copper	mg/L	0.00074 JB	0.002 U	0.002 U	0.002 U	0.002 U									
Dissolved Oxygen, Field	mg/L							0.12							
Dissolved Solids, Total	mg/L	470	470	490 J	470 J	480 J	470	500	490	520	510	490	470	590	490
Fluoride	mg/L	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.1	0.093	0.098	0.11	0.078	0.082	0.11
Iron	mg/L	0.27 B	0.3	0.24	0.093 J	0.095 J									
Lead	mg/L	0.00035 J	0.001 U	0.001 U	0.001 U	0.00076 J	0.00076 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Lithium	mg/L	0.004 J	0.0033 J	0.0046 J	0.0052 J	0.0051 J	0.0033 J	0.0029 J	0.0058 J*+^+	0.0035 J	0.0083 B^+	0.0025 J^-	0.0042 J	0.0042 J	0.0046 J
Magnesium	mg/L	13 B	14	14	14	13	14	14	14	15	15	15	14	14	15
Manganese	mg/L	0.48 JB	0.5	0.51	0.49	0.47									
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U									
Molybdenum	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 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	0.005 U
Nickel	mg/L	0.00068 JB	0.002 U	0.002 U	0.002 U	0.002 U									
Oxidation-Reduction Potential, Field	mV														
pH, Field	pH units	7.16	7.15	7.13		6.98		7.14	7.16	7.35	7.29	7.3	7.42	7.19	7.3
Potassium	mg/L	1.4 B	1.4	1.4	1.4	1.4	1.5	1.4	1.5	1.6	1.5	1.5	1.4	1.2	1.5
Radium-226	pCi/L	0.209	0.179	0.069 U	0.17	0.258									
Radium-226/228	pCi/L	0.537	0.527	0.525	0.342	0.518									
Radium-228	pCi/L	0.328 U	0.348 U	0.456	0.171 U	0.259 U									
Redox Potential, Field	mV														
Selenium	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.0012 JB	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0009 J	0.005 U	0.005 U	0.005 U
Silver	mg/L	0.00025 J	0.00021 J	0.00019 J	0.001 U	0.001 U									
Sodium	mg/L	15 JB	16 B	15	16 J	15 J	15	17	15	17	15	17	15	14	17
Strontium	mg/L	0.2 B	0.2 B	0.2 B	0.2	0.2									
Sulfate	mg/L	120	130	130	130	130	140	140	140	150	140	140	140	140	140
Temperature, Field	deg C							14.1				13	13	13	13
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	0.001 U	0.001 U	0.00067 J	0.001 U	0.001 U	0.001 U
Turbidity, Field	NTU	2.9	3.3	3		0.6		11.3	2.72		4	3.8	2.3	1.9	4.8
Vanadium	mg/L	0.005 U													
Zinc	mg/L	0.02 U	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 = Millivolts
 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.
 F1 = MS and/or MSD Recovery is outside acceptance limits.
 Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date Sample Type	MW-1 2022-02-20 N	MW-1 2022-03-31 FD	MW-1 2022-03-31 N	MW-1 2022-04-27 FD	MW-1 2022-04-27 N	MW-1 2022-06-21 N	MW-1 2022-10-10 N	MW-1 2022-12-12 N	MW-1 2023-02-24 N	MW-1 2023-04-07 N	MW-1 2023-09-28 N	MW-6 2016-08-26 N	MW-6 2016-10-03 N	MW-6 2016-11-28 N
Analyte	Unit													
Alkalinity, Total as CaCO3	mg/L		230	230	230	230	240	230	240	250	240			259
Aluminum	mg/L		0.037 J	0.026 J										
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	0.0006 J	2E-05 J	5E-05 U	5E-05 U
Arsenic	mg/L		0.002 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.00029	0.00035	0.00031
Barium	mg/L		0.13	0.13	0.12	0.11	0.12	0.093	0.12	0.12	0.13	0.148	0.138	0.141
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	2E-05 U	2E-05 U	2E-05 U
Bicarbonate Alkalinity as CaCO3	mg/L		230	230	230	230	240	230	240	250	240			
Boron	mg/L		0.2 U	0.2 U				0.1 U			0.064 J	0.062 J	0.045	0.054
Bromide	mg/L													0.107
Cadmium	mg/L		0.0001 U	0.0001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0002 J	0.001 U	0.00024 J	4E-05	3E-05	3E-05
Calcium	mg/L		150	150				130			120	130	123	116
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		42	42				42			41	39	17.1	17.8
Chromium	mg/L		0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0017 J	0.005 U	0.0005	0.0001	0.000822
Cobalt	mg/L		0.00065	0.00062	0.00057 J	0.00053 J	0.0011	0.00052 J	0.00065 J	0.00074 J	0.00042 J	0.0011	0.000403	0.000377
Conductivity, Field	uS/cm	596	794	794		789		815	844	814	706	644	716	718
Copper	mg/L		0.005 U	0.005 U										
Dissolved Oxygen, Field	mg/L		0.97	0.97		0.58		1.32	1.16	0.99	1.4	1.18	0.04	0.3
Dissolved Solids, Total	mg/L		470 J	500 J				570			490	480	476	434
Fluoride	mg/L		0.11	0.11	0.1	0.11	0.1	0.1	0.11	0.11	0.073	0.078	0.08 J	0.09 J
Iron	mg/L		0.1	0.08 J										0.09
Lead	mg/L		0.0005 U	0.0005 U	0.001 U	0.001 U	0.0009 J	0.001 U	0.001 U	0.001 U	0.001 U	0.00083 J	3.9E-05	2E-05
Lithium	mg/L		0.0045 J	0.0033 J	0.0046 J	0.004 J	0.0028 J	0.0041 J	0.0051 J	0.0041 J	0.0059 J	0.006 J	0.007	0.003
Magnesium	mg/L		15	16	15	14	16	16	16	15	14	17		14.2
Manganese	mg/L		0.57	0.58										
Mercury	mg/L		0.0002 U	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	5E-06 U	2E-06 J
Molybdenum	mg/L		0.002 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0011 J	0.00073	0.00069
Nickel	mg/L		0.005 U	0.005 U										0.00064
Oxidation-Reduction Potential, Field	mV		33.4	33.4		43.9		50.5	12.3	131.2	142.2	71.1		
pH, Field	pH units	7.08	6.98	6.98		7.14		7.17	7.59	7.08	7.14	7.14	7	7.04
Potassium	mg/L		1.5 J	1.7 J	1.5	1.4	1.6	1.5	1.5	1.5	1.4	1.7		1.93
Radium-226	pCi/L		0.0911 U	0.0844 U	0.175	0.0509 U	0.235	0.0798 U	0.0801 U	0.0889	0.00883 U	0.181 U	0.87	0.444
Radium-226/228	pCi/L		0.489 U	0.112 U	0.291 U	0.372 U	0.988	0.485 U	0.816	0.256 U	0.356 U	0.357 U	1.663	1.32
Radium-228	pCi/L		0.398 U	0.0278 U	0.116 U	0.321 U	0.753	0.405 U	0.735	0.167 U	0.347 U	0.176 U	0.793	0.876
Redox Potential, Field	mV												165.3	171
Selenium	mg/L		0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	3E-05 J	0.0001 U
Silver	mg/L		0.001 U	0.001 U										4E-05 J
Sodium	mg/L		18	19	16	15	17	17	18	17	16	20		14.4
Strontium	mg/L		0.27	0.27										0.228
Sulfate	mg/L		130	130				130			130	130	131	123
Temperature, Field	deg C	13	13	13		13.1		14.7	12.3	12.6	12.9	13.4	17.2	14.7
Thallium	mg/L		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0004 J	0.001 U	0.00071 J	0.001 U	0.00071 J	2E-05 J	4E-05 J
Turbidity, Field	NTU	1.11	6.5	6.5		0.01		2.28	6.54	1.79	2.62	6.44	5.5	1.9
Vanadium	mg/L													4
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 = Millivolts
 NTU = Nephelometric Turbidity Unit
 uS/cm = Microsiemens per centimeter
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 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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 F1 = MS and/or MSD Recovery is outside acceptance limits.
 Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date Sample Type		MW-6 2017-02-07 N	MW-6 2017-03-28 N	MW-6 2017-05-03 N	MW-6 2017-06-13 N	MW-6 2017-07-14 N	MW-6 2018-02-28 N	MW-6 2018-05-16 N	MW-6 2018-09-18 N	MW-6 2019-03-16 N	MW-6 2019-09-18 N	MW-6 2020-03-11 N	MW-6 2020-09-09 FD	MW-6 2020-09-09 N	MW-6 2021-03-13 N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	257						250	220	230 B	220	230	220	220	230
Aluminum	mg/L		0.05 U	0.05 U	0.05 U	0.05 U									
Antimony	mg/L	1E-05 J	0.00059 JB	0.002 U	0.002 U	0.002 U	0.0015 J	0.002 U	0.002 U	0.002 U	0.00071 J	0.002 U	0.002 U	0.002 U	0.002 U
Arsenic	mg/L	0.00031	0.00042 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	0.005 U	0.005 U	0.005 U
Barium	mg/L	0.123	0.15 B	0.15	0.14	0.14	0.15	0.14	0.15	0.13	0.13	0.13	0.13	0.13	0.12
Beryllium	mg/L	2E-05 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00069 J	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						240	250	220	230 B	220	230	220	220	230
Boron	mg/L	0.122	0.065 J	0.06 J	0.067 J	0.064 JB	0.075 J	0.08 J	0.073 J	0.059 J	0.04 J	0.051 J	0.081 J	0.082 J	0.026 J
Bromide	mg/L	0.3 U	0.14 J	0.12 J	0.12 J	0.12 J									
Cadmium	mg/L	3E-05	0.001 U	0.001 U	0.001 U	0.001 U	0.00022 J	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	106	120 JB	120	120	120	120	120	120	120	110	110	110	110	100
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	17.9	19	20	20	20	22	22	23	23	22	23	24	24	24
Chromium	mg/L	0.00476	0.001 JB	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	0.002 U	0.002 U
Cobalt	mg/L	0.000376	0.00052 J	0.00044 J	0.00047 J	0.00053 J	0.00063 J	0.00065 J	0.00065 J	0.0005 J	0.00046 J	0.00044 J	0.00049 J	0.00049 J	0.00044 J
Conductivity, Field	uS/cm	719						729				726	685	685	686
Copper	mg/L		0.002 U	0.002 U	0.002 U	0.002 U									
Dissolved Oxygen, Field	mg/L	0.99						0.13							
Dissolved Solids, Total	mg/L	454	480	460	480 J	470 J	470	460	480	450	340	450	430	440	440
Fluoride	mg/L	0.3 U	0.098	0.095	0.096	0.095	0.1	0.095	0.11	0.083	0.083	0.095	0.033 J	0.038 J	0.071
Iron	mg/L		0.031 JB	0.1 U	0.1 U	0.1 U									
Lead	mg/L	2.1E-05	0.00028 J	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	0.001 U	0.001 U
Lithium	mg/L	0.006	0.0042 J	0.0033 J	0.0049 J	0.0053 J	0.0031 J	0.0021 J	0.0049 J*+^+	0.0032 J	0.0035 J	0.008 U^-	0.0056 J	0.0049 J	0.0034 J
Magnesium	mg/L	12.8	14 B	14	15	14	14	14	14	15	13	14	14	14	12
Manganese	mg/L		1.3 JB	1.5	1.4	1.5									
Mercury	mg/L	5E-06 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U									
Molybdenum	mg/L	0.00128	0.00078 J	0.01 U	0.01 U	0.01 U	0.0017 J	0.005 U	0.005 U	0.005 U	0.0053	0.005 U	0.005 U	0.005 U	0.0015 J
Nickel	mg/L		0.00046 JB	0.002 U	0.002 U	0.002 U									
Oxidation-Reduction Potential, Field	mV														
pH, Field	pH units	6.96	7.03	6.96	6.95	6.89		7.01	7.03	7.17	7.21	7.19	7.21	7.21	7
Potassium	mg/L	1.64	1.7 B	1.7	1.6	1.7	1.7	1.7	1.6	1.8	1.6	1.7	1.6	1.6	1.7
Radium-226	pCi/L	0.141	0.0546 U	0.124	0.113	0.174									
Radium-226/228	pCi/L	0.249	0.283 U	0.159 U	0.665	0.259 U									
Radium-228	pCi/L	0.108	0.228 U	0.0352 U	0.552	0.0855 U									
Redox Potential, Field	mV	145.2													
Selenium	mg/L	5E-05 J	0.005 U	0.005 U	0.005 U	0.005 U	0.001 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
Silver	mg/L		4.4E-05 J	0.001 U	0.001 U	0.001 U									
Sodium	mg/L	10.8	13 JB	13 B	13	14 J	13	13	13	14	13	13	14	14	12
Strontium	mg/L	0.174	0.22 B	0.21 B	0.21 B	0.22									
Sulfate	mg/L	118	120	130	130	130	130	120	130	130	140	120	130	130	120
Temperature, Field	deg C	13.9						14.2				13	14	14	13
Thallium	mg/L	8.7E-05	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00081 J	0.001 U	0.00027 J	0.001 U	0.001 U
Turbidity, Field	NTU	1.6	0.2	0.2	1.5	2.4		2.19	0.97		4	0.3	0.3	0.3	0.6
Vanadium	mg/L		0.005 U												
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 = Millivolts
 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.
 F1 = MS and/or MSD Recovery is outside acceptance limits.
 Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Bottom Ash Pond
Gavin Power Plant

Location Date		MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6
Sample Type		2021-09-18	2022-02-20	2022-03-31	2022-04-27	2022-06-28	2022-06-28	2022-10-11	2022-12-13	2023-03-01	2023-04-07	2023-09-29
Analyte		N	N	N	N	FD	N	N	N	N	N	N
Analyte	Unit											
Alkalinity, Total as CaCO3	mg/L	210		230	230	230	240	230	230	220	240	230
Aluminum	mg/L			0.05 U								
Antimony	mg/L	0.002 U		0.00085 J	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	0.005 U		0.002 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
Barium	mg/L	0.13		0.14	0.12	0.16	0.19	0.12	0.12	0.14	0.13	0.12
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	210		230	230	230	240	230	230	220	240	230
Boron	mg/L	0.1 U		0.2 U				0.1 U			0.057 J	0.073 J
Bromide	mg/L											
Cadmium	mg/L	0.001 U		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
Calcium	mg/L	110		130				110			110	110
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	26		24				27			25	28
Chromium	mg/L	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	0.005 U
Cobalt	mg/L	0.00057 J		0.00046 J	0.00039 J	0.00073 J	0.00095 J	0.00041 J	0.00044 J	0.00053 J	0.00045 J	0.00044 J
Conductivity, Field	uS/cm	675	699	723	702			755	687	713	645	592
Copper	mg/L			0.005 U								
Dissolved Oxygen, Field	mg/L			0.42	1.02			0.7	1.34	0.79	1.32	1.82
Dissolved Solids, Total	mg/L	490		420 J				440			430	430
Fluoride	mg/L	0.097		0.098	0.091	0.088	0.094	0.094	0.093	0.094	0.06	0.093
Iron	mg/L			0.1 U								
Lead	mg/L	0.001 U		0.0005 U	0.001 U	0.001 U	0.00056 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Lithium	mg/L	0.0031 J		0.0035 J	0.004 J	0.0044 J	0.0048 J	0.0049 J	0.0042 J	0.0061 J	0.0052 J	0.0063 J
Magnesium	mg/L	14		13	13	14	14	13	14	14	13	14
Manganese	mg/L			1.5								
Mercury	mg/L			0.0002 U	0.00018 J	0.0002 U	0.0002 U	0.0002 U	0.00013 JB	0.0002 U	0.0002 U	0.0002 U
Molybdenum	mg/L	0.005 U		0.002 U	0.005 U	0.0012 J	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Nickel	mg/L			0.005 U								
Oxidation-Reduction Potential, Field	mV			92.9				55.6	52.5	206.7	167.4	109.5
pH, Field	pH units	7.08	6.96	7.01	7.03			7.32	7.18	6.89	6.97	7.02
Potassium	mg/L	1.6		1.7 J	1.6	1.7	1.8	1.5	1.6	1.8	1.6	1.6
Radium-226	pCi/L			0.0507 U	0.0377 U	0.0864 U	0.152	0.0567 U	0.0985 U	0.0353 U	0.167 U	0.0871 U
Radium-226/228	pCi/L			0.024 U	0.16 U	0.334 U	0.647	0.527	0.976	0.191 U	0.611	0.376 U
Radium-228	pCi/L			-0.0267 U	0.122 U	0.247 U	0.495	0.471 U	0.877	0.156 U	0.444 U	0.289 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	0.005 U	0.005 U	0.005 U
Silver	mg/L			0.001								
Sodium	mg/L	14		14	13	14	13	13	14	15	13	14
Strontium	mg/L			0.23								
Sulfate	mg/L	120		110				120			110	120
Temperature, Field	deg C	15	13.4	15	13.6			15	13.6	14.6	13.5	14.6
Thallium	mg/L	0.001 U		0.001 U	0.001 U	0.00029 J	0.001 U	0.001 U	0.001 U	0.00028 J	0.001 U	0.001 U
Turbidity, Field	NTU	0.3	0.16	2.9	0.15			2.7	4.19	2.84	3	2.41
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 = Millivolts
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.
F1 = MS and/or MSD Recovery is outside acceptance limits.
Empty cells = Not analyzed



APPENDIX F LABORATORY ANALYTICAL REPORTS

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ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 6/6/2023 8:56:45 AM Revision 1

JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-183219-1

Eurofins Cleveland

Job Notes

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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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Revision 1

Authorized for release by
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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-183219-1

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
F	MS/MSD Recovery and/or RPD exceeds the control limits
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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-183219-1

Job ID: 240-183219-1

Laboratory: Eurofins Cleveland

Narrative

**Job Narrative
240-183219-1**

Revised 6/06/2023 to include Calcium per client request.

Receipt

The sample was received on 4/7/2023 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 1.4°C, 1.6°C, 1.8°C, 1.8°C, 2.0°C and 2.4°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 9315_Ra226: Radium-226 batch 608150: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-19-F-20230405-01 (240-183219-1), (LCS 160-608150/2-A), (MB 160-608150/1-A)

Method 9320_Ra228: Radium-228 batch 608160: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-19-F-20230405-01 (240-183219-1), (LCS 160-608160/2-A), (MB 160-608160/1-A)

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: 240-183219-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
SM 2540C	Solids, Total Dissolved (TDS)	SM	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: 240-183219-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-183219-1	BAC-19-F-20230405-01	Water	04/05/23 15:05	04/07/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183219-1

Client Sample ID: BAC-19-F-20230405-01

Lab Sample ID: 240-183219-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	220		100	57	ug/L	1		6010D	Total Recoverable
Barium	590		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.33	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	27		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	17000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	8.4		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	440000		1000	330	ug/L	1		6020B	Total Recoverable
Calcium	84000		1000	250	ug/L	1		6020B	Total Recoverable
Total Alkalinity	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	870		10	1.3	mg/L	10		300.0	Total/NA
Fluoride	0.54		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	7.3		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	1500		20	16	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183219-1

Client Sample ID: BAC-19-F-20230405-01

Lab Sample ID: 240-183219-1

Date Collected: 04/05/23 15:05

Matrix: Water

Date Received: 04/07/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	220		100	57	ug/L		04/10/23 14:00	04/12/23 00:46	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		04/10/23 14:00	04/11/23 18:29	1
Arsenic	ND		5.0	0.75	ug/L		04/10/23 14:00	04/11/23 18:29	1
Barium	590		5.0	2.2	ug/L		04/10/23 14:00	04/11/23 18:29	1
Beryllium	ND		1.0	0.62	ug/L		04/10/23 14:00	04/11/23 18:29	1
Cadmium	ND		1.0	0.20	ug/L		04/10/23 14:00	04/11/23 18:29	1
Chromium	ND		5.0	1.2	ug/L		04/10/23 14:00	04/11/23 18:29	1
Cobalt	0.33	J	1.0	0.19	ug/L		04/10/23 14:00	04/11/23 18:29	1
Lead	ND		1.0	0.45	ug/L		04/10/23 14:00	04/11/23 18:29	1
Lithium	27		8.0	1.7	ug/L		04/10/23 14:00	04/11/23 18:29	1
Magnesium	17000		1000	61	ug/L		04/10/23 14:00	04/11/23 18:29	1
Molybdenum	8.4		5.0	1.1	ug/L		04/10/23 14:00	04/11/23 18:29	1
Potassium	2800		1000	220	ug/L		04/10/23 14:00	04/11/23 18:29	1
Selenium	ND		5.0	0.89	ug/L		04/10/23 14:00	04/11/23 18:29	1
Sodium	440000		1000	330	ug/L		04/10/23 14:00	04/11/23 18:29	1
Thallium	ND		1.0	0.20	ug/L		04/10/23 14:00	04/11/23 18:29	1
Calcium	84000		1000	250	ug/L		04/10/23 14:00	04/11/23 18:29	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		04/10/23 14:00	04/11/23 16:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	160		5.0	2.6	mg/L			04/17/23 23:35	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	160		5.0	2.6	mg/L			04/17/23 23:35	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/17/23 23:35	1
Chloride (EPA 300.0)	870		10	1.3	mg/L			04/28/23 20:44	10
Fluoride (EPA 300.0)	0.54		0.050	0.024	mg/L			04/28/23 20:24	1
Sulfate (EPA 300.0)	7.3		1.0	0.35	mg/L			04/28/23 20:24	1
Total Dissolved Solids (SM 2540C)	1500		20	16	mg/L			04/12/23 10:05	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.717		0.274	0.282	1.00	0.269	pCi/L	04/19/23 13:18	05/11/23 19:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.8		30 - 110					04/19/23 13:18	05/11/23 19:41	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.404	U F	0.298	0.300	1.00	0.452	pCi/L	04/19/23 14:02	05/11/23 13:11	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183219-1

Client Sample ID: BAC-19-F-20230405-01

Lab Sample ID: 240-183219-1

Date Collected: 04/05/23 15:05

Matrix: Water

Date Received: 04/07/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	97.8		30 - 110	04/19/23 14:02	05/11/23 13:11	1
Y Carrier	86.4		30 - 110	04/19/23 14:02	05/11/23 13:11	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	1.12		0.405	0.412	5.00	0.452	pCi/L		05/12/23 11:39	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-183219-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)							
240-183219-1	BAC-19-F-20230405-01	97.8							
LCS 160-608150/2-A	Lab Control Sample	102							
MB 160-608150/1-A	Method Blank	95.1							

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)						
240-183219-1	BAC-19-F-20230405-01	97.8	86.4						
LCS 160-608160/2-A	Lab Control Sample	102	93.1						
MB 160-608160/1-A	Method Blank	95.1	86.0						

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183219-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-568717/1-A
Matrix: Water
Analysis Batch: 568985

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 568717

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		04/10/23 14:00	04/11/23 22:31	1

Lab Sample ID: LCS 240-568717/2-A
Matrix: Water
Analysis Batch: 568985

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 568717

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 240-568717/1-A
Matrix: Water
Analysis Batch: 569003

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 568717

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		04/10/23 14:00	04/11/23 16:56	1
Arsenic	ND		5.0	0.75	ug/L		04/10/23 14:00	04/11/23 16:56	1
Barium	ND		5.0	2.2	ug/L		04/10/23 14:00	04/11/23 16:56	1
Beryllium	ND		1.0	0.62	ug/L		04/10/23 14:00	04/11/23 16:56	1
Cadmium	ND		1.0	0.20	ug/L		04/10/23 14:00	04/11/23 16:56	1
Chromium	ND		5.0	1.2	ug/L		04/10/23 14:00	04/11/23 16:56	1
Cobalt	ND		1.0	0.19	ug/L		04/10/23 14:00	04/11/23 16:56	1
Lead	ND		1.0	0.45	ug/L		04/10/23 14:00	04/11/23 16:56	1
Lithium	ND		8.0	1.7	ug/L		04/10/23 14:00	04/11/23 16:56	1
Magnesium	ND		1000	61	ug/L		04/10/23 14:00	04/11/23 16:56	1
Molybdenum	ND		5.0	1.1	ug/L		04/10/23 14:00	04/11/23 16:56	1
Potassium	ND		1000	220	ug/L		04/10/23 14:00	04/11/23 16:56	1
Selenium	ND		5.0	0.89	ug/L		04/10/23 14:00	04/11/23 16:56	1
Sodium	ND		1000	330	ug/L		04/10/23 14:00	04/11/23 16:56	1
Thallium	ND		1.0	0.20	ug/L		04/10/23 14:00	04/11/23 16:56	1
Calcium	ND		1000	250	ug/L		04/10/23 14:00	04/11/23 16:56	1

Lab Sample ID: LCS 240-568717/3-A
Matrix: Water
Analysis Batch: 569003

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 568717

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	101		ug/L		101	80 - 120
Arsenic	1000	941		ug/L		94	80 - 120
Barium	1000	964		ug/L		96	80 - 120
Beryllium	500	464		ug/L		93	80 - 120
Cadmium	500	482		ug/L		96	80 - 120
Chromium	500	486		ug/L		97	80 - 120
Cobalt	500	481		ug/L		96	80 - 120
Lead	500	491		ug/L		98	80 - 120
Lithium	500	495		ug/L		99	80 - 120
Magnesium	25000	23700		ug/L		95	80 - 120
Molybdenum	500	480		ug/L		96	80 - 120

Eurofins Cleveland

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183219-1

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

Lab Sample ID: LCS 240-568717/3-A
 Matrix: Water
 Analysis Batch: 569003

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 568717

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Potassium	25000	23600		ug/L		94	80 - 120
Selenium	1000	941		ug/L		94	80 - 120
Sodium	25000	23700		ug/L		95	80 - 120
Thallium	1000	967		ug/L		97	80 - 120
Calcium	25000	23300		ug/L		93	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-568722/1-A
 Matrix: Water
 Analysis Batch: 569031

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 568722

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		04/10/23 14:00	04/11/23 15:43	1

Lab Sample ID: LCS 240-568722/2-A
 Matrix: Water
 Analysis Batch: 569031

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 568722

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.15		ug/L		103	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-569785/30
 Matrix: Water
 Analysis Batch: 569785

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			04/17/23 21:44	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/17/23 21:44	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/17/23 21:44	1

Lab Sample ID: MB 240-569785/4
 Matrix: Water
 Analysis Batch: 569785

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			04/17/23 19:51	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/17/23 19:51	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/17/23 19:51	1

Lab Sample ID: LCS 240-569785/29
 Matrix: Water
 Analysis Batch: 569785

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	149		mg/L		102	86 - 123

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183219-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-571198/3
Matrix: Water
Analysis Batch: 571198

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			04/28/23 06:58	1
Fluoride	ND		0.050	0.024	mg/L			04/28/23 06:58	1
Sulfate	ND		1.0	0.35	mg/L			04/28/23 06:58	1

Lab Sample ID: MB 240-571198/36
Matrix: Water
Analysis Batch: 571198

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			04/28/23 18:03	1
Fluoride	ND		0.050	0.024	mg/L			04/28/23 18:03	1
Sulfate	ND		1.0	0.35	mg/L			04/28/23 18:03	1

Lab Sample ID: LCS 240-571198/37
Matrix: Water
Analysis Batch: 571198

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.5		mg/L		103	90 - 110
Fluoride	2.50	2.63		mg/L		105	90 - 110
Sulfate	50.0	52.4		mg/L		105	90 - 110

Lab Sample ID: LCS 240-571198/4
Matrix: Water
Analysis Batch: 571198

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.3		mg/L		103	90 - 110
Fluoride	2.50	2.61		mg/L		104	90 - 110
Sulfate	50.0	51.8		mg/L		104	90 - 110

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

Lab Sample ID: MB 240-569063/1
Matrix: Water
Analysis Batch: 569063

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			04/12/23 10:05	1

Lab Sample ID: LCS 240-569063/2
Matrix: Water
Analysis Batch: 569063

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	580	545		mg/L		94	80 - 120

Eurofins Cleveland

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183219-1

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-608150/1-A
Matrix: Water
Analysis Batch: 611049

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 608150

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.1271	U	0.180	0.181	1.00	0.306	pCi/L	04/19/23 13:18	05/11/23 19:40	1
Carrier	MB	MB	Limits		Prepared	Analyzed	Dil Fac			
	%Yield	Qualifier								
Ba Carrier	95.1		30 - 110		04/19/23 13:18	05/11/23 19:40	1			

Lab Sample ID: LCS 160-608150/2-A
Matrix: Water
Analysis Batch: 611049

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 608150

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	10.45		1.32	1.00	0.298	pCi/L	92	75 - 113
Carrier	LCS	LCS	Limits		Prepared	Analyzed	Dil Fac		
	%Yield	Qualifier							
Ba Carrier	102		30 - 110						

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-608160/1-A
Matrix: Water
Analysis Batch: 611047

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 608160

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.1838	U	0.308	0.308	1.00	0.525	pCi/L	04/19/23 14:02	05/11/23 13:02	1
Carrier	MB	MB	Limits		Prepared	Analyzed	Dil Fac			
	%Yield	Qualifier								
Ba Carrier	95.1		30 - 110		04/19/23 14:02	05/11/23 13:02	1			
Y Carrier	86.0		30 - 110		04/19/23 14:02	05/11/23 13:02	1			

Lab Sample ID: LCS 160-608160/2-A
Matrix: Water
Analysis Batch: 611047

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 608160

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-228	7.96	7.915		1.06	1.00	0.437	pCi/L	99	75 - 125
Carrier	LCS	LCS	Limits		Prepared	Analyzed	Dil Fac		
	%Yield	Qualifier							
Ba Carrier	102		30 - 110						
Y Carrier	93.1		30 - 110						

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183219-1

Metals

Prep Batch: 568717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183219-1	BAC-19-F-20230405-01	Total Recoverable	Water	3005A	
MB 240-568717/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-568717/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-568717/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 568722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183219-1	BAC-19-F-20230405-01	Total/NA	Water	7470A	
MB 240-568722/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-568722/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 568985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183219-1	BAC-19-F-20230405-01	Total Recoverable	Water	6010D	568717
MB 240-568717/1-A	Method Blank	Total Recoverable	Water	6010D	568717
LCS 240-568717/2-A	Lab Control Sample	Total Recoverable	Water	6010D	568717

Analysis Batch: 569003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183219-1	BAC-19-F-20230405-01	Total Recoverable	Water	6020B	568717
MB 240-568717/1-A	Method Blank	Total Recoverable	Water	6020B	568717
LCS 240-568717/3-A	Lab Control Sample	Total Recoverable	Water	6020B	568717

Analysis Batch: 569031

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183219-1	BAC-19-F-20230405-01	Total/NA	Water	7470A	568722
MB 240-568722/1-A	Method Blank	Total/NA	Water	7470A	568722
LCS 240-568722/2-A	Lab Control Sample	Total/NA	Water	7470A	568722

General Chemistry

Analysis Batch: 569063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183219-1	BAC-19-F-20230405-01	Total/NA	Water	SM 2540C	
MB 240-569063/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-569063/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 569785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183219-1	BAC-19-F-20230405-01	Total/NA	Water	2320B-1997	
MB 240-569785/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-569785/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-569785/29	Lab Control Sample	Total/NA	Water	2320B-1997	

Analysis Batch: 571198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183219-1	BAC-19-F-20230405-01	Total/NA	Water	300.0	
240-183219-1	BAC-19-F-20230405-01	Total/NA	Water	300.0	
MB 240-571198/3	Method Blank	Total/NA	Water	300.0	
MB 240-571198/36	Method Blank	Total/NA	Water	300.0	
LCS 240-571198/37	Lab Control Sample	Total/NA	Water	300.0	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-183219-1

General Chemistry (Continued)

Analysis Batch: 571198 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-571198/4	Lab Control Sample	Total/NA	Water	300.0	

Rad

Prep Batch: 608150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183219-1	BAC-19-F-20230405-01	Total/NA	Water	PrecSep-21	
MB 160-608150/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-608150/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 608160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183219-1	BAC-19-F-20230405-01	Total/NA	Water	PrecSep_0	
MB 160-608160/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-608160/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183219-1

Client Sample ID: BAC-19-F-20230405-01

Lab Sample ID: 240-183219-1

Date Collected: 04/05/23 15:05

Matrix: Water

Date Received: 04/07/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			568717	MRL	EET CLE	04/10/23 14:00
Total Recoverable	Analysis	6010D		1	568985	AJC	EET CLE	04/12/23 00:46
Total Recoverable	Prep	3005A			568717	MRL	EET CLE	04/10/23 14:00
Total Recoverable	Analysis	6020B		1	569003	RKT	EET CLE	04/11/23 18:29
Total/NA	Prep	7470A			568722	MRL	EET CLE	04/10/23 14:00
Total/NA	Analysis	7470A		1	569031	DSH	EET CLE	04/11/23 16:45
Total/NA	Analysis	2320B-1997		1	569785	JWW	EET CLE	04/17/23 23:35
Total/NA	Analysis	300.0		1	571198	JWW	EET CLE	04/28/23 20:24
Total/NA	Analysis	300.0		10	571198	JWW	EET CLE	04/28/23 20:44
Total/NA	Analysis	SM 2540C		1	569063	GH	EET CLE	04/12/23 10:05
Total/NA	Prep	PrecSep-21			608150	KAC	EET SL	04/19/23 13:18
Total/NA	Analysis	9315		1	611049	FLC	EET SL	05/11/23 19:41
Total/NA	Prep	PrecSep_0			608160	KAC	EET SL	04/19/23 14:02
Total/NA	Analysis	9320		1	611117	FLC	EET SL	05/11/23 13:11
Total/NA	Analysis	Ra226_Ra228		1	611295	SCB	EET SL	05/12/23 11:39

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
 Project/Site: Federal CCR Wells

Job ID: 240-183219-1

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
California	State	2927	02-27-24
Connecticut	State	PH-0590	06-29-23
Florida	NELAP	E87225	05-24-23
Georgia	State	4062	02-28-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	05-31-23
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	04-30-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	05-24-23
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	05-07-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-23
Florida	NELAP	E87689	06-30-23
HI - RadChem Recognition	State	n/a	06-30-23
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana (All)	NELAP	04080	06-30-23
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-23
MI - RadChem Recognition	State	9005	06-30-23
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-23
New Jersey	NELAP	MO002	06-30-23
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-23
North Dakota	State	R-207	06-30-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-183219-1

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
Oklahoma	NELAP	9997	08-31-23
Oregon	NELAP	4157	09-01-23
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23
Texas	NELAP	T104704193	07-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00028	05-17-23
Utah	NELAP	MO000542021-14	07-31-23
Virginia	NELAP	10310	06-14-23
Washington	State	C592	08-30-23
West Virginia DEP	State	381	10-31-23

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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: Federal - CCR Wells Site: Ohio		Lab PM: Cisneros, Roxanne E-Mail: roxanne.cisneros@eurofinset.com State of Origin:		COC No: 240-93018-34502 Page: Page 1 of 1 Job #:	
Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: 2935505 WC #: Project #: 24019633 SSO#:		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 Other:			
Sample Identification BAC-19-F-20230405-01 Sample Date: 4-5-23 1505 Sample Type (C=Comp, G=grab): G Preservation Code: W Matrix (W=Water, S=Soils, O=Organic, M=Metal, A=As) Field Filtered Sample (Yes or No): <input checked="" type="checkbox"/> Yes Perform MS/MSD (Yes or No): <input checked="" type="checkbox"/> Yes 6010B, 7470, 6020(See Metals List) 2540C, Calcd, 300.0, 28D(Chloride, Fluoride, Sulfate) 9315_Ra226, 9320_Ra228 2320B(Carbonate Alkalinity/Bi-Carbonate Alkalinity)		Total Number of Containers: <input checked="" type="checkbox"/>			
Sample Identification BAC-19-F-20230405-01 Sample Date: 4-5-23 1505 Sample Type (C=Comp, G=grab): G Preservation Code: W Matrix (W=Water, S=Soils, O=Organic, M=Metal, A=As) Field Filtered Sample (Yes or No): <input checked="" type="checkbox"/> Yes Perform MS/MSD (Yes or No): <input checked="" type="checkbox"/> Yes 6010B, 7470, 6020(See Metals List) 2540C, Calcd, 300.0, 28D(Chloride, Fluoride, Sulfate) 9315_Ra226, 9320_Ra228 2320B(Carbonate Alkalinity/Bi-Carbonate Alkalinity)		Special Instructions/Note: 240-183219 Chain of Custody			
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Empty Kit Relinquished by: Relinquished by: <i>Bobby Caste</i> Relinquished Date: 4-6-23 1700 Relinquished by: <i>Leah M. Smith</i> Relinquished Date: 4-6-23 1700		Method of Shipment: Received by: <i>Bobby Caste</i> Received Date: 4-6-23 1200 Received by: <i>Leah M. Smith</i> Received Date: 04-07-23 800			
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:			



Eurofins - Canton Sample Receipt Form/Narrative		Login # : _____	
Barberton Facility			
Client <u>Lightstone Generation Gavin Power LLC</u> Site Name _____		Cooler unpacked by: <u>Leah M. Smith</u>	
Cooler Received on <u>04-07-23</u> Opened on <u>04-07-23</u>			
FedEx: 1 st Grd Exp UPS FAS <u>Clipper</u> Client Drop Off Eurofins Courier Other _____			
Receipt After-hours: Drop-off Date/Time		Storage Location	
Eurofins Cooler # <u>EC</u> Foam Box Client Cooler <u>Box</u> Other _____			
Packing material used: Bubble Wrap Foam <u>Plastic Bag</u> None Other _____			
COOLANT: <u>Wet Ice</u> Blue Ice Dry Ice Water None			
1. Cooler temperature upon receipt		<input checked="" type="checkbox"/> See Multiple Cooler Form	
IR GUN # <u>*22*</u> (CF <u>+0.0</u> °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 <u>NA</u>	
-Were tamper/custody seals intact and uncompromised?		Yes No <u>NA</u>	
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 <u>No</u>	
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# <u>HC203864</u>	
14. Were VOAs on the COC?		Yes <u>No</u>	
15. Were air bubbles >6 mm in any VOA vials? Larger than this.		Yes No <u>NA</u>	
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____		Yes <u>No</u>	
17. Was a LL Hg or Me Hg trip blank present?		Yes <u>No</u>	
Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____			
Concerning _____			

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES <input type="checkbox"/> 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: _____

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-19-F-20230405-01	240-183219-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-19-F-20230405-01	240-183219-D-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-19-F-20230405-01	240-183219-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____



Client Information (Sub Contract Lab)		Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): 240-166170.1
Company: TestAmerica Laboratories, Inc.		E-Mail: roxanne.cisneros@et.eurofins.com	Page: Page 1 of 1
Address: 13715 Rider Trail North, City: Earth City State, Zip: MO, 63045 Phone: 314-298-8566(Tel) 314-298-8757(Fax) Email:		State of Origin: Ohio	Job #: 240-183219-1
Project Name: Federal GWM Wells Site:		Preservation Codes: 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:	
Due Date Requested: 4/20/2023 TAT Requested (days):		Analysis Requested	
PO #: WO #: Project #: 24019633 SSOW#:		Total Number of Containers	
Sample Identification - Client ID (Lab ID) BAC-19-F-20230405-01 (240-183219-1)		Special Instructions/Note: Recount of TAR after 21 day ingrowth if > action limit, save planelt	
Sample Date 4/5/23	Sample Time 15:05 Eastern	Field Filtered Sample (Yes or No) X	Perform MSMSD (Yes or No) X
Sample Type (C=Comp, G=grab)	Preservation Code: Water	9320_Ra228/PreSep_0 Radium-228 (GFPC)	X
MATRIX (W=water, S=solid, O=water/oil, B=Blood, A=Air)		9315_Ra228/PreSep_21 Radium-226 (GFPC)	X
		Ra228Ra228_GFPC/ Combined Radium-226 and	X
		Radium-228	X
Relinquished by: <i>[Signature]</i>		Date/Time: 4/17/23 0930	
Relinquished by: <i>[Signature]</i>		Date/Time: 4/17/23 0930	
Relinquished by: <i>[Signature]</i>		Date/Time: 4/17/23 0930	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:	
Deliverable Requested: I, II, III, IV, Other (specify)		Primary Deliverable Rank: 2	
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Special Instructions/QC Requirements:	
Empty Kit Relinquished by:		Method of Shipment:	
Relinquished by: <i>[Signature]</i>		Date/Time: 4/17/23 1015	
Relinquished by: <i>[Signature]</i>		Date/Time: 4/17/23 1015	
Relinquished by: <i>[Signature]</i>		Date/Time: 4/17/23 1015	
Cooler Temperature(s) °C and Other Remarks:			



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-183219-1

Login Number: 183219

List Number: 2

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

List Creation: 04/11/23 02:19 PM

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

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ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 6/6/2023 8:58:13 AM Revision 1

JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-183255-1

Eurofins Cleveland

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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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Revision 1

Authorized for release by
Roxanne Cisneros, Senior Project Manager
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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Qualifiers

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
^1+	Initial Calibration Verification (ICV) 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
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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Job ID: 240-183255-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-183255-1

Revised 6/06/2023 to include Calcium per client request.

Receipt

The samples were received on 4/11/2023 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 5 coolers at receipt time were 1.6°C, 1.8°C, 2.3°C, 2.6°C and 14.0°C

Metals

Method 6020B: The continuing calibration verification (CCV) associated with batch 240-569329 recovered above the upper control limit for beryllium. The samples associated with this CCV were less than the reporting limit for the affected analyte; therefore, the data have been reported. The associated samples are impacted: BAC-11-F-20230406-01 (240-183255-1), BAC-09-F-20230406-01 (240-183255-2), DUP-004-BAC-09-F-20230406-01 (240-183255-3), BAC-17-F-20230406-01 (240-183255-4) and BAC-15-F-20230406-01 (240-183255-5).

Method 6020B: The continuing calibration verification (CCV) associated with batch lithium recovered above the upper control limit for lithium. The samples associated with this CCV were less than the reporting limit for the affected analyte; therefore, the data have been reported. The associated sample is impacted: BAC-17-F-20230406-01 (240-183255-4).

Method 6020B: The following samples were diluted due to the nature of the sample matrix: BAC-11-F-20230406-01 (240-183255-1) and DUP-004-BAC-09-F-20230406-01 (240-183255-3). Elevated reporting limits (RLs) are provided.

Method 6020B: The initial calibration verification Low (ICVL) result for batch 240-569715 was above the upper control limit. Sample results were non-detects, and have been reported as qualified data.

Method 6020B: The following sample was diluted due to the nature of the sample matrix: BAC-13-F-20230407-01 (240-183255-7). 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 samples were diluted due to the nature of the sample matrix: BAC-11-F-20230406-01 (240-183255-1) and BAC-13-F-20230407-01 (240-183255-7). 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 160-608036: The following samples were prepared at a reduced aliquot due to Matrix: DUP-004-BAC-09-F-20230406-01 (240-183255-3), BAC-17-F-20230406-01 (240-183255-4), BAC-15-F-20230406-01 (240-183255-5), BAC-05-F-20230407-01 (240-183255-9), BAC-03-F-20230407-01 (240-183255-10) and MW-1-F-20230407-01 (240-183255-11). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method 9315_Ra226: Radium-228 Prep Batch 160-608036: Insufficient sample volume was available to perform a sample duplicate for the following samples: EB-001-F-20230406-01 (240-183255-6), BAC-13-F-20230407-01 (240-183255-7), BAC-04-F-20230407-01 (240-183255-8), MW-6-F-20230407-01 (240-183255-12) and EB-001-F-20230407-01 (240-183255-13). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method 9315_Ra226: Radium 226 prep batch 160-608041: The barium carrier recovery is outside the upper control limit (110%) for the following sample: BAC-11-F-20230406-01 (240-183255-1). 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.

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Job ID: 240-183255-1 (Continued)

Laboratory: Eurofins Cleveland (Continued)

Method 9315_Ra226: Radium-226 608041: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-11-F-20230406-01 (240-183255-1), BAC-09-F-20230406-01 (240-183255-2), (LCS 160-608041/2-A), (MB 160-608041/1-A)

Method 9315_Ra226: Radium-226 batch 608036: The detection goal was not met for the following samples. Samples were prepped at a reduced volume due to the presence of matrix interferences: BAC-15-F-20230406-01 (240-183255-5), (280-174618-C-5-G) and (280-174618-C-5-H DU). Analytical results are reported with the detection limit achieved.

Method 9315_Ra226: Radium-226 batch 608036: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. DUP-004-BAC-09-F-20230406-01 (240-183255-3), BAC-17-F-20230406-01 (240-183255-4), BAC-15-F-20230406-01 (240-183255-5), EB-001-F-20230406-01 (240-183255-6), BAC-13-F-20230407-01 (240-183255-7), BAC-04-F-20230407-01 (240-183255-8), BAC-05-F-20230407-01 (240-183255-9), BAC-03-F-20230407-01 (240-183255-10), MW-1-F-20230407-01 (240-183255-11), MW-6-F-20230407-01 (240-183255-12), EB-001-F-20230407-01 (240-183255-13), (LCS 160-608036/2-A), (LCSD 160-608036/3-A), (MB 160-608036/1-A)

Method 9320_Ra228: Radium-228 Prep Batch 160-608040: The following samples were prepared at a reduced aliquot due to Matrix: DUP-004-BAC-09-F-20230406-01 (240-183255-3), BAC-17-F-20230406-01 (240-183255-4), BAC-15-F-20230406-01 (240-183255-5), BAC-05-F-20230407-01 (240-183255-9) and BAC-03-F-20230407-01 (240-183255-10). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method 9320_Ra228: Radium-228 Prep Batch 160-608040: Insufficient sample volume was available to perform a sample duplicate for the following samples: EB-001-F-20230406-01 (240-183255-6), BAC-13-F-20230407-01 (240-183255-7), BAC-04-F-20230407-01 (240-183255-8), MW-1-F-20230407-01 (240-183255-11), MW-6-F-20230407-01 (240-183255-12) and EB-001-F-20230407-01 (240-183255-13). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method 9320_Ra228: Radium 228 prep batch 160-608055: The barium carrier recovery is outside the upper control limit (110%) for the following sample: BAC-11-F-20230406-01 (240-183255-1). 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 608040: The detection goal was not met for the following samples. Samples were prepped at a reduced volume due to the presence of matrix interferences: DUP-004-BAC-09-F-20230406-01 (240-183255-3), BAC-15-F-20230406-01 (240-183255-5). Analytical results are reported with the detection limit achieved.

Method 9320_Ra228: Radium-228 batch 608040: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. DUP-004-BAC-09-F-20230406-01 (240-183255-3), BAC-17-F-20230406-01 (240-183255-4), BAC-15-F-20230406-01 (240-183255-5), EB-001-F-20230406-01 (240-183255-6), BAC-13-F-20230407-01 (240-183255-7), BAC-04-F-20230407-01 (240-183255-8), BAC-05-F-20230407-01 (240-183255-9), BAC-03-F-20230407-01 (240-183255-10), MW-1-F-20230407-01 (240-183255-11), MW-6-F-20230407-01 (240-183255-12), EB-001-F-20230407-01 (240-183255-13), (LCS 160-608040/2-A), (LCSD 160-608040/3-A), (MB 160-608040/1-A)

Method 9320_Ra228: Radium-228 batch 608055: The detection goal was not met for the following sample. Sample was prepped at a reduced volume due to the presence of matrix interferences: BAC-09-F-20230406-01 (240-183255-2). Analytical results are reported with the detection limit achieved.

Method 9320_Ra228: Radium-228 batch 608055: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-11-F-20230406-01 (240-183255-1), BAC-09-F-20230406-01 (240-183255-2), (LCS 160-608055/2-A), (MB 160-608055/1-A)

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Job ID: 240-183255-1 (Continued)

Laboratory: Eurofins Cleveland (Continued)

Method 9320_Ra228: Radium-228 batch 608055: 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. BAC-11-F-20230406-01 (240-183255-1)

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: 240-183255-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
SM 2540C	Solids, Total Dissolved (TDS)	SM	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: 240-183255-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-183255-1	BAC-11-F-20230406-01	Water	04/06/23 10:13	04/11/23 08:00
240-183255-2	BAC-09-F-20230406-01	Water	04/06/23 12:08	04/11/23 08:00
240-183255-3	DUP-004-BAC-09-F-20230406-01	Water	04/06/23 12:08	04/11/23 08:00
240-183255-4	BAC-17-F-20230406-01	Water	04/06/23 13:57	04/11/23 08:00
240-183255-5	BAC-15-F-20230406-01	Water	04/06/23 15:08	04/11/23 08:00
240-183255-6	EB-001-F-20230406-01	Water	04/06/23 15:30	04/11/23 08:00
240-183255-7	BAC-13-F-20230407-01	Water	04/07/23 09:42	04/11/23 08:00
240-183255-8	BAC-04-F-20230407-01	Water	04/07/23 10:35	04/11/23 08:00
240-183255-9	BAC-05-F-20230407-01	Water	04/07/23 11:41	04/11/23 08:00
240-183255-10	BAC-03-F-20230407-01	Water	04/07/23 13:00	04/11/23 08:00
240-183255-11	MW-1-F-20230407-01	Water	04/07/23 13:57	04/11/23 08:00
240-183255-12	MW-6-F-20230407-01	Water	04/07/23 14:35	04/11/23 08:00
240-183255-13	EB-001-F-20230407-01	Water	04/07/23 15:00	04/11/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: BAC-11-F-20230406-01

Lab Sample ID: 240-183255-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	380		100	57	ug/L	1		6010D	Total Recoverable
Barium	140000		50	22	ug/L	10		6020B	Total Recoverable
Cobalt	2.7	J	10	1.9	ug/L	10		6020B	Total Recoverable
Lithium	320		80	17	ug/L	10		6020B	Total Recoverable
Magnesium	660000		10000	610	ug/L	10		6020B	Total Recoverable
Potassium	22000		10000	2200	ug/L	10		6020B	Total Recoverable
Sodium	9200000		10000	3300	ug/L	10		6020B	Total Recoverable
Calcium	2200000		10000	2500	ug/L	10		6020B	Total Recoverable
Total Alkalinity	39		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	39		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	23000		500	64	mg/L	500		300.0	Total/NA
Total Dissolved Solids	38000		1000	780	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-09-F-20230406-01

Lab Sample ID: 240-183255-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	250		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	2.3	J	10	1.5	ug/L	2		6020B	Total Recoverable
Barium	2100		10	4.5	ug/L	2		6020B	Total Recoverable
Chromium	7.6	J	10	2.4	ug/L	2		6020B	Total Recoverable
Cobalt	2.3		2.0	0.38	ug/L	2		6020B	Total Recoverable
Lead	2.2		2.0	0.90	ug/L	2		6020B	Total Recoverable
Lithium	98		16	3.3	ug/L	2		6020B	Total Recoverable
Magnesium	100000		2000	120	ug/L	2		6020B	Total Recoverable
Molybdenum	85		10	2.2	ug/L	2		6020B	Total Recoverable
Potassium	6600		2000	430	ug/L	2		6020B	Total Recoverable
Sodium	1500000		2000	660	ug/L	2		6020B	Total Recoverable
Calcium	440000		2000	510	ug/L	2		6020B	Total Recoverable
Total Alkalinity	120		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	120		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	4700		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	62		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	6900		100	78	mg/L	1		SM 2540C	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: 240-183255-1

Client Sample ID: DUP-004-BAC-09-F-20230406-01

Lab Sample ID: 240-183255-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	250		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	2.2	J	10	1.5	ug/L	2		6020B	Total Recoverable
Barium	2300		10	4.5	ug/L	2		6020B	Total Recoverable
Chromium	6.0	J	10	2.4	ug/L	2		6020B	Total Recoverable
Cobalt	2.4		2.0	0.38	ug/L	2		6020B	Total Recoverable
Lead	2.1		2.0	0.90	ug/L	2		6020B	Total Recoverable
Lithium	100		16	3.3	ug/L	2		6020B	Total Recoverable
Magnesium	110000		2000	120	ug/L	2		6020B	Total Recoverable
Molybdenum	86		10	2.2	ug/L	2		6020B	Total Recoverable
Potassium	6800		2000	430	ug/L	2		6020B	Total Recoverable
Sodium	1600000		2000	660	ug/L	2		6020B	Total Recoverable
Calcium	450000		2000	510	ug/L	2		6020B	Total Recoverable
Total Alkalinity	120		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	120		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	4600		50	6.4	mg/L	50		300.0	Total/NA
Fluoride	0.87		0.25	0.12	mg/L	5		300.0	Total/NA
Sulfate	64		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	6800		100	78	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-17-F-20230406-01

Lab Sample ID: 240-183255-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3600		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	0.84	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	41		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.20	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Chromium	2.9	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	34		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.3		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.4	J ^+	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	26000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1100		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	20000		1000	330	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: 240-183255-1

Client Sample ID: BAC-17-F-20230406-01 (Continued)

Lab Sample ID: 240-183255-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	45000		1000	250	ug/L	1		6020B	Total Recoverable
Total Alkalinity	58		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	58		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	20		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.038	J	0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	220		2.0	0.70	mg/L	2		300.0	Total/NA
Total Dissolved Solids	400		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-15-F-20230406-01

Lab Sample ID: 240-183255-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	390		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	2.8	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	71		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.33	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Chromium	6.7		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	5.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	4.1		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.8	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	11000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	11000		1000	330	ug/L	1		6020B	Total Recoverable
Calcium	31000		1000	250	ug/L	1		6020B	Total Recoverable
Total Alkalinity	71		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	71		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	0.95	J	1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.033	J	0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	89		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	210		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-001-F-20230406-01

Lab Sample ID: 240-183255-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity	3.9	J	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	3.9	J	5.0	2.6	mg/L	1		2320B-1997	Total/NA

Client Sample ID: BAC-13-F-20230407-01

Lab Sample ID: 240-183255-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	350		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	2.6	J	10	1.5	ug/L	2		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: 240-183255-1

Client Sample ID: BAC-13-F-20230407-01 (Continued)

Lab Sample ID: 240-183255-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	5100		10	4.5	ug/L	2		6020B	Total Recoverable
Cobalt	0.58	J	2.0	0.38	ug/L	2		6020B	Total Recoverable
Lithium	63		16	3.3	ug/L	2		6020B	Total Recoverable
Magnesium	63000		2000	120	ug/L	2		6020B	Total Recoverable
Molybdenum	16		10	2.2	ug/L	2		6020B	Total Recoverable
Potassium	8000		2000	430	ug/L	2		6020B	Total Recoverable
Sodium	1400000		2000	660	ug/L	2		6020B	Total Recoverable
Calcium	300000		2000	510	ug/L	2		6020B	Total Recoverable
Total Alkalinity	52		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	52		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	3100		25	3.2	mg/L	25		300.0	Total/NA
Fluoride	0.46		0.25	0.12	mg/L	5		300.0	Total/NA
Total Dissolved Solids	4600		50	39	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-04-F-20230407-01

Lab Sample ID: 240-183255-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2300		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	1.5	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	41		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	1.6	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	7.4	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	18000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	25000		1000	330	ug/L	1		6020B	Total Recoverable
Calcium	83000		1000	250	ug/L	1		6020B	Total Recoverable
Total Alkalinity	110		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	110		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	42		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.032	J	0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	210		2.0	0.70	mg/L	2		300.0	Total/NA
Total Dissolved Solids	480		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-05-F-20230407-01

Lab Sample ID: 240-183255-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2300		100	57	ug/L	1		6010D	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: 240-183255-1

Client Sample ID: BAC-05-F-20230407-01 (Continued)

Lab Sample ID: 240-183255-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.83	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	41		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.32	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Chromium	2.0	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	8.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.6		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	11		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	25000		1000	330	ug/L	1		6020B	Total Recoverable
Calcium	74000		1000	250	ug/L	1		6020B	Total Recoverable
Total Alkalinity	79		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	79		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	35		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.048	J	0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	270		2.0	0.70	mg/L	2		300.0	Total/NA
Total Dissolved Solids	520		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-03-F-20230407-01

Lab Sample ID: 240-183255-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1800		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	1.3	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	54		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	2.3	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.8		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	4.5		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	7.9	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	15000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	29000		1000	330	ug/L	1		6020B	Total Recoverable
Calcium	75000		1000	250	ug/L	1		6020B	Total Recoverable
Total Alkalinity	95		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	95		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	54		1.0	0.13	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: 240-183255-1

Client Sample ID: BAC-03-F-20230407-01 (Continued)

Lab Sample ID: 240-183255-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	190		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	460		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-1-F-20230407-01

Lab Sample ID: 240-183255-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	64	J	100	57	ug/L	1		6010D	Total Recoverable
Barium	120		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	1.7	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.42	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	5.9	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	14000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Calcium	120000		1000	250	ug/L	1		6020B	Total Recoverable
Total Alkalinity	250		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	250		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	41		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.073		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	130		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	490		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-6-F-20230407-01

Lab Sample ID: 240-183255-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	57	J	100	57	ug/L	1		6010D	Total Recoverable
Barium	130		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.45	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	5.2	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	13000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	13000		1000	330	ug/L	1		6020B	Total Recoverable
Calcium	110000		1000	250	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	25		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.060		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	110		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	430		10	7.8	mg/L	1		SM 2540C	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: 240-183255-1

Client Sample ID: EB-001-F-20230407-01

Lab Sample ID: 240-183255-13

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: BAC-11-F-20230406-01

Lab Sample ID: 240-183255-1

Date Collected: 04/06/23 10:13

Matrix: Water

Date Received: 04/11/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	380		100	57	ug/L		04/12/23 14:00	04/13/23 14:03	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		20	5.7	ug/L		04/12/23 14:00	04/13/23 20:02	10
Arsenic	ND		50	7.5	ug/L		04/12/23 14:00	04/13/23 20:02	10
Barium	140000		50	22	ug/L		04/12/23 14:00	04/13/23 20:02	10
Beryllium	ND	^+	10	6.2	ug/L		04/12/23 14:00	04/13/23 20:02	10
Cadmium	ND		10	2.0	ug/L		04/12/23 14:00	04/13/23 20:02	10
Chromium	ND		50	12	ug/L		04/12/23 14:00	04/13/23 20:02	10
Cobalt	2.7	J	10	1.9	ug/L		04/12/23 14:00	04/13/23 20:02	10
Lead	ND		10	4.5	ug/L		04/12/23 14:00	04/13/23 20:02	10
Lithium	320		80	17	ug/L		04/12/23 14:00	04/14/23 19:36	10
Magnesium	660000		10000	610	ug/L		04/12/23 14:00	04/13/23 20:02	10
Molybdenum	ND		50	11	ug/L		04/12/23 14:00	04/13/23 20:02	10
Potassium	22000		10000	2200	ug/L		04/12/23 14:00	04/13/23 20:02	10
Selenium	ND		50	8.9	ug/L		04/12/23 14:00	04/13/23 20:02	10
Sodium	9200000		10000	3300	ug/L		04/12/23 14:00	04/13/23 20:02	10
Thallium	ND		10	2.0	ug/L		04/12/23 14:00	04/13/23 20:02	10
Calcium	2200000		10000	2500	ug/L		04/12/23 14:00	04/13/23 20:02	10

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		04/12/23 14:00	04/13/23 20:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	39		5.0	2.6	mg/L			04/18/23 20:43	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	39		5.0	2.6	mg/L			04/18/23 20:43	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/18/23 20:43	1
Chloride (EPA 300.0)	23000		500	64	mg/L			05/02/23 21:08	500
Fluoride (EPA 300.0)	ND		2.5	1.2	mg/L			05/02/23 20:46	50
Sulfate (EPA 300.0)	ND		50	17	mg/L			05/02/23 20:46	50
Total Dissolved Solids (SM 2540C)	38000		1000	780	mg/L			04/13/23 10:05	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	49.3		3.06	5.39	1.00	0.765	pCi/L	04/19/23 10:49	05/11/23 19:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	183	X	30 - 110					04/19/23 10:49	05/11/23 19:23	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	165	G	4.92	15.9	1.00	1.08	pCi/L	04/19/23 11:27	05/11/23 12:59	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: BAC-11-F-20230406-01

Lab Sample ID: 240-183255-1

Date Collected: 04/06/23 10:13

Matrix: Water

Date Received: 04/11/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	183	X	30 - 110	04/19/23 11:27	05/11/23 12:59	1
Y Carrier	88.6		30 - 110	04/19/23 11:27	05/11/23 12:59	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	214		5.79	16.8	5.00	1.08	pCi/L		05/12/23 16:48	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: BAC-09-F-20230406-01

Lab Sample ID: 240-183255-2

Date Collected: 04/06/23 12:08

Matrix: Water

Date Received: 04/11/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	250		100	57	ug/L		04/12/23 14:00	04/13/23 14:16	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		4.0	1.1	ug/L		04/12/23 14:00	04/13/23 20:05	2
Arsenic	2.3	J	10	1.5	ug/L		04/12/23 14:00	04/13/23 20:05	2
Barium	2100		10	4.5	ug/L		04/12/23 14:00	04/13/23 20:05	2
Beryllium	ND	^+	2.0	1.2	ug/L		04/12/23 14:00	04/13/23 20:05	2
Cadmium	ND		2.0	0.39	ug/L		04/12/23 14:00	04/13/23 20:05	2
Chromium	7.6	J	10	2.4	ug/L		04/12/23 14:00	04/13/23 20:05	2
Cobalt	2.3		2.0	0.38	ug/L		04/12/23 14:00	04/13/23 20:05	2
Lead	2.2		2.0	0.90	ug/L		04/12/23 14:00	04/13/23 20:05	2
Lithium	98		16	3.3	ug/L		04/12/23 14:00	04/14/23 19:39	2
Magnesium	100000		2000	120	ug/L		04/12/23 14:00	04/13/23 20:05	2
Molybdenum	85		10	2.2	ug/L		04/12/23 14:00	04/13/23 20:05	2
Potassium	6600		2000	430	ug/L		04/12/23 14:00	04/13/23 20:05	2
Selenium	ND		10	1.8	ug/L		04/12/23 14:00	04/13/23 20:05	2
Sodium	1500000		2000	660	ug/L		04/12/23 14:00	04/13/23 20:05	2
Thallium	ND		2.0	0.40	ug/L		04/12/23 14:00	04/13/23 20:05	2
Calcium	440000		2000	510	ug/L		04/12/23 14:00	04/13/23 20:05	2

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		04/12/23 14:00	04/13/23 20:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	120		5.0	2.6	mg/L			04/18/23 20:47	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	120		5.0	2.6	mg/L			04/18/23 20:47	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/18/23 20:47	1
Chloride (EPA 300.0)	4700		50	6.4	mg/L			05/02/23 21:51	50
Fluoride (EPA 300.0)	0.85		0.25	0.12	mg/L			05/02/23 21:29	5
Sulfate (EPA 300.0)	62		5.0	1.7	mg/L			05/02/23 21:29	5
Total Dissolved Solids (SM 2540C)	6900		100	78	mg/L			04/13/23 10:05	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	11.9		1.61	1.93	1.00	0.871	pCi/L	04/19/23 10:49	05/11/23 19:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.2		30 - 110					04/19/23 10:49	05/11/23 19:24	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	1.42	G	0.911	0.920	1.00	1.37	pCi/L	04/19/23 11:27	05/11/23 13:01	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: BAC-09-F-20230406-01

Lab Sample ID: 240-183255-2

Date Collected: 04/06/23 12:08

Matrix: Water

Date Received: 04/11/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	73.2		30 - 110	04/19/23 11:27	05/11/23 13:01	1
Y Carrier	88.2		30 - 110	04/19/23 11:27	05/11/23 13:01	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	13.3		1.85	2.14	5.00	1.37	pCi/L		05/12/23 16:48	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: DUP-004-BAC-09-F-20230406-01

Lab Sample ID: 240-183255-3

Date Collected: 04/06/23 12:08

Matrix: Water

Date Received: 04/11/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	250		100	57	ug/L		04/12/23 14:00	04/13/23 14:21	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		4.0	1.1	ug/L		04/12/23 14:00	04/13/23 20:08	2
Arsenic	2.2	J	10	1.5	ug/L		04/12/23 14:00	04/13/23 20:08	2
Barium	2300		10	4.5	ug/L		04/12/23 14:00	04/13/23 20:08	2
Beryllium	ND	^+	2.0	1.2	ug/L		04/12/23 14:00	04/13/23 20:08	2
Cadmium	ND		2.0	0.39	ug/L		04/12/23 14:00	04/13/23 20:08	2
Chromium	6.0	J	10	2.4	ug/L		04/12/23 14:00	04/13/23 20:08	2
Cobalt	2.4		2.0	0.38	ug/L		04/12/23 14:00	04/13/23 20:08	2
Lead	2.1		2.0	0.90	ug/L		04/12/23 14:00	04/13/23 20:08	2
Lithium	100		16	3.3	ug/L		04/12/23 14:00	04/14/23 19:42	2
Magnesium	110000		2000	120	ug/L		04/12/23 14:00	04/13/23 20:08	2
Molybdenum	86		10	2.2	ug/L		04/12/23 14:00	04/13/23 20:08	2
Potassium	6800		2000	430	ug/L		04/12/23 14:00	04/13/23 20:08	2
Selenium	ND		10	1.8	ug/L		04/12/23 14:00	04/13/23 20:08	2
Sodium	1600000		2000	660	ug/L		04/12/23 14:00	04/13/23 20:08	2
Thallium	ND		2.0	0.40	ug/L		04/12/23 14:00	04/13/23 20:08	2
Calcium	450000		2000	510	ug/L		04/12/23 14:00	04/13/23 20:08	2

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		04/12/23 14:00	04/13/23 20:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	120		5.0	2.6	mg/L			04/18/23 17:39	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	120		5.0	2.6	mg/L			04/18/23 17:39	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/18/23 17:39	1
Chloride (EPA 300.0)	4600		50	6.4	mg/L			05/02/23 22:34	50
Fluoride (EPA 300.0)	0.87		0.25	0.12	mg/L			05/02/23 22:13	5
Sulfate (EPA 300.0)	64		5.0	1.7	mg/L			05/02/23 22:13	5
Total Dissolved Solids (SM 2540C)	6800		100	78	mg/L			04/13/23 10:05	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	2.10		0.673	0.699	1.00	0.586	pCi/L	04/19/23 09:57	05/12/23 06:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	70.8		30 - 110					04/19/23 09:57	05/12/23 06:23	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	1.60	G	0.954	0.966	1.00	1.40	pCi/L	04/19/23 10:34	05/11/23 15:10	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: DUP-004-BAC-09-F-20230406-01

Lab Sample ID: 240-183255-3

Date Collected: 04/06/23 12:08

Matrix: Water

Date Received: 04/11/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	70.8		30 - 110	04/19/23 10:34	05/11/23 15:10	1
Y Carrier	87.9		30 - 110	04/19/23 10:34	05/11/23 15:10	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
Combined Radium 226 + 228	3.70		(2σ+/-) 1.17	(2σ+/-) 1.19	5.00	1.40	pCi/L		05/12/23 13:59	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: BAC-17-F-20230406-01

Lab Sample ID: 240-183255-4

Date Collected: 04/06/23 13:57

Matrix: Water

Date Received: 04/11/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3600		100	57	ug/L		04/12/23 14:00	04/13/23 14:25	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		04/12/23 14:00	04/13/23 20:11	1
Arsenic	0.84	J	5.0	0.75	ug/L		04/12/23 14:00	04/13/23 20:11	1
Barium	41		5.0	2.2	ug/L		04/12/23 14:00	04/13/23 20:11	1
Beryllium	ND	^+	1.0	0.62	ug/L		04/12/23 14:00	04/13/23 20:11	1
Cadmium	0.20	J	1.0	0.20	ug/L		04/12/23 14:00	04/13/23 20:11	1
Chromium	2.9	J	5.0	1.2	ug/L		04/12/23 14:00	04/13/23 20:11	1
Cobalt	34		1.0	0.19	ug/L		04/12/23 14:00	04/13/23 20:11	1
Lead	1.3		1.0	0.45	ug/L		04/12/23 14:00	04/13/23 20:11	1
Lithium	6.4	J ^+	8.0	1.7	ug/L		04/12/23 14:00	04/13/23 20:11	1
Magnesium	26000		1000	61	ug/L		04/12/23 14:00	04/13/23 20:11	1
Molybdenum	ND		5.0	1.1	ug/L		04/12/23 14:00	04/13/23 20:11	1
Potassium	1100		1000	220	ug/L		04/12/23 14:00	04/13/23 20:11	1
Selenium	ND		5.0	0.89	ug/L		04/12/23 14:00	04/13/23 20:11	1
Sodium	20000		1000	330	ug/L		04/12/23 14:00	04/13/23 20:11	1
Thallium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 20:11	1
Calcium	45000		1000	250	ug/L		04/12/23 14:00	04/13/23 20:11	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		04/12/23 14:00	04/13/23 20:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	58		5.0	2.6	mg/L			04/18/23 20:58	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	58		5.0	2.6	mg/L			04/18/23 20:58	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/18/23 20:58	1
Chloride (EPA 300.0)	20		1.0	0.13	mg/L			05/02/23 22:56	1
Fluoride (EPA 300.0)	0.038	J	0.050	0.024	mg/L			05/02/23 22:56	1
Sulfate (EPA 300.0)	220		2.0	0.70	mg/L			05/03/23 20:59	2
Total Dissolved Solids (SM 2540C)	400		10	7.8	mg/L			04/13/23 10:05	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	0.291	U	0.259	0.260	1.00	0.388	pCi/L	04/19/23 09:57	05/12/23 06:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.1		30 - 110					04/19/23 09:57	05/12/23 06:24	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	-0.224	U	0.362	0.362	1.00	0.770	pCi/L	04/19/23 10:34	05/11/23 15:10	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: BAC-17-F-20230406-01

Lab Sample ID: 240-183255-4

Date Collected: 04/06/23 13:57

Matrix: Water

Date Received: 04/11/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	78.1		30 - 110	04/19/23 10:34	05/11/23 15:10	1
Y Carrier	80.7		30 - 110	04/19/23 10:34	05/11/23 15:10	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.0672	U	0.445	0.446	5.00	0.770	pCi/L		05/12/23 13:59	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: BAC-15-F-20230406-01

Lab Sample ID: 240-183255-5

Date Collected: 04/06/23 15:08

Matrix: Water

Date Received: 04/11/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	390		100	57	ug/L		04/12/23 14:00	04/13/23 14:29	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		04/12/23 14:00	04/13/23 20:14	1
Arsenic	2.8	J	5.0	0.75	ug/L		04/12/23 14:00	04/13/23 20:14	1
Barium	71		5.0	2.2	ug/L		04/12/23 14:00	04/13/23 20:14	1
Beryllium	ND	^+	1.0	0.62	ug/L		04/12/23 14:00	04/13/23 20:14	1
Cadmium	0.33	J	1.0	0.20	ug/L		04/12/23 14:00	04/13/23 20:14	1
Chromium	6.7		5.0	1.2	ug/L		04/12/23 14:00	04/13/23 20:14	1
Cobalt	5.1		1.0	0.19	ug/L		04/12/23 14:00	04/13/23 20:14	1
Lead	4.1		1.0	0.45	ug/L		04/12/23 14:00	04/13/23 20:14	1
Lithium	6.8	J	8.0	1.7	ug/L		04/12/23 14:00	04/14/23 19:45	1
Magnesium	11000		1000	61	ug/L		04/12/23 14:00	04/13/23 20:14	1
Molybdenum	ND		5.0	1.1	ug/L		04/12/23 14:00	04/13/23 20:14	1
Potassium	1700		1000	220	ug/L		04/12/23 14:00	04/13/23 20:14	1
Selenium	ND		5.0	0.89	ug/L		04/12/23 14:00	04/13/23 20:14	1
Sodium	11000		1000	330	ug/L		04/12/23 14:00	04/13/23 20:14	1
Thallium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 20:14	1
Calcium	31000		1000	250	ug/L		04/12/23 14:00	04/13/23 20:14	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		04/12/23 14:00	04/13/23 20:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	71		5.0	2.6	mg/L			04/18/23 21:05	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	71		5.0	2.6	mg/L			04/18/23 21:05	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/18/23 21:05	1
Chloride (EPA 300.0)	0.95	J	1.0	0.13	mg/L			05/02/23 23:18	1
Fluoride (EPA 300.0)	0.033	J	0.050	0.024	mg/L			05/02/23 23:18	1
Sulfate (EPA 300.0)	89		1.0	0.35	mg/L			05/02/23 23:18	1
Total Dissolved Solids (SM 2540C)	210		10	7.8	mg/L			04/13/23 10:05	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.593	U G	0.738	0.740	1.00	1.22	pCi/L	04/19/23 09:57	05/12/23 06:24	1
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Ba Carrier</i>	<i>70.8</i>		<i>30 - 110</i>					<i>04/19/23 09:57</i>	<i>05/12/23 06:24</i>	<i>1</i>

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	1.05	U G	1.65	1.65	1.00	2.80	pCi/L	04/19/23 10:34	05/11/23 15:11	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: BAC-15-F-20230406-01

Lab Sample ID: 240-183255-5

Date Collected: 04/06/23 15:08

Matrix: Water

Date Received: 04/11/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	70.8		30 - 110	04/19/23 10:34	05/11/23 15:11	1
Y Carrier	81.9		30 - 110	04/19/23 10:34	05/11/23 15:11	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	1.64	U	1.81	1.81	5.00	2.80	pCi/L		05/12/23 13:59	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: EB-001-F-20230406-01

Lab Sample ID: 240-183255-6

Date Collected: 04/06/23 15:30

Matrix: Water

Date Received: 04/11/23 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		04/12/23 14:00	04/13/23 14:34	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		04/12/23 14:00	04/13/23 20:22	1
Arsenic	ND		5.0	0.75	ug/L		04/12/23 14:00	04/13/23 20:22	1
Barium	ND		5.0	2.2	ug/L		04/12/23 14:00	04/13/23 20:22	1
Beryllium	ND		1.0	0.62	ug/L		04/12/23 14:00	04/13/23 20:22	1
Cadmium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 20:22	1
Chromium	ND		5.0	1.2	ug/L		04/12/23 14:00	04/13/23 20:22	1
Cobalt	ND		1.0	0.19	ug/L		04/12/23 14:00	04/13/23 20:22	1
Lead	ND		1.0	0.45	ug/L		04/12/23 14:00	04/13/23 20:22	1
Lithium	ND		8.0	1.7	ug/L		04/12/23 14:00	04/13/23 20:22	1
Magnesium	ND		1000	61	ug/L		04/12/23 14:00	04/13/23 20:22	1
Molybdenum	ND		5.0	1.1	ug/L		04/12/23 14:00	04/13/23 20:22	1
Potassium	ND		1000	220	ug/L		04/12/23 14:00	04/13/23 20:22	1
Selenium	ND		5.0	0.89	ug/L		04/12/23 14:00	04/13/23 20:22	1
Sodium	ND		1000	330	ug/L		04/12/23 14:00	04/13/23 20:22	1
Thallium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 20:22	1
Calcium	ND		1000	250	ug/L		04/12/23 14:00	04/13/23 20:22	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		04/12/23 14:00	04/13/23 20:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	3.9	J	5.0	2.6	mg/L			04/18/23 21:09	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	3.9	J	5.0	2.6	mg/L			04/18/23 21:09	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/18/23 21:09	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			05/03/23 01:06	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			05/03/23 01:06	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			05/03/23 01:06	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			04/13/23 10:05	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	-0.0164	U	0.106	0.106	1.00	0.245	pCi/L	04/19/23 09:57	05/12/23 06:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.6		30 - 110					04/19/23 09:57	05/12/23 06:21	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.0833	U	0.293	0.293	1.00	0.525	pCi/L	04/19/23 10:34	05/11/23 15:11	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: EB-001-F-20230406-01

Lab Sample ID: 240-183255-6

Date Collected: 04/06/23 15:30

Matrix: Water

Date Received: 04/11/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	82.6		30 - 110	04/19/23 10:34	05/11/23 15:11	1
Y Carrier	95.0		30 - 110	04/19/23 10:34	05/11/23 15:11	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.0669	U	0.312	0.312	5.00	0.525	pCi/L		05/12/23 13:59	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: BAC-13-F-20230407-01

Lab Sample ID: 240-183255-7

Date Collected: 04/07/23 09:42

Matrix: Water

Date Received: 04/11/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	350		100	57	ug/L		04/12/23 14:00	04/13/23 14:38	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND	^1+	4.0	1.1	ug/L		04/12/23 14:00	04/17/23 17:03	2
Arsenic	2.6	J	10	1.5	ug/L		04/12/23 14:00	04/17/23 17:03	2
Barium	5100		10	4.5	ug/L		04/12/23 14:00	04/17/23 17:03	2
Beryllium	ND		2.0	1.2	ug/L		04/12/23 14:00	04/17/23 17:03	2
Cadmium	ND		2.0	0.39	ug/L		04/12/23 14:00	04/17/23 17:03	2
Chromium	ND		10	2.4	ug/L		04/12/23 14:00	04/17/23 17:03	2
Cobalt	0.58	J	2.0	0.38	ug/L		04/12/23 14:00	04/17/23 17:03	2
Lead	ND		2.0	0.90	ug/L		04/12/23 14:00	04/17/23 17:03	2
Lithium	63		16	3.3	ug/L		04/12/23 14:00	04/17/23 17:03	2
Magnesium	63000		2000	120	ug/L		04/12/23 14:00	04/17/23 17:03	2
Molybdenum	16		10	2.2	ug/L		04/12/23 14:00	04/17/23 17:03	2
Potassium	8000		2000	430	ug/L		04/12/23 14:00	04/17/23 17:03	2
Selenium	ND		10	1.8	ug/L		04/12/23 14:00	04/17/23 17:03	2
Sodium	1400000		2000	660	ug/L		04/12/23 14:00	04/17/23 17:03	2
Thallium	ND		2.0	0.40	ug/L		04/12/23 14:00	04/17/23 17:03	2
Calcium	300000		2000	510	ug/L		04/12/23 14:00	04/17/23 17:03	2

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		04/12/23 14:00	04/13/23 20:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	52		5.0	2.6	mg/L			04/18/23 19:11	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	52		5.0	2.6	mg/L			04/18/23 19:11	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/18/23 19:11	1
Chloride (EPA 300.0)	3100		25	3.2	mg/L			05/03/23 01:50	25
Fluoride (EPA 300.0)	0.46		0.25	0.12	mg/L			05/03/23 01:28	5
Sulfate (EPA 300.0)	ND		5.0	1.7	mg/L			05/03/23 01:28	5
Total Dissolved Solids (SM 2540C)	4600		50	39	mg/L			04/13/23 10:05	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	3.56		0.504	0.597	1.00	0.210	pCi/L	04/19/23 09:57	05/12/23 06:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	107		30 - 110					04/19/23 09:57	05/12/23 06:21	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	3.51		0.548	0.636	1.00	0.410	pCi/L	04/19/23 10:34	05/11/23 15:11	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: BAC-13-F-20230407-01

Lab Sample ID: 240-183255-7

Date Collected: 04/07/23 09:42

Matrix: Water

Date Received: 04/11/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	107		30 - 110	04/19/23 10:34	05/11/23 15:11	1
Y Carrier	86.7		30 - 110	04/19/23 10:34	05/11/23 15:11	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
Combined Radium 226 + 228	7.06		(2σ+/-) 0.745	(2σ+/-) 0.872	5.00	0.410	pCi/L		05/12/23 13:59	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: BAC-04-F-20230407-01

Lab Sample ID: 240-183255-8

Date Collected: 04/07/23 10:35

Matrix: Water

Date Received: 04/11/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2300		100	57	ug/L		04/12/23 14:00	04/13/23 14:42	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		04/12/23 14:00	04/13/23 20:28	1
Arsenic	1.5	J	5.0	0.75	ug/L		04/12/23 14:00	04/13/23 20:28	1
Barium	41		5.0	2.2	ug/L		04/12/23 14:00	04/13/23 20:28	1
Beryllium	ND		1.0	0.62	ug/L		04/12/23 14:00	04/13/23 20:28	1
Cadmium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 20:28	1
Chromium	1.6	J	5.0	1.2	ug/L		04/12/23 14:00	04/13/23 20:28	1
Cobalt	2.1		1.0	0.19	ug/L		04/12/23 14:00	04/13/23 20:28	1
Lead	ND		1.0	0.45	ug/L		04/12/23 14:00	04/13/23 20:28	1
Lithium	7.4	J	8.0	1.7	ug/L		04/12/23 14:00	04/13/23 20:28	1
Magnesium	18000		1000	61	ug/L		04/12/23 14:00	04/13/23 20:28	1
Molybdenum	ND		5.0	1.1	ug/L		04/12/23 14:00	04/13/23 20:28	1
Potassium	1700		1000	220	ug/L		04/12/23 14:00	04/13/23 20:28	1
Selenium	ND		5.0	0.89	ug/L		04/12/23 14:00	04/13/23 20:28	1
Sodium	25000		1000	330	ug/L		04/12/23 14:00	04/13/23 20:28	1
Thallium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 20:28	1
Calcium	83000		1000	250	ug/L		04/12/23 14:00	04/13/23 20:28	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		04/12/23 14:00	04/13/23 20:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	110		5.0	2.6	mg/L			04/18/23 19:14	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	110		5.0	2.6	mg/L			04/18/23 19:14	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/18/23 19:14	1
Chloride (EPA 300.0)	42		1.0	0.13	mg/L			05/03/23 02:11	1
Fluoride (EPA 300.0)	0.032	J	0.050	0.024	mg/L			05/03/23 02:11	1
Sulfate (EPA 300.0)	210		2.0	0.70	mg/L			05/03/23 22:04	2
Total Dissolved Solids (SM 2540C)	480		10	7.8	mg/L			04/13/23 10:05	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	0.151	U	0.165	0.165	1.00	0.258	pCi/L	04/19/23 09:57	05/12/23 06:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	70.8		30 - 110					04/19/23 09:57	05/12/23 06:21	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	0.541	U	0.451	0.454	1.00	0.704	pCi/L	04/19/23 10:34	05/11/23 15:12	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: BAC-04-F-20230407-01

Lab Sample ID: 240-183255-8

Date Collected: 04/07/23 10:35

Matrix: Water

Date Received: 04/11/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	70.8		30 - 110	04/19/23 10:34	05/11/23 15:12	1
Y Carrier	81.9		30 - 110	04/19/23 10:34	05/11/23 15:12	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.692	U	0.480	0.483	5.00	0.704	pCi/L		05/12/23 13:59	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: BAC-05-F-20230407-01

Lab Sample ID: 240-183255-9

Date Collected: 04/07/23 11:41

Matrix: Water

Date Received: 04/11/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2300		100	57	ug/L		04/12/23 14:00	04/13/23 14:47	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		04/12/23 14:00	04/13/23 20:31	1
Arsenic	0.83	J	5.0	0.75	ug/L		04/12/23 14:00	04/13/23 20:31	1
Barium	41		5.0	2.2	ug/L		04/12/23 14:00	04/13/23 20:31	1
Beryllium	ND		1.0	0.62	ug/L		04/12/23 14:00	04/13/23 20:31	1
Cadmium	0.32	J	1.0	0.20	ug/L		04/12/23 14:00	04/13/23 20:31	1
Chromium	2.0	J	5.0	1.2	ug/L		04/12/23 14:00	04/13/23 20:31	1
Cobalt	8.1		1.0	0.19	ug/L		04/12/23 14:00	04/13/23 20:31	1
Lead	1.6		1.0	0.45	ug/L		04/12/23 14:00	04/13/23 20:31	1
Lithium	11		8.0	1.7	ug/L		04/12/23 14:00	04/13/23 20:31	1
Magnesium	20000		1000	61	ug/L		04/12/23 14:00	04/13/23 20:31	1
Molybdenum	ND		5.0	1.1	ug/L		04/12/23 14:00	04/13/23 20:31	1
Potassium	1600		1000	220	ug/L		04/12/23 14:00	04/13/23 20:31	1
Selenium	ND		5.0	0.89	ug/L		04/12/23 14:00	04/13/23 20:31	1
Sodium	25000		1000	330	ug/L		04/12/23 14:00	04/13/23 20:31	1
Thallium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 20:31	1
Calcium	74000		1000	250	ug/L		04/12/23 14:00	04/13/23 20:31	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		04/12/23 14:00	04/13/23 20:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	79		5.0	2.6	mg/L			04/18/23 19:20	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	79		5.0	2.6	mg/L			04/18/23 19:20	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/18/23 19:20	1
Chloride (EPA 300.0)	35		1.0	0.13	mg/L			05/03/23 02:33	1
Fluoride (EPA 300.0)	0.048	J	0.050	0.024	mg/L			05/03/23 02:33	1
Sulfate (EPA 300.0)	270		2.0	0.70	mg/L			05/03/23 22:26	2
Total Dissolved Solids (SM 2540C)	520		10	7.8	mg/L			04/13/23 10:05	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0139	U	0.202	0.202	1.00	0.410	pCi/L	04/19/23 09:57	05/12/23 06:22	1
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Ba Carrier</i>	83.0		30 - 110					04/19/23 09:57	05/12/23 06:22	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.0410	U	0.347	0.347	1.00	0.647	pCi/L	04/19/23 10:34	05/11/23 15:12	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: BAC-05-F-20230407-01

Lab Sample ID: 240-183255-9

Date Collected: 04/07/23 11:41

Matrix: Water

Date Received: 04/11/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	83.0		30 - 110	04/19/23 10:34	05/11/23 15:12	1
Y Carrier	92.0		30 - 110	04/19/23 10:34	05/11/23 15:12	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.0549	U	0.402	0.402	5.00	0.647	pCi/L		05/12/23 13:59	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: BAC-03-F-20230407-01

Lab Sample ID: 240-183255-10

Date Collected: 04/07/23 13:00

Matrix: Water

Date Received: 04/11/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1800		100	57	ug/L		04/12/23 14:00	04/13/23 14:51	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		04/12/23 14:00	04/13/23 20:34	1
Arsenic	1.3	J	5.0	0.75	ug/L		04/12/23 14:00	04/13/23 20:34	1
Barium	54		5.0	2.2	ug/L		04/12/23 14:00	04/13/23 20:34	1
Beryllium	ND		1.0	0.62	ug/L		04/12/23 14:00	04/13/23 20:34	1
Cadmium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 20:34	1
Chromium	2.3	J	5.0	1.2	ug/L		04/12/23 14:00	04/13/23 20:34	1
Cobalt	1.8		1.0	0.19	ug/L		04/12/23 14:00	04/13/23 20:34	1
Lead	4.5		1.0	0.45	ug/L		04/12/23 14:00	04/13/23 20:34	1
Lithium	7.9	J	8.0	1.7	ug/L		04/12/23 14:00	04/13/23 20:34	1
Magnesium	15000		1000	61	ug/L		04/12/23 14:00	04/13/23 20:34	1
Molybdenum	ND		5.0	1.1	ug/L		04/12/23 14:00	04/13/23 20:34	1
Potassium	2000		1000	220	ug/L		04/12/23 14:00	04/13/23 20:34	1
Selenium	ND		5.0	0.89	ug/L		04/12/23 14:00	04/13/23 20:34	1
Sodium	29000		1000	330	ug/L		04/12/23 14:00	04/13/23 20:34	1
Thallium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 20:34	1
Calcium	75000		1000	250	ug/L		04/12/23 14:00	04/13/23 20:34	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		04/12/23 14:00	04/13/23 20:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	95		5.0	2.6	mg/L			04/18/23 19:24	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	95		5.0	2.6	mg/L			04/18/23 19:24	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/18/23 19:24	1
Chloride (EPA 300.0)	54		1.0	0.13	mg/L			05/03/23 02:54	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			05/03/23 02:54	1
Sulfate (EPA 300.0)	190		1.0	0.35	mg/L			05/03/23 02:54	1
Total Dissolved Solids (SM 2540C)	460		10	7.8	mg/L			04/13/23 10:05	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0535	U	0.176	0.176	1.00	0.341	pCi/L	04/19/23 09:57	05/12/23 06:22	1
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Ba Carrier</i>	<i>86.0</i>		<i>30 - 110</i>					<i>04/19/23 09:57</i>	<i>05/12/23 06:22</i>	<i>1</i>

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.501	U	0.438	0.441	1.00	0.688	pCi/L	04/19/23 10:34	05/11/23 15:12	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: BAC-03-F-20230407-01

Lab Sample ID: 240-183255-10

Date Collected: 04/07/23 13:00

Matrix: Water

Date Received: 04/11/23 08:00

<u>Carrier</u>	<u>%Yield</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Ba Carrier	86.0		30 - 110	04/19/23 10:34	05/11/23 15:12	1
Y Carrier	87.5		30 - 110	04/19/23 10:34	05/11/23 15:12	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

<u>Analyte</u>	<u>Result</u>	<u>Qualifier</u>	<u>Count Uncert. (2σ+/-)</u>	<u>Total Uncert. (2σ+/-)</u>	<u>RL</u>	<u>MDC</u>	<u>Unit</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Combined Radium 226 + 228	0.555	U	0.472	0.475	5.00	0.688	pCi/L		05/12/23 13:59	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: MW-1-F-20230407-01

Lab Sample ID: 240-183255-11

Date Collected: 04/07/23 13:57

Matrix: Water

Date Received: 04/11/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	64	J	100	57	ug/L		04/12/23 14:00	04/13/23 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		04/12/23 14:00	04/13/23 20:37	1
Arsenic	ND		5.0	0.75	ug/L		04/12/23 14:00	04/13/23 20:37	1
Barium	120		5.0	2.2	ug/L		04/12/23 14:00	04/13/23 20:37	1
Beryllium	ND		1.0	0.62	ug/L		04/12/23 14:00	04/13/23 20:37	1
Cadmium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 20:37	1
Chromium	1.7	J	5.0	1.2	ug/L		04/12/23 14:00	04/13/23 20:37	1
Cobalt	0.42	J	1.0	0.19	ug/L		04/12/23 14:00	04/13/23 20:37	1
Lead	ND		1.0	0.45	ug/L		04/12/23 14:00	04/13/23 20:37	1
Lithium	5.9	J	8.0	1.7	ug/L		04/12/23 14:00	04/13/23 20:37	1
Magnesium	14000		1000	61	ug/L		04/12/23 14:00	04/13/23 20:37	1
Molybdenum	ND		5.0	1.1	ug/L		04/12/23 14:00	04/13/23 20:37	1
Potassium	1400		1000	220	ug/L		04/12/23 14:00	04/13/23 20:37	1
Selenium	ND		5.0	0.89	ug/L		04/12/23 14:00	04/13/23 20:37	1
Sodium	16000		1000	330	ug/L		04/12/23 14:00	04/13/23 20:37	1
Thallium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 20:37	1
Calcium	120000		1000	250	ug/L		04/12/23 14:00	04/13/23 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		04/12/23 14:00	04/13/23 21:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	250		5.0	2.6	mg/L			04/18/23 19:29	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	250		5.0	2.6	mg/L			04/18/23 19:29	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/18/23 19:29	1
Chloride (EPA 300.0)	41		1.0	0.13	mg/L			05/03/23 11:35	1
Fluoride (EPA 300.0)	0.073		0.050	0.024	mg/L			05/03/23 11:35	1
Sulfate (EPA 300.0)	130		1.0	0.35	mg/L			05/03/23 11:35	1
Total Dissolved Solids (SM 2540C)	490		10	7.8	mg/L			04/13/23 10:05	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.00883	U	0.122	0.122	1.00	0.262	pCi/L	04/19/23 09:57	05/12/23 06:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.9		30 - 110					04/19/23 09:57	05/12/23 06:22	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.347	U	0.380	0.381	1.00	0.618	pCi/L	04/19/23 10:34	05/11/23 15:14	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: MW-1-F-20230407-01

Lab Sample ID: 240-183255-11

Date Collected: 04/07/23 13:57

Matrix: Water

Date Received: 04/11/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	77.9		30 - 110	04/19/23 10:34	05/11/23 15:14	1
Y Carrier	75.1		30 - 110	04/19/23 10:34	05/11/23 15:14	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.356	U	0.399	0.400	5.00	0.618	pCi/L		05/12/23 13:59	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: MW-6-F-20230407-01

Lab Sample ID: 240-183255-12

Date Collected: 04/07/23 14:35

Matrix: Water

Date Received: 04/11/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	57	J	100	57	ug/L		04/12/23 14:00	04/13/23 15:08	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		04/12/23 14:00	04/13/23 20:40	1
Arsenic	ND		5.0	0.75	ug/L		04/12/23 14:00	04/13/23 20:40	1
Barium	130		5.0	2.2	ug/L		04/12/23 14:00	04/13/23 20:40	1
Beryllium	ND		1.0	0.62	ug/L		04/12/23 14:00	04/13/23 20:40	1
Cadmium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 20:40	1
Chromium	ND		5.0	1.2	ug/L		04/12/23 14:00	04/13/23 20:40	1
Cobalt	0.45	J	1.0	0.19	ug/L		04/12/23 14:00	04/13/23 20:40	1
Lead	ND		1.0	0.45	ug/L		04/12/23 14:00	04/13/23 20:40	1
Lithium	5.2	J	8.0	1.7	ug/L		04/12/23 14:00	04/13/23 20:40	1
Magnesium	13000		1000	61	ug/L		04/12/23 14:00	04/13/23 20:40	1
Molybdenum	ND		5.0	1.1	ug/L		04/12/23 14:00	04/13/23 20:40	1
Potassium	1600		1000	220	ug/L		04/12/23 14:00	04/13/23 20:40	1
Selenium	ND		5.0	0.89	ug/L		04/12/23 14:00	04/13/23 20:40	1
Sodium	13000		1000	330	ug/L		04/12/23 14:00	04/13/23 20:40	1
Thallium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 20:40	1
Calcium	110000		1000	250	ug/L		04/12/23 14:00	04/13/23 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		04/12/23 14:00	04/13/23 21:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			04/18/23 19:33	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			04/18/23 19:33	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/18/23 19:33	1
Chloride (EPA 300.0)	25		1.0	0.13	mg/L			05/03/23 12:18	1
Fluoride (EPA 300.0)	0.060		0.050	0.024	mg/L			05/03/23 12:18	1
Sulfate (EPA 300.0)	110		1.0	0.35	mg/L			05/03/23 12:18	1
Total Dissolved Solids (SM 2540C)	430		10	7.8	mg/L			04/13/23 10:05	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.167	U	0.153	0.154	1.00	0.230	pCi/L	04/19/23 09:57	05/12/23 10:22	1
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Ba Carrier</i>	89.2		30 - 110					04/19/23 09:57	05/12/23 10:22	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.444	U	0.377	0.379	1.00	0.591	pCi/L	04/19/23 10:34	05/11/23 15:14	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: MW-6-F-20230407-01

Lab Sample ID: 240-183255-12

Date Collected: 04/07/23 14:35

Matrix: Water

Date Received: 04/11/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	89.2		30 - 110	04/19/23 10:34	05/11/23 15:14	1
Y Carrier	77.8		30 - 110	04/19/23 10:34	05/11/23 15:14	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.611		0.407	0.409	5.00	0.591	pCi/L		05/12/23 13:59	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: EB-001-F-20230407-01

Lab Sample ID: 240-183255-13

Date Collected: 04/07/23 15:00

Matrix: Water

Date Received: 04/11/23 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		04/12/23 14:00	04/13/23 15:12	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		04/12/23 14:00	04/13/23 20:43	1
Arsenic	ND		5.0	0.75	ug/L		04/12/23 14:00	04/13/23 20:43	1
Barium	ND		5.0	2.2	ug/L		04/12/23 14:00	04/13/23 20:43	1
Beryllium	ND		1.0	0.62	ug/L		04/12/23 14:00	04/13/23 20:43	1
Cadmium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 20:43	1
Chromium	ND		5.0	1.2	ug/L		04/12/23 14:00	04/13/23 20:43	1
Cobalt	ND		1.0	0.19	ug/L		04/12/23 14:00	04/13/23 20:43	1
Lead	ND		1.0	0.45	ug/L		04/12/23 14:00	04/13/23 20:43	1
Lithium	ND		8.0	1.7	ug/L		04/12/23 14:00	04/13/23 20:43	1
Magnesium	ND		1000	61	ug/L		04/12/23 14:00	04/13/23 20:43	1
Molybdenum	ND		5.0	1.1	ug/L		04/12/23 14:00	04/13/23 20:43	1
Potassium	ND		1000	220	ug/L		04/12/23 14:00	04/13/23 20:43	1
Selenium	ND		5.0	0.89	ug/L		04/12/23 14:00	04/13/23 20:43	1
Sodium	ND		1000	330	ug/L		04/12/23 14:00	04/13/23 20:43	1
Thallium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 20:43	1
Calcium	ND		1000	250	ug/L		04/12/23 14:00	04/13/23 20:43	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		04/12/23 14:00	04/13/23 21:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/18/23 19:42	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/18/23 19:42	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/18/23 19:42	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			05/03/23 13:23	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			05/03/23 13:23	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			05/03/23 13:23	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			04/13/23 10:05	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	-0.106	U	0.120	0.121	1.00	0.334	pCi/L	04/19/23 09:57	05/12/23 10:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	61.7		30 - 110					04/19/23 09:57	05/12/23 10:22	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	0.0756	U	0.389	0.390	1.00	0.709	pCi/L	04/19/23 10:34	05/11/23 15:14	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: EB-001-F-20230407-01

Lab Sample ID: 240-183255-13

Date Collected: 04/07/23 15:00

Matrix: Water

Date Received: 04/11/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	61.7		30 - 110	04/19/23 10:34	05/11/23 15:14	1
Y Carrier	91.6		30 - 110	04/19/23 10:34	05/11/23 15:14	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	-0.0305	U	0.407	0.408	5.00	0.709	pCi/L		05/12/23 13:59	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (30-110)	
240-183255-1	BAC-11-F-20230406-01	183 X	
240-183255-2	BAC-09-F-20230406-01	73.2	
240-183255-3	DUP-004-BAC-09-F-20230406-01	70.8	
240-183255-4	BAC-17-F-20230406-01	78.1	
240-183255-5	BAC-15-F-20230406-01	70.8	
240-183255-6	EB-001-F-20230406-01	82.6	
240-183255-7	BAC-13-F-20230407-01	107	
240-183255-8	BAC-04-F-20230407-01	70.8	
240-183255-9	BAC-05-F-20230407-01	83.0	
240-183255-10	BAC-03-F-20230407-01	86.0	
240-183255-11	MW-1-F-20230407-01	77.9	
240-183255-12	MW-6-F-20230407-01	89.2	
240-183255-13	EB-001-F-20230407-01	61.7	
LCS 160-608036/2-A	Lab Control Sample	79.9	
LCS 160-608041/2-A	Lab Control Sample	91.2	
LCS D 160-608036/3-A	Lab Control Sample Dup	79.6	
MB 160-608036/1-A	Method Blank	81.3	
MB 160-608041/1-A	Method Blank	90.9	

Tracer/Carrier Legend
Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (30-110)	Y (30-110)
240-183255-1	BAC-11-F-20230406-01	183 X	88.6
240-183255-2	BAC-09-F-20230406-01	73.2	88.2
240-183255-3	DUP-004-BAC-09-F-20230406-01	70.8	87.9
240-183255-4	BAC-17-F-20230406-01	78.1	80.7
240-183255-5	BAC-15-F-20230406-01	70.8	81.9
240-183255-6	EB-001-F-20230406-01	82.6	95.0
240-183255-7	BAC-13-F-20230407-01	107	86.7
240-183255-8	BAC-04-F-20230407-01	70.8	81.9
240-183255-9	BAC-05-F-20230407-01	83.0	92.0
240-183255-10	BAC-03-F-20230407-01	86.0	87.5
240-183255-11	MW-1-F-20230407-01	77.9	75.1
240-183255-12	MW-6-F-20230407-01	89.2	77.8
240-183255-13	EB-001-F-20230407-01	61.7	91.6
LCS 160-608040/2-A	Lab Control Sample	79.9	92.3
LCS 160-608055/2-A	Lab Control Sample	91.2	87.9
LCS D 160-608040/3-A	Lab Control Sample Dup	79.6	97.6
MB 160-608040/1-A	Method Blank	81.3	87.1
MB 160-608055/1-A	Method Blank	90.9	83.4

Tracer/Carrier Legend
Ba = Ba Carrier

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Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC

Project/Site: Federal CCR Wells

Y = Y Carrier

Job ID: 240-183255-1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-569066/1-A
Matrix: Water
Analysis Batch: 569319

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 569066

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		04/12/23 14:00	04/13/23 13:09	1

Lab Sample ID: LCS 240-569066/2-A
Matrix: Water
Analysis Batch: 569319

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 569066

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	954		ug/L		95	80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-569066/1-A
Matrix: Water
Analysis Batch: 569329

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 569066

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		04/12/23 14:00	04/13/23 19:24	1
Arsenic	ND		5.0	0.75	ug/L		04/12/23 14:00	04/13/23 19:24	1
Barium	ND		5.0	2.2	ug/L		04/12/23 14:00	04/13/23 19:24	1
Beryllium	ND	^+	1.0	0.62	ug/L		04/12/23 14:00	04/13/23 19:24	1
Cadmium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 19:24	1
Chromium	ND		5.0	1.2	ug/L		04/12/23 14:00	04/13/23 19:24	1
Cobalt	ND		1.0	0.19	ug/L		04/12/23 14:00	04/13/23 19:24	1
Lead	ND		1.0	0.45	ug/L		04/12/23 14:00	04/13/23 19:24	1
Lithium	ND	^+	8.0	1.7	ug/L		04/12/23 14:00	04/13/23 19:24	1
Magnesium	ND		1000	61	ug/L		04/12/23 14:00	04/13/23 19:24	1
Molybdenum	ND		5.0	1.1	ug/L		04/12/23 14:00	04/13/23 19:24	1
Potassium	ND		1000	220	ug/L		04/12/23 14:00	04/13/23 19:24	1
Selenium	ND		5.0	0.89	ug/L		04/12/23 14:00	04/13/23 19:24	1
Sodium	ND		1000	330	ug/L		04/12/23 14:00	04/13/23 19:24	1
Thallium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 19:24	1
Calcium	ND		1000	250	ug/L		04/12/23 14:00	04/13/23 19:24	1

Lab Sample ID: LCS 240-569066/3-A
Matrix: Water
Analysis Batch: 569329

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 569066

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	96.6		ug/L		97	80 - 120
Arsenic	1000	906		ug/L		91	80 - 120
Barium	1000	909		ug/L		91	80 - 120
Beryllium	500	528	^+	ug/L		106	80 - 120
Cadmium	500	465		ug/L		93	80 - 120
Chromium	500	468		ug/L		94	80 - 120
Cobalt	500	456		ug/L		91	80 - 120
Lead	500	457		ug/L		91	80 - 120
Lithium	500	498	^+	ug/L		100	80 - 120
Magnesium	25000	21900		ug/L		87	80 - 120
Molybdenum	500	465		ug/L		93	80 - 120

Eurofins Cleveland

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

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

Lab Sample ID: LCS 240-569066/3-A
 Matrix: Water
 Analysis Batch: 569329

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 569066

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Potassium	25000	22400		ug/L		90	80 - 120
Selenium	1000	909		ug/L		91	80 - 120
Sodium	25000	22000		ug/L		88	80 - 120
Thallium	1000	930		ug/L		93	80 - 120
Calcium	25000	21600		ug/L		86	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-569067/1-A
 Matrix: Water
 Analysis Batch: 569349

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 569067

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		04/12/23 14:00	04/13/23 20:14	1

Lab Sample ID: LCS 240-569067/2-A
 Matrix: Water
 Analysis Batch: 569349

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 569067

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.56		ug/L		111	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-569862/25
 Matrix: Water
 Analysis Batch: 569862

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			04/18/23 18:59	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/18/23 18:59	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/18/23 18:59	1

Lab Sample ID: MB 240-569862/3
 Matrix: Water
 Analysis Batch: 569862

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			04/18/23 17:35	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/18/23 17:35	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/18/23 17:35	1

Lab Sample ID: LCS 240-569862/2
 Matrix: Water
 Analysis Batch: 569862

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	151		mg/L		103	86 - 123

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Method: 2320B-1997 - Alkalinity, Total (Continued)

Lab Sample ID: LCS 240-569862/24
 Matrix: Water
 Analysis Batch: 569862

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	150		mg/L		103	86 - 123

Lab Sample ID: 240-183255-3 DU
 Matrix: Water
 Analysis Batch: 569862

Client Sample ID: DUP-004-BAC-09-F-20230406-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	120		117		mg/L		3	20
Bicarbonate Alkalinity as CaCO3	120		117		mg/L		3	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Lab Sample ID: 240-183255-12 DU
 Matrix: Water
 Analysis Batch: 569862

Client Sample ID: MW-6-F-20230407-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	240		245		mg/L		0.07	20
Bicarbonate Alkalinity as CaCO3	240		245		mg/L		0.07	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Lab Sample ID: MB 240-570018/4
 Matrix: Water
 Analysis Batch: 570018

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			04/18/23 20:17	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/18/23 20:17	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/18/23 20:17	1

Lab Sample ID: 240-183255-4 DU
 Matrix: Water
 Analysis Batch: 570018

Client Sample ID: BAC-17-F-20230406-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	58		57.6		mg/L		1	20
Bicarbonate Alkalinity as CaCO3	58		57.6		mg/L		1	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-571768/3
 Matrix: Water
 Analysis Batch: 571768

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			05/02/23 11:22	1
Fluoride	ND		0.050	0.024	mg/L			05/02/23 11:22	1
Sulfate	ND		1.0	0.35	mg/L			05/02/23 11:22	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 240-571768/4
Matrix: Water
Analysis Batch: 571768

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	2.62		mg/L		105	90 - 110
Sulfate	50.0	50.9		mg/L		102	90 - 110

Lab Sample ID: 240-183255-5 MS
Matrix: Water
Analysis Batch: 571768

Client Sample ID: BAC-15-F-20230406-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.95	J	50.0	51.9		mg/L		102	80 - 120
Fluoride	0.033	J	2.50	2.76		mg/L		109	80 - 120
Sulfate	89		50.0	138		mg/L		99	80 - 120

Lab Sample ID: 240-183255-5 MSD
Matrix: Water
Analysis Batch: 571768

Client Sample ID: BAC-15-F-20230406-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	0.95	J	50.0	52.4		mg/L		103	80 - 120	1	15
Fluoride	0.033	J	2.50	2.79		mg/L		110	80 - 120	1	15
Sulfate	89		50.0	138		mg/L		100	80 - 120	0	15

Lab Sample ID: MB 240-571784/3
Matrix: Water
Analysis Batch: 571784

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			05/03/23 04:43	1
Fluoride	ND		0.050	0.024	mg/L			05/03/23 04:43	1
Sulfate	ND		1.0	0.35	mg/L			05/03/23 04:43	1

Lab Sample ID: LCS 240-571784/4
Matrix: Water
Analysis Batch: 571784

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	2.61		mg/L		105	90 - 110
Sulfate	50.0	50.5		mg/L		101	90 - 110

Lab Sample ID: MB 240-571978/3
Matrix: Water
Analysis Batch: 571978

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			05/03/23 17:44	1
Fluoride	ND		0.050	0.024	mg/L			05/03/23 17:44	1
Sulfate	ND		1.0	0.35	mg/L			05/03/23 17:44	1

Eurofins Cleveland

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 240-571978/4
 Matrix: Water
 Analysis Batch: 571978

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	2.58		mg/L		103	90 - 110
Sulfate	50.0	50.9		mg/L		102	90 - 110

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

Lab Sample ID: MB 240-569230/1
 Matrix: Water
 Analysis Batch: 569230

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			04/13/23 10:05	1

Lab Sample ID: LCS 240-569230/2
 Matrix: Water
 Analysis Batch: 569230

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	580	543		mg/L		94	80 - 120

Lab Sample ID: 240-183255-1 DU
 Matrix: Water
 Analysis Batch: 569230

Client Sample ID: BAC-11-F-20230406-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	38000		37400		mg/L		3	20

Lab Sample ID: 240-183255-8 DU
 Matrix: Water
 Analysis Batch: 569230

Client Sample ID: BAC-04-F-20230407-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	480		479		mg/L		0.4	20

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-608036/1-A
 Matrix: Water
 Analysis Batch: 611284

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 608036

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.002087	U	0.201	0.201	1.00	0.392	pCi/L	04/19/23 09:57	05/12/23 06:25	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	81.3		30 - 110	04/19/23 09:57	05/12/23 06:25	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: LCS 160-608036/2-A
Matrix: Water
Analysis Batch: 611284

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 608036

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	
Radium-226	11.3	10.50		1.34	1.00	0.320	pCi/L	93	75 - 113	
Carrier	%Yield	LCS Qualifier	LCS Limits							
Ba Carrier	79.9		30 - 110							

Lab Sample ID: LCSD 160-608036/3-A
Matrix: Water
Analysis Batch: 611284

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 608036

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-226	11.3	10.28		1.31	1.00	0.272	pCi/L	91	75 - 113	0.08	1
Carrier	%Yield	LCSD Qualifier	LCSD Limits								
Ba Carrier	79.6		30 - 110								

Lab Sample ID: MB 160-608041/1-A
Matrix: Water
Analysis Batch: 611046

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 608041

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.04075	U	0.118	0.118	1.00	0.286	pCi/L	04/19/23 10:49	05/11/23 17:33	1
Carrier	%Yield	MB Qualifier	Count Limits							
Ba Carrier	90.9		30 - 110							
								Prepared	Analyzed	Dil Fac
								04/19/23 10:49	05/11/23 17:33	1

Lab Sample ID: LCS 160-608041/2-A
Matrix: Water
Analysis Batch: 611046

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 608041

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	11.3	9.974		1.31	1.00	0.305	pCi/L	88	75 - 113
Carrier	%Yield	LCS Qualifier	LCS Limits						
Ba Carrier	91.2		30 - 110						

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-608040/1-A
Matrix: Water
Analysis Batch: 611046

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 608040

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2542	U	0.360	0.360	1.00	0.604	pCi/L	04/19/23 10:34	05/11/23 15:10	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

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

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	81.3		30 - 110	04/19/23 10:34	05/11/23 15:10	1
Y Carrier	87.1		30 - 110	04/19/23 10:34	05/11/23 15:10	1

Lab Sample ID: LCS 160-608040/2-A
 Matrix: Water
 Analysis Batch: 611046

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 608040

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	7.96	8.431		1.20	1.00	0.494	pCi/L	106	75 - 125

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	79.9		30 - 110
Y Carrier	92.3		30 - 110

Lab Sample ID: LCSD 160-608040/3-A
 Matrix: Water
 Analysis Batch: 611046

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 608040

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-228	7.96	7.779		1.12	1.00	0.501	pCi/L	98	75 - 125	0.28	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	79.6		30 - 110
Y Carrier	97.6		30 - 110

Lab Sample ID: MB 160-608055/1-A
 Matrix: Water
 Analysis Batch: 611046

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 608055

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1243	U	0.313	0.313	1.00	0.550	pCi/L	04/19/23 11:27	05/11/23 12:54	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		30 - 110	04/19/23 11:27	05/11/23 12:54	1
Y Carrier	83.4		30 - 110	04/19/23 11:27	05/11/23 12:54	1

Lab Sample ID: LCS 160-608055/2-A
 Matrix: Water
 Analysis Batch: 611046

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 608055

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	7.96	8.256		1.14	1.00	0.443	pCi/L	104	75 - 125

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	91.2		30 - 110
Y Carrier	87.9		30 - 110

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Metals

Prep Batch: 569066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183255-1	BAC-11-F-20230406-01	Total Recoverable	Water	3005A	
240-183255-2	BAC-09-F-20230406-01	Total Recoverable	Water	3005A	
240-183255-3	DUP-004-BAC-09-F-20230406-01	Total Recoverable	Water	3005A	
240-183255-4	BAC-17-F-20230406-01	Total Recoverable	Water	3005A	
240-183255-5	BAC-15-F-20230406-01	Total Recoverable	Water	3005A	
240-183255-6	EB-001-F-20230406-01	Total Recoverable	Water	3005A	
240-183255-7	BAC-13-F-20230407-01	Total Recoverable	Water	3005A	
240-183255-8	BAC-04-F-20230407-01	Total Recoverable	Water	3005A	
240-183255-9	BAC-05-F-20230407-01	Total Recoverable	Water	3005A	
240-183255-10	BAC-03-F-20230407-01	Total Recoverable	Water	3005A	
240-183255-11	MW-1-F-20230407-01	Total Recoverable	Water	3005A	
240-183255-12	MW-6-F-20230407-01	Total Recoverable	Water	3005A	
240-183255-13	EB-001-F-20230407-01	Total Recoverable	Water	3005A	
MB 240-569066/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-569066/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-569066/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 569067

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183255-1	BAC-11-F-20230406-01	Total/NA	Water	7470A	
240-183255-2	BAC-09-F-20230406-01	Total/NA	Water	7470A	
240-183255-3	DUP-004-BAC-09-F-20230406-01	Total/NA	Water	7470A	
240-183255-4	BAC-17-F-20230406-01	Total/NA	Water	7470A	
240-183255-5	BAC-15-F-20230406-01	Total/NA	Water	7470A	
240-183255-6	EB-001-F-20230406-01	Total/NA	Water	7470A	
240-183255-7	BAC-13-F-20230407-01	Total/NA	Water	7470A	
240-183255-8	BAC-04-F-20230407-01	Total/NA	Water	7470A	
240-183255-9	BAC-05-F-20230407-01	Total/NA	Water	7470A	
240-183255-10	BAC-03-F-20230407-01	Total/NA	Water	7470A	
240-183255-11	MW-1-F-20230407-01	Total/NA	Water	7470A	
240-183255-12	MW-6-F-20230407-01	Total/NA	Water	7470A	
240-183255-13	EB-001-F-20230407-01	Total/NA	Water	7470A	
MB 240-569067/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-569067/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 569319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183255-1	BAC-11-F-20230406-01	Total Recoverable	Water	6010D	569066
240-183255-2	BAC-09-F-20230406-01	Total Recoverable	Water	6010D	569066
240-183255-3	DUP-004-BAC-09-F-20230406-01	Total Recoverable	Water	6010D	569066
240-183255-4	BAC-17-F-20230406-01	Total Recoverable	Water	6010D	569066
240-183255-5	BAC-15-F-20230406-01	Total Recoverable	Water	6010D	569066
240-183255-6	EB-001-F-20230406-01	Total Recoverable	Water	6010D	569066
240-183255-7	BAC-13-F-20230407-01	Total Recoverable	Water	6010D	569066
240-183255-8	BAC-04-F-20230407-01	Total Recoverable	Water	6010D	569066
240-183255-9	BAC-05-F-20230407-01	Total Recoverable	Water	6010D	569066
240-183255-10	BAC-03-F-20230407-01	Total Recoverable	Water	6010D	569066
240-183255-11	MW-1-F-20230407-01	Total Recoverable	Water	6010D	569066
240-183255-12	MW-6-F-20230407-01	Total Recoverable	Water	6010D	569066
240-183255-13	EB-001-F-20230407-01	Total Recoverable	Water	6010D	569066
MB 240-569066/1-A	Method Blank	Total Recoverable	Water	6010D	569066

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Metals (Continued)

Analysis Batch: 569319 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-569066/2-A	Lab Control Sample	Total Recoverable	Water	6010D	569066

Analysis Batch: 569329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183255-1	BAC-11-F-20230406-01	Total Recoverable	Water	6020B	569066
240-183255-2	BAC-09-F-20230406-01	Total Recoverable	Water	6020B	569066
240-183255-3	DUP-004-BAC-09-F-20230406-01	Total Recoverable	Water	6020B	569066
240-183255-4	BAC-17-F-20230406-01	Total Recoverable	Water	6020B	569066
240-183255-5	BAC-15-F-20230406-01	Total Recoverable	Water	6020B	569066
240-183255-6	EB-001-F-20230406-01	Total Recoverable	Water	6020B	569066
240-183255-8	BAC-04-F-20230407-01	Total Recoverable	Water	6020B	569066
240-183255-9	BAC-05-F-20230407-01	Total Recoverable	Water	6020B	569066
240-183255-10	BAC-03-F-20230407-01	Total Recoverable	Water	6020B	569066
240-183255-11	MW-1-F-20230407-01	Total Recoverable	Water	6020B	569066
240-183255-12	MW-6-F-20230407-01	Total Recoverable	Water	6020B	569066
240-183255-13	EB-001-F-20230407-01	Total Recoverable	Water	6020B	569066
MB 240-569066/1-A	Method Blank	Total Recoverable	Water	6020B	569066
LCS 240-569066/3-A	Lab Control Sample	Total Recoverable	Water	6020B	569066

Analysis Batch: 569349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183255-1	BAC-11-F-20230406-01	Total/NA	Water	7470A	569067
240-183255-2	BAC-09-F-20230406-01	Total/NA	Water	7470A	569067
240-183255-3	DUP-004-BAC-09-F-20230406-01	Total/NA	Water	7470A	569067
240-183255-4	BAC-17-F-20230406-01	Total/NA	Water	7470A	569067
240-183255-5	BAC-15-F-20230406-01	Total/NA	Water	7470A	569067
240-183255-6	EB-001-F-20230406-01	Total/NA	Water	7470A	569067
240-183255-7	BAC-13-F-20230407-01	Total/NA	Water	7470A	569067
240-183255-8	BAC-04-F-20230407-01	Total/NA	Water	7470A	569067
240-183255-9	BAC-05-F-20230407-01	Total/NA	Water	7470A	569067
240-183255-10	BAC-03-F-20230407-01	Total/NA	Water	7470A	569067
240-183255-11	MW-1-F-20230407-01	Total/NA	Water	7470A	569067
240-183255-12	MW-6-F-20230407-01	Total/NA	Water	7470A	569067
240-183255-13	EB-001-F-20230407-01	Total/NA	Water	7470A	569067
MB 240-569067/1-A	Method Blank	Total/NA	Water	7470A	569067
LCS 240-569067/2-A	Lab Control Sample	Total/NA	Water	7470A	569067

Analysis Batch: 569539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183255-1	BAC-11-F-20230406-01	Total Recoverable	Water	6020B	569066
240-183255-2	BAC-09-F-20230406-01	Total Recoverable	Water	6020B	569066
240-183255-3	DUP-004-BAC-09-F-20230406-01	Total Recoverable	Water	6020B	569066
240-183255-5	BAC-15-F-20230406-01	Total Recoverable	Water	6020B	569066

Analysis Batch: 569715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183255-7	BAC-13-F-20230407-01	Total Recoverable	Water	6020B	569066

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

General Chemistry

Analysis Batch: 569230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183255-1	BAC-11-F-20230406-01	Total/NA	Water	SM 2540C	
240-183255-2	BAC-09-F-20230406-01	Total/NA	Water	SM 2540C	
240-183255-3	DUP-004-BAC-09-F-20230406-01	Total/NA	Water	SM 2540C	
240-183255-4	BAC-17-F-20230406-01	Total/NA	Water	SM 2540C	
240-183255-5	BAC-15-F-20230406-01	Total/NA	Water	SM 2540C	
240-183255-6	EB-001-F-20230406-01	Total/NA	Water	SM 2540C	
240-183255-7	BAC-13-F-20230407-01	Total/NA	Water	SM 2540C	
240-183255-8	BAC-04-F-20230407-01	Total/NA	Water	SM 2540C	
240-183255-9	BAC-05-F-20230407-01	Total/NA	Water	SM 2540C	
240-183255-10	BAC-03-F-20230407-01	Total/NA	Water	SM 2540C	
240-183255-11	MW-1-F-20230407-01	Total/NA	Water	SM 2540C	
240-183255-12	MW-6-F-20230407-01	Total/NA	Water	SM 2540C	
240-183255-13	EB-001-F-20230407-01	Total/NA	Water	SM 2540C	
MB 240-569230/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-569230/2	Lab Control Sample	Total/NA	Water	SM 2540C	
240-183255-1 DU	BAC-11-F-20230406-01	Total/NA	Water	SM 2540C	
240-183255-8 DU	BAC-04-F-20230407-01	Total/NA	Water	SM 2540C	

Analysis Batch: 569862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183255-3	DUP-004-BAC-09-F-20230406-01	Total/NA	Water	2320B-1997	
240-183255-7	BAC-13-F-20230407-01	Total/NA	Water	2320B-1997	
240-183255-8	BAC-04-F-20230407-01	Total/NA	Water	2320B-1997	
240-183255-9	BAC-05-F-20230407-01	Total/NA	Water	2320B-1997	
240-183255-10	BAC-03-F-20230407-01	Total/NA	Water	2320B-1997	
240-183255-11	MW-1-F-20230407-01	Total/NA	Water	2320B-1997	
240-183255-12	MW-6-F-20230407-01	Total/NA	Water	2320B-1997	
240-183255-13	EB-001-F-20230407-01	Total/NA	Water	2320B-1997	
MB 240-569862/25	Method Blank	Total/NA	Water	2320B-1997	
MB 240-569862/3	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-569862/2	Lab Control Sample	Total/NA	Water	2320B-1997	
LCS 240-569862/24	Lab Control Sample	Total/NA	Water	2320B-1997	
240-183255-3 DU	DUP-004-BAC-09-F-20230406-01	Total/NA	Water	2320B-1997	
240-183255-12 DU	MW-6-F-20230407-01	Total/NA	Water	2320B-1997	

Analysis Batch: 570018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183255-1	BAC-11-F-20230406-01	Total/NA	Water	2320B-1997	
240-183255-2	BAC-09-F-20230406-01	Total/NA	Water	2320B-1997	
240-183255-4	BAC-17-F-20230406-01	Total/NA	Water	2320B-1997	
240-183255-5	BAC-15-F-20230406-01	Total/NA	Water	2320B-1997	
240-183255-6	EB-001-F-20230406-01	Total/NA	Water	2320B-1997	
MB 240-570018/4	Method Blank	Total/NA	Water	2320B-1997	
240-183255-4 DU	BAC-17-F-20230406-01	Total/NA	Water	2320B-1997	

Analysis Batch: 571768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183255-1	BAC-11-F-20230406-01	Total/NA	Water	300.0	
240-183255-1	BAC-11-F-20230406-01	Total/NA	Water	300.0	
240-183255-2	BAC-09-F-20230406-01	Total/NA	Water	300.0	
240-183255-2	BAC-09-F-20230406-01	Total/NA	Water	300.0	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-183255-1

General Chemistry (Continued)

Analysis Batch: 571768 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183255-3	DUP-004-BAC-09-F-20230406-01	Total/NA	Water	300.0	
240-183255-3	DUP-004-BAC-09-F-20230406-01	Total/NA	Water	300.0	
240-183255-4	BAC-17-F-20230406-01	Total/NA	Water	300.0	
240-183255-5	BAC-15-F-20230406-01	Total/NA	Water	300.0	
240-183255-6	EB-001-F-20230406-01	Total/NA	Water	300.0	
240-183255-7	BAC-13-F-20230407-01	Total/NA	Water	300.0	
240-183255-7	BAC-13-F-20230407-01	Total/NA	Water	300.0	
240-183255-8	BAC-04-F-20230407-01	Total/NA	Water	300.0	
240-183255-9	BAC-05-F-20230407-01	Total/NA	Water	300.0	
240-183255-10	BAC-03-F-20230407-01	Total/NA	Water	300.0	
MB 240-571768/3	Method Blank	Total/NA	Water	300.0	
LCS 240-571768/4	Lab Control Sample	Total/NA	Water	300.0	
240-183255-5 MS	BAC-15-F-20230406-01	Total/NA	Water	300.0	
240-183255-5 MSD	BAC-15-F-20230406-01	Total/NA	Water	300.0	

Analysis Batch: 571784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183255-11	MW-1-F-20230407-01	Total/NA	Water	300.0	
240-183255-12	MW-6-F-20230407-01	Total/NA	Water	300.0	
240-183255-13	EB-001-F-20230407-01	Total/NA	Water	300.0	
MB 240-571784/3	Method Blank	Total/NA	Water	300.0	
LCS 240-571784/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 571978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183255-4	BAC-17-F-20230406-01	Total/NA	Water	300.0	
240-183255-8	BAC-04-F-20230407-01	Total/NA	Water	300.0	
240-183255-9	BAC-05-F-20230407-01	Total/NA	Water	300.0	
MB 240-571978/3	Method Blank	Total/NA	Water	300.0	
LCS 240-571978/4	Lab Control Sample	Total/NA	Water	300.0	

Rad

Prep Batch: 608036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183255-3	DUP-004-BAC-09-F-20230406-01	Total/NA	Water	PrecSep-21	
240-183255-4	BAC-17-F-20230406-01	Total/NA	Water	PrecSep-21	
240-183255-5	BAC-15-F-20230406-01	Total/NA	Water	PrecSep-21	
240-183255-6	EB-001-F-20230406-01	Total/NA	Water	PrecSep-21	
240-183255-7	BAC-13-F-20230407-01	Total/NA	Water	PrecSep-21	
240-183255-8	BAC-04-F-20230407-01	Total/NA	Water	PrecSep-21	
240-183255-9	BAC-05-F-20230407-01	Total/NA	Water	PrecSep-21	
240-183255-10	BAC-03-F-20230407-01	Total/NA	Water	PrecSep-21	
240-183255-11	MW-1-F-20230407-01	Total/NA	Water	PrecSep-21	
240-183255-12	MW-6-F-20230407-01	Total/NA	Water	PrecSep-21	
240-183255-13	EB-001-F-20230407-01	Total/NA	Water	PrecSep-21	
MB 160-608036/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-608036/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-608036/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Eurofins Cleveland

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Rad

Prep Batch: 608040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183255-3	DUP-004-BAC-09-F-20230406-01	Total/NA	Water	PrecSep_0	
240-183255-4	BAC-17-F-20230406-01	Total/NA	Water	PrecSep_0	
240-183255-5	BAC-15-F-20230406-01	Total/NA	Water	PrecSep_0	
240-183255-6	EB-001-F-20230406-01	Total/NA	Water	PrecSep_0	
240-183255-7	BAC-13-F-20230407-01	Total/NA	Water	PrecSep_0	
240-183255-8	BAC-04-F-20230407-01	Total/NA	Water	PrecSep_0	
240-183255-9	BAC-05-F-20230407-01	Total/NA	Water	PrecSep_0	
240-183255-10	BAC-03-F-20230407-01	Total/NA	Water	PrecSep_0	
240-183255-11	MW-1-F-20230407-01	Total/NA	Water	PrecSep_0	
240-183255-12	MW-6-F-20230407-01	Total/NA	Water	PrecSep_0	
240-183255-13	EB-001-F-20230407-01	Total/NA	Water	PrecSep_0	
MB 160-608040/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-608040/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-608040/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Prep Batch: 608041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183255-1	BAC-11-F-20230406-01	Total/NA	Water	PrecSep-21	
240-183255-2	BAC-09-F-20230406-01	Total/NA	Water	PrecSep-21	
MB 160-608041/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-608041/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 608055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183255-1	BAC-11-F-20230406-01	Total/NA	Water	PrecSep_0	
240-183255-2	BAC-09-F-20230406-01	Total/NA	Water	PrecSep_0	
MB 160-608055/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-608055/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: BAC-11-F-20230406-01

Lab Sample ID: 240-183255-1

Date Collected: 04/06/23 10:13

Matrix: Water

Date Received: 04/11/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6010D		1	569319	KLC	EET CLE	04/13/23 14:03
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		10	569329	RKT	EET CLE	04/13/23 20:02
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		10	569539	RKT	EET CLE	04/14/23 19:36
Total/NA	Prep	7470A			569067	MRL	EET CLE	04/12/23 14:00
Total/NA	Analysis	7470A		1	569349	DSH	EET CLE	04/13/23 20:38
Total/NA	Analysis	2320B-1997		1	570018	JWW	EET CLE	04/18/23 20:43
Total/NA	Analysis	300.0		50	571768	JMB	EET CLE	05/02/23 20:46
Total/NA	Analysis	300.0		500	571768	JMB	EET CLE	05/02/23 21:08
Total/NA	Analysis	SM 2540C		1	569230	GH	EET CLE	04/13/23 10:05
Total/NA	Prep	PrecSep-21			608041	KAC	EET SL	04/19/23 10:49
Total/NA	Analysis	9315		1	611047	FLC	EET SL	05/11/23 19:23
Total/NA	Prep	PrecSep_0			608055	KAC	EET SL	04/19/23 11:27
Total/NA	Analysis	9320		1	611049	FLC	EET SL	05/11/23 12:59
Total/NA	Analysis	Ra226_Ra228		1	611330	EMH	EET SL	05/12/23 16:48

Client Sample ID: BAC-09-F-20230406-01

Lab Sample ID: 240-183255-2

Date Collected: 04/06/23 12:08

Matrix: Water

Date Received: 04/11/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6010D		1	569319	KLC	EET CLE	04/13/23 14:16
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		2	569329	RKT	EET CLE	04/13/23 20:05
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		2	569539	RKT	EET CLE	04/14/23 19:39
Total/NA	Prep	7470A			569067	MRL	EET CLE	04/12/23 14:00
Total/NA	Analysis	7470A		1	569349	DSH	EET CLE	04/13/23 20:40
Total/NA	Analysis	2320B-1997		1	570018	JWW	EET CLE	04/18/23 20:47
Total/NA	Analysis	300.0		5	571768	JMB	EET CLE	05/02/23 21:29
Total/NA	Analysis	300.0		50	571768	JMB	EET CLE	05/02/23 21:51
Total/NA	Analysis	SM 2540C		1	569230	GH	EET CLE	04/13/23 10:05
Total/NA	Prep	PrecSep-21			608041	KAC	EET SL	04/19/23 10:49
Total/NA	Analysis	9315		1	611047	FLC	EET SL	05/11/23 19:24
Total/NA	Prep	PrecSep_0			608055	KAC	EET SL	04/19/23 11:27
Total/NA	Analysis	9320		1	611047	FLC	EET SL	05/11/23 13:01
Total/NA	Analysis	Ra226_Ra228		1	611330	EMH	EET SL	05/12/23 16:48

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: DUP-004-BAC-09-F-20230406-01

Lab Sample ID: 240-183255-3

Date Collected: 04/06/23 12:08

Matrix: Water

Date Received: 04/11/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6010D		1	569319	KLC	EET CLE	04/13/23 14:21
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		2	569329	RKT	EET CLE	04/13/23 20:08
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		2	569539	RKT	EET CLE	04/14/23 19:42
Total/NA	Prep	7470A			569067	MRL	EET CLE	04/12/23 14:00
Total/NA	Analysis	7470A		1	569349	DSH	EET CLE	04/13/23 20:42
Total/NA	Analysis	2320B-1997		1	569862	JWW	EET CLE	04/18/23 17:39
Total/NA	Analysis	300.0		5	571768	JMB	EET CLE	05/02/23 22:13
Total/NA	Analysis	300.0		50	571768	JMB	EET CLE	05/02/23 22:34
Total/NA	Analysis	SM 2540C		1	569230	GH	EET CLE	04/13/23 10:05
Total/NA	Prep	PrecSep-21			608036	KAC	EET SL	04/19/23 09:57
Total/NA	Analysis	9315		1	611284	FLC	EET SL	05/12/23 06:23
Total/NA	Prep	PrecSep_0			608040	KAC	EET SL	04/19/23 10:34
Total/NA	Analysis	9320		1	611046	FLC	EET SL	05/11/23 15:10
Total/NA	Analysis	Ra226_Ra228		1	611319	EMH	EET SL	05/12/23 13:59

Client Sample ID: BAC-17-F-20230406-01

Lab Sample ID: 240-183255-4

Date Collected: 04/06/23 13:57

Matrix: Water

Date Received: 04/11/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6010D		1	569319	KLC	EET CLE	04/13/23 14:25
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569329	RKT	EET CLE	04/13/23 20:11
Total/NA	Prep	7470A			569067	MRL	EET CLE	04/12/23 14:00
Total/NA	Analysis	7470A		1	569349	DSH	EET CLE	04/13/23 20:45
Total/NA	Analysis	2320B-1997		1	570018	JWW	EET CLE	04/18/23 20:58
Total/NA	Analysis	300.0		1	571768	JMB	EET CLE	05/02/23 22:56
Total/NA	Analysis	300.0		2	571978	JMB	EET CLE	05/03/23 20:59
Total/NA	Analysis	SM 2540C		1	569230	GH	EET CLE	04/13/23 10:05
Total/NA	Prep	PrecSep-21			608036	KAC	EET SL	04/19/23 09:57
Total/NA	Analysis	9315		1	611284	FLC	EET SL	05/12/23 06:24
Total/NA	Prep	PrecSep_0			608040	KAC	EET SL	04/19/23 10:34
Total/NA	Analysis	9320		1	611046	FLC	EET SL	05/11/23 15:10
Total/NA	Analysis	Ra226_Ra228		1	611319	EMH	EET SL	05/12/23 13:59

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: BAC-15-F-20230406-01

Lab Sample ID: 240-183255-5

Date Collected: 04/06/23 15:08

Matrix: Water

Date Received: 04/11/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6010D		1	569319	KLC	EET CLE	04/13/23 14:29
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569329	RKT	EET CLE	04/13/23 20:14
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569539	RKT	EET CLE	04/14/23 19:45
Total/NA	Prep	7470A			569067	MRL	EET CLE	04/12/23 14:00
Total/NA	Analysis	7470A		1	569349	DSH	EET CLE	04/13/23 20:47
Total/NA	Analysis	2320B-1997		1	570018	JWW	EET CLE	04/18/23 21:05
Total/NA	Analysis	300.0		1	571768	JMB	EET CLE	05/02/23 23:18
Total/NA	Analysis	SM 2540C		1	569230	GH	EET CLE	04/13/23 10:05
Total/NA	Prep	PrecSep-21			608036	KAC	EET SL	04/19/23 09:57
Total/NA	Analysis	9315		1	611284	FLC	EET SL	05/12/23 06:24
Total/NA	Prep	PrecSep_0			608040	KAC	EET SL	04/19/23 10:34
Total/NA	Analysis	9320		1	611046	FLC	EET SL	05/11/23 15:11
Total/NA	Analysis	Ra226_Ra228		1	611319	EMH	EET SL	05/12/23 13:59

Client Sample ID: EB-001-F-20230406-01

Lab Sample ID: 240-183255-6

Date Collected: 04/06/23 15:30

Matrix: Water

Date Received: 04/11/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6010D		1	569319	KLC	EET CLE	04/13/23 14:34
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569329	RKT	EET CLE	04/13/23 20:22
Total/NA	Prep	7470A			569067	MRL	EET CLE	04/12/23 14:00
Total/NA	Analysis	7470A		1	569349	DSH	EET CLE	04/13/23 20:49
Total/NA	Analysis	2320B-1997		1	570018	JWW	EET CLE	04/18/23 21:09
Total/NA	Analysis	300.0		1	571768	JMB	EET CLE	05/03/23 01:06
Total/NA	Analysis	SM 2540C		1	569230	GH	EET CLE	04/13/23 10:05
Total/NA	Prep	PrecSep-21			608036	KAC	EET SL	04/19/23 09:57
Total/NA	Analysis	9315		1	611284	FLC	EET SL	05/12/23 06:21
Total/NA	Prep	PrecSep_0			608040	KAC	EET SL	04/19/23 10:34
Total/NA	Analysis	9320		1	611046	FLC	EET SL	05/11/23 15:11
Total/NA	Analysis	Ra226_Ra228		1	611319	EMH	EET SL	05/12/23 13:59

Client Sample ID: BAC-13-F-20230407-01

Lab Sample ID: 240-183255-7

Date Collected: 04/07/23 09:42

Matrix: Water

Date Received: 04/11/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6010D		1	569319	KLC	EET CLE	04/13/23 14:38

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: BAC-13-F-20230407-01

Lab Sample ID: 240-183255-7

Date Collected: 04/07/23 09:42

Matrix: Water

Date Received: 04/11/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		2	569715	DSH	EET CLE	04/17/23 17:03
Total/NA	Prep	7470A			569067	MRL	EET CLE	04/12/23 14:00
Total/NA	Analysis	7470A		1	569349	DSH	EET CLE	04/13/23 20:51
Total/NA	Analysis	2320B-1997		1	569862	JWW	EET CLE	04/18/23 19:11
Total/NA	Analysis	300.0		5	571768	JMB	EET CLE	05/03/23 01:28
Total/NA	Analysis	300.0		25	571768	JMB	EET CLE	05/03/23 01:50
Total/NA	Analysis	SM 2540C		1	569230	GH	EET CLE	04/13/23 10:05
Total/NA	Prep	PrecSep-21			608036	KAC	EET SL	04/19/23 09:57
Total/NA	Analysis	9315		1	611284	FLC	EET SL	05/12/23 06:21
Total/NA	Prep	PrecSep_0			608040	KAC	EET SL	04/19/23 10:34
Total/NA	Analysis	9320		1	611046	FLC	EET SL	05/11/23 15:11
Total/NA	Analysis	Ra226_Ra228		1	611319	EMH	EET SL	05/12/23 13:59

Client Sample ID: BAC-04-F-20230407-01

Lab Sample ID: 240-183255-8

Date Collected: 04/07/23 10:35

Matrix: Water

Date Received: 04/11/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6010D		1	569319	KLC	EET CLE	04/13/23 14:42
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569329	RKT	EET CLE	04/13/23 20:28
Total/NA	Prep	7470A			569067	MRL	EET CLE	04/12/23 14:00
Total/NA	Analysis	7470A		1	569349	DSH	EET CLE	04/13/23 20:53
Total/NA	Analysis	2320B-1997		1	569862	JWW	EET CLE	04/18/23 19:14
Total/NA	Analysis	300.0		1	571768	JMB	EET CLE	05/03/23 02:11
Total/NA	Analysis	300.0		2	571978	JMB	EET CLE	05/03/23 22:04
Total/NA	Analysis	SM 2540C		1	569230	GH	EET CLE	04/13/23 10:05
Total/NA	Prep	PrecSep-21			608036	KAC	EET SL	04/19/23 09:57
Total/NA	Analysis	9315		1	611284	FLC	EET SL	05/12/23 06:21
Total/NA	Prep	PrecSep_0			608040	KAC	EET SL	04/19/23 10:34
Total/NA	Analysis	9320		1	611046	FLC	EET SL	05/11/23 15:12
Total/NA	Analysis	Ra226_Ra228		1	611319	EMH	EET SL	05/12/23 13:59

Client Sample ID: BAC-05-F-20230407-01

Lab Sample ID: 240-183255-9

Date Collected: 04/07/23 11:41

Matrix: Water

Date Received: 04/11/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6010D		1	569319	KLC	EET CLE	04/13/23 14:47
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569329	RKT	EET CLE	04/13/23 20:31

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: BAC-05-F-20230407-01

Lab Sample ID: 240-183255-9

Date Collected: 04/07/23 11:41

Matrix: Water

Date Received: 04/11/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			569067	MRL	EET CLE	04/12/23 14:00
Total/NA	Analysis	7470A		1	569349	DSH	EET CLE	04/13/23 20:55
Total/NA	Analysis	2320B-1997		1	569862	JWW	EET CLE	04/18/23 19:20
Total/NA	Analysis	300.0		1	571768	JMB	EET CLE	05/03/23 02:33
Total/NA	Analysis	300.0		2	571978	JMB	EET CLE	05/03/23 22:26
Total/NA	Analysis	SM 2540C		1	569230	GH	EET CLE	04/13/23 10:05
Total/NA	Prep	PrecSep-21			608036	KAC	EET SL	04/19/23 09:57
Total/NA	Analysis	9315		1	611284	FLC	EET SL	05/12/23 06:22
Total/NA	Prep	PrecSep_0			608040	KAC	EET SL	04/19/23 10:34
Total/NA	Analysis	9320		1	611046	FLC	EET SL	05/11/23 15:12
Total/NA	Analysis	Ra226_Ra228		1	611319	EMH	EET SL	05/12/23 13:59

Client Sample ID: BAC-03-F-20230407-01

Lab Sample ID: 240-183255-10

Date Collected: 04/07/23 13:00

Matrix: Water

Date Received: 04/11/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6010D		1	569319	KLC	EET CLE	04/13/23 14:51
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569329	RKT	EET CLE	04/13/23 20:34
Total/NA	Prep	7470A			569067	MRL	EET CLE	04/12/23 14:00
Total/NA	Analysis	7470A		1	569349	DSH	EET CLE	04/13/23 20:57
Total/NA	Analysis	2320B-1997		1	569862	JWW	EET CLE	04/18/23 19:24
Total/NA	Analysis	300.0		1	571768	JMB	EET CLE	05/03/23 02:54
Total/NA	Analysis	SM 2540C		1	569230	GH	EET CLE	04/13/23 10:05
Total/NA	Prep	PrecSep-21			608036	KAC	EET SL	04/19/23 09:57
Total/NA	Analysis	9315		1	611284	FLC	EET SL	05/12/23 06:22
Total/NA	Prep	PrecSep_0			608040	KAC	EET SL	04/19/23 10:34
Total/NA	Analysis	9320		1	611046	FLC	EET SL	05/11/23 15:12
Total/NA	Analysis	Ra226_Ra228		1	611319	EMH	EET SL	05/12/23 13:59

Client Sample ID: MW-1-F-20230407-01

Lab Sample ID: 240-183255-11

Date Collected: 04/07/23 13:57

Matrix: Water

Date Received: 04/11/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6010D		1	569319	KLC	EET CLE	04/13/23 14:55
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569329	RKT	EET CLE	04/13/23 20:37
Total/NA	Prep	7470A			569067	MRL	EET CLE	04/12/23 14:00
Total/NA	Analysis	7470A		1	569349	DSH	EET CLE	04/13/23 21:04
Total/NA	Analysis	2320B-1997		1	569862	JWW	EET CLE	04/18/23 19:29

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: MW-1-F-20230407-01
Date Collected: 04/07/23 13:57
Date Received: 04/11/23 08:00

Lab Sample ID: 240-183255-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	571784	JMB	EET CLE	05/03/23 11:35
Total/NA	Analysis	SM 2540C		1	569230	GH	EET CLE	04/13/23 10:05
Total/NA	Prep	PrecSep-21			608036	KAC	EET SL	04/19/23 09:57
Total/NA	Analysis	9315		1	611284	FLC	EET SL	05/12/23 06:22
Total/NA	Prep	PrecSep_0			608040	KAC	EET SL	04/19/23 10:34
Total/NA	Analysis	9320		1	611049	FLC	EET SL	05/11/23 15:14
Total/NA	Analysis	Ra226_Ra228		1	611319	EMH	EET SL	05/12/23 13:59

Client Sample ID: MW-6-F-20230407-01
Date Collected: 04/07/23 14:35
Date Received: 04/11/23 08:00

Lab Sample ID: 240-183255-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6010D		1	569319	KLC	EET CLE	04/13/23 15:08
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569329	RKT	EET CLE	04/13/23 20:40
Total/NA	Prep	7470A			569067	MRL	EET CLE	04/12/23 14:00
Total/NA	Analysis	7470A		1	569349	DSH	EET CLE	04/13/23 21:06
Total/NA	Analysis	2320B-1997		1	569862	JWW	EET CLE	04/18/23 19:33
Total/NA	Analysis	300.0		1	571784	JMB	EET CLE	05/03/23 12:18
Total/NA	Analysis	SM 2540C		1	569230	GH	EET CLE	04/13/23 10:05
Total/NA	Prep	PrecSep-21			608036	KAC	EET SL	04/19/23 09:57
Total/NA	Analysis	9315		1	611284	FLC	EET SL	05/12/23 10:22
Total/NA	Prep	PrecSep_0			608040	KAC	EET SL	04/19/23 10:34
Total/NA	Analysis	9320		1	611049	FLC	EET SL	05/11/23 15:14
Total/NA	Analysis	Ra226_Ra228		1	611319	EMH	EET SL	05/12/23 13:59

Client Sample ID: EB-001-F-20230407-01
Date Collected: 04/07/23 15:00
Date Received: 04/11/23 08:00

Lab Sample ID: 240-183255-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6010D		1	569319	KLC	EET CLE	04/13/23 15:12
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569329	RKT	EET CLE	04/13/23 20:43
Total/NA	Prep	7470A			569067	MRL	EET CLE	04/12/23 14:00
Total/NA	Analysis	7470A		1	569349	DSH	EET CLE	04/13/23 21:08
Total/NA	Analysis	2320B-1997		1	569862	JWW	EET CLE	04/18/23 19:42
Total/NA	Analysis	300.0		1	571784	JMB	EET CLE	05/03/23 13:23
Total/NA	Analysis	SM 2540C		1	569230	GH	EET CLE	04/13/23 10:05
Total/NA	Prep	PrecSep-21			608036	KAC	EET SL	04/19/23 09:57
Total/NA	Analysis	9315		1	611284	FLC	EET SL	05/12/23 10:22

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-183255-1

Client Sample ID: EB-001-F-20230407-01

Lab Sample ID: 240-183255-13

Date Collected: 04/07/23 15:00

Matrix: Water

Date Received: 04/11/23 08:00

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total/NA	Prep	PrecSep_0			608040	KAC	EET SL	04/19/23 10:34
Total/NA	Analysis	9320		1	611049	FLC	EET SL	05/11/23 15:14
Total/NA	Analysis	Ra226_Ra228		1	611319	EMH	EET SL	05/12/23 13:59

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
 Project/Site: Federal CCR Wells

Job ID: 240-183255-1

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
California	State	2927	02-27-24
Connecticut	State	PH-0590	06-29-23
Florida	NELAP	E87225	05-24-23
Georgia	State	4062	02-28-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	05-31-23
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	05-24-23
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	05-07-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-23
Florida	NELAP	E87689	06-30-23
HI - RadChem Recognition	State	n/a	06-30-23
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana (All)	NELAP	04080	06-30-23
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-23
MI - RadChem Recognition	State	9005	06-30-23
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-23
New Jersey	NELAP	MO002	06-30-23
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-23
North Dakota	State	R-207	06-30-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-183255-1

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
Oklahoma	NELAP	9997	08-31-23
Oregon	NELAP	4157	09-01-23
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23
Texas	NELAP	T104704193	07-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00028	05-17-23
Utah	NELAP	MO000542021-14	07-31-23
Virginia	NELAP	10310	06-14-23
Washington	State	C592	08-30-23
West Virginia DEP	State	381	10-31-23

Chain of Custody, Record

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Client Information		Lab PM:		Carrier Tracking No(s)		COC No:	
Client Contact: Taylor Huffman		Cisneros, Roxanne		240-93018-34502		Page: Lot 1 of 2	
Company: Lightstone Generation Gavin Power LLC		E-Mail: roxanne.cisneros@eurofins.com		State of Origin:		Job #:	
Address: 7397 OH-7		City: Cheshire		Due Date Requested:		Analysis Requested	
State, Zip: OH, 45620		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		TAT Requested (days):		Preservation Codes:	
Phone: 740-925-3171(Tel)		PO #: 29355505		Field Filtered Sample (Yes or No)		A - HCL 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 X - EDTA Y - EDA Z - other (specify)	
Email: taylor.huffman@lightstonegen.com		WO #: 24019633		Perform MS/MSD (Yes or No)		Other:	
Project Name: Federal - CCR Wells		Project #: 24019633		60108_7470_6020(See Metals List)		Special Instructions/Note:	
Site: Ohio		SSOW#:		9315_Ra226_9320_Ra228		Total Number of containers	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
BAC-11-F-20230406-01		4-6-23		1013		W	
BAC-09-F-20230406-01		4-6-23		1208		W	
DUP-004-BAC-09-F-20230406-01		4-6-23		1208		W	
BAC-17-F-20230406-01		4-6-23		1357		W	
BAC-15-F-20230406-01		4-6-23		1508		W	
EB-001-F-20230406-01		4-6-23		1530		W	
BAC-13-F-20230407-01		4-7-23		0942		W	
BAC-04-F-20230407-01		4-7-23		1035		W	
BAC-05-F-20230407-01		4-7-23		1141		W	
BAC-03-F-20230407-01		4-7-23		1300		W	
MW-1-F-20230407-01		4-7-23		1357		W	
Possible Hazard Identification		Sample Date		Sample Time		Sample Type	
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Date:		Date:		Date:	
Deliverable Requested: I, II, III, IV, Other (specify)		Date:		Date:		Date:	
Empty Kit Relinquished by:		Date:		Date:		Date:	
Relinquished by: <i>Taylor Huffman</i>		Date: 4-10-23		Date: 10920		Date: 4-10-23	
Relinquished by: <i>Taylor Huffman</i>		Date: 4-10-23		Date: 1700		Date: 4-11-23	
Relinquished by: <i>Taylor Huffman</i>		Date: 4-10-23		Date: 1700		Date: 4-11-23	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Company: EFA	
Special Instructions/OC Requirements:		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Special Instructions/OC Requirements:		Company: EFA	
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months		Method of Shipment:		Date/Time: 4-10-23 1040		Company: EFA	
Date/Time: 4-10-23 1040		Date/Time: 4-11-23 800		Date/Time: 4-11-23 800		Company: EFA	

Chain of Custody Record

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Client Information			Lab PM: Cisneros, Roxanne			Carrier Tracking No(s): 240-93018-34502		
Client Contact: Taylor Huffman			E-Mail: roxanne.cisneros@eurofins.com			State of Origin:		
Company: Lightsone Generation Gavin Power LLC			PWSID:			Job #:		
Address: 7397 OH-7			City: Cheshire			State: OH, 45620		
Phone: 740-925-3171(Tel)			PO #: 2935505			Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Email: taylor.huffman@lightsonegen.com			WO #:			TAT Requested (days):		
Project Name: Federal - CCR Wells			Project #: 24019633			Due Date Requested:		
Site: Ohio			SSOW#:			Date Requested:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Solid, Other)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 7470, 6020(See Metals List)	2540C_Calc'd, 300.0_28D(Chloride, Fluoride, Sulfate)	9315_Ra226, 9320_Ra228	2320B(Carbonate Alkalinity/Bi-Carbonate Alkalinity)	Analysis Requested	Carrier Tracking No(s)	Lab No	Lab Name	Lab Address	
MU-G-F-20230407-01	4-7-23	1435	G	W	N	N	1	1	1	1						
EB-001-F-20230407-01	4-7-23	1500	G	W	N	N	1	1	1	1						

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Special Instructions/QC Requirements:

Preservation Codes:
 A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Arsenic, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, Other: _____

Preservation Codes:
 M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2SO4, S - H2SO4, T - TSP Dodecahydral, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify) _____

Barberton Facility

Client Light Stone Site Name _____ Cooler unpacked by: Nancy Boyle

Cooler Received on 4-11-23 Opened on 4-11-23

FedEx: 1st Grd Exp UPS FAS Clipper 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 # 22 (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 leach 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 NA
 -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# HC203864
 14. Were VOAs on the COC? Yes No NA
 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 NA
 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: _____

Temperature readings:

Client Sample ID	Lab ID	Container Type	Container		Preservative	
			pH	Temp	Added (mls)	Lot #
BAC-11-F-20230406-01	240-183255-A-1	Plastic 250ml - unpreserved				
BAC-11-F-20230406-01	240-183255-B-1	Plastic 500ml - unpreserved				
BAC-11-F-20230406-01	240-183255-C-1	Plastic 500ml - with Nitric Acid	<2			
BAC-11-F-20230406-01	240-183255-D-1	Plastic 1 liter - Nitric Acid	<2			
BAC-11-F-20230406-01	240-183255-E-1	Plastic 1 liter - Nitric Acid	<2			
BAC-09-F-20230406-01	240-183255-A-2	Plastic 250ml - unpreserved				
BAC-09-F-20230406-01	240-183255-B-2	Plastic 500ml - unpreserved				
BAC-09-F-20230406-01	240-183255-C-2	Plastic 500ml - with Nitric Acid	<2			
BAC-09-F-20230406-01	240-183255-D-2	Plastic 1 liter - Nitric Acid	<2			
BAC-09-F-20230406-01	240-183255-E-2	Plastic 1 liter - Nitric Acid	<2			
DUP-004-BAC-09-F-20230406-01	240-183255-A-3	Plastic 250ml - unpreserved				
DUP-004-BAC-09-F-20230406-01	240-183255-B-3	Plastic 500ml - unpreserved				
DUP-004-BAC-09-F-20230406-01	240-183255-C-3	Plastic 500ml - with Nitric Acid	<2			
DUP-004-BAC-09-F-20230406-01	240-183255-D-3	Plastic 1 liter - Nitric Acid	<2			
DUP-004-BAC-09-F-20230406-01	240-183255-E-3	Plastic 1 liter - Nitric Acid	<2			
BAC-17-F-20230406-01	240-183255-A-4	Plastic 250ml - unpreserved				
BAC-17-F-20230406-01	240-183255-B-4	Plastic 500ml - unpreserved				
BAC-17-F-20230406-01	240-183255-C-4	Plastic 500ml - with Nitric Acid	<2			
BAC-17-F-20230406-01	240-183255-D-4	Plastic 1 liter - Nitric Acid	<2			
BAC-17-F-20230406-01	240-183255-E-4	Plastic 1 liter - Nitric Acid	<2			
BAC-15-F-20230406-01	240-183255-A-5	Plastic 250ml - unpreserved				
BAC-15-F-20230406-01	240-183255-B-5	Plastic 500ml - unpreserved				
BAC-15-F-20230406-01	240-183255-C-5	Plastic 500ml - with Nitric Acid	<2			
BAC-15-F-20230406-01	240-183255-D-5	Plastic 1 liter - Nitric Acid	<2			
BAC-15-F-20230406-01	240-183255-E-5	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-20230406-01	240-183255-A-6	Plastic 250ml - unpreserved				
EB-001-F-20230406-01	240-183255-B-6	Plastic 500ml - unpreserved				
EB-001-F-20230406-01	240-183255-C-6	Plastic 500ml - with Nitric Acid	<2			
EB-001-F-20230406-01	240-183255-D-6	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-20230406-01	240-183255-E-6	Plastic 1 liter - Nitric Acid	<2			
BAC-13-F-20230407-01	240-183255-A-7	Plastic 250ml - unpreserved				
BAC-13-F-20230407-01	240-183255-B-7	Plastic 500ml - unpreserved				

Client Sample ID	Lab ID	Container Type	Container		Preservative	
			pH	Temp	Added (mls)	Lot #
BAC-13-F-20230407-01	240-183255-C-7	Plastic 500ml - with Nitric Acid	<2			
BAC-13-F-20230407-01	240-183255-D-7	Plastic 1 liter - Nitric Acid	<2			
BAC-13-F-20230407-01	240-183255-E-7	Plastic 1 liter - Nitric Acid	<2			
BAC-04-F-20230407-01	240-183255-A-8	Plastic 250ml - unpreserved				
BAC-04-F-20230407-01	240-183255-B-8	Plastic 500ml - unpreserved				
BAC-04-F-20230407-01	240-183255-C-8	Plastic 500ml - with Nitric Acid	<2			
BAC-04-F-20230407-01	240-183255-D-8	Plastic 1 liter - Nitric Acid	<2			
BAC-04-F-20230407-01	240-183255-E-8	Plastic 1 liter - Nitric Acid	<2			
BAC-05-F-20230407-01	240-183255-A-9	Plastic 250ml - unpreserved				
BAC-05-F-20230407-01	240-183255-B-9	Plastic 500ml - unpreserved				
BAC-05-F-20230407-01	240-183255-C-9	Plastic 500ml - with Nitric Acid	<2			
BAC-05-F-20230407-01	240-183255-D-9	Plastic 1 liter - Nitric Acid	<2			
BAC-05-F-20230407-01	240-183255-E-9	Plastic 1 liter - Nitric Acid	<2			
BAC-03-F-20230407-01	240-183255-A-10	Plastic 250ml - unpreserved				
BAC-03-F-20230407-01	240-183255-B-10	Plastic 500ml - unpreserved				
BAC-03-F-20230407-01	240-183255-C-10	Plastic 500ml - with Nitric Acid	<2			
BAC-03-F-20230407-01	240-183255-D-10	Plastic 1 liter - Nitric Acid	<2			
BAC-03-F-20230407-01	240-183255-E-10	Plastic 1 liter - Nitric Acid	<2			
MW-1-F-20230407-01	240-183255-A-11	Plastic 250ml - unpreserved				
MW-1-F-20230407-01	240-183255-B-11	Plastic 500ml - unpreserved				
MW-1-F-20230407-01	240-183255-C-11	Plastic 500ml - with Nitric Acid	<2			
MW-1-F-20230407-01	240-183255-D-11	Plastic 1 liter - Nitric Acid	<2			
MW-1-F-20230407-01	240-183255-E-11	Plastic 1 liter - Nitric Acid	<2			
MW-6-F-20230407-01	240-183255-A-12	Plastic 250ml - unpreserved				
MW-6-F-20230407-01	240-183255-B-12	Plastic 500ml - unpreserved				
MW-6-F-20230407-01	240-183255-C-12	Plastic 500ml - with Nitric Acid	<2			
MW-6-F-20230407-01	240-183255-D-12	Plastic 1 liter - Nitric Acid	<2			
MW-6-F-20230407-01	240-183255-E-12	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-20230407-01	240-183255-A-13	Plastic 250ml - unpreserved				
EB-001-F-20230407-01	240-183255-B-13	Plastic 500ml - unpreserved				
EB-001-F-20230407-01	240-183255-C-13	Plastic 500ml - with Nitric Acid	<2			
EB-001-F-20230407-01	240-183255-D-13	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-20230407-01	240-183255-E-13	Plastic 1 liter - Nitric Acid	<2			

Eurofins Canton

180 S. Van Buren Avenue
Barberton, OH 44203

Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)		Lab PM:	Carrier Tracking No(s):				
Client Contact: Shipping/Receiving Company: TestAmerica Laboratories, Inc.		Cisneros, Roxanne	240-166190.1				
Address: 13715 Rider Trail North, City: Earth City State, Zip: MO, 63045 Phone: 314-298-8566(Tel) 314-298-8757(Fax) Email:		E-Mail: roxanne.cisneros@et.eurofinsus.com	Page: Page 1 of 2 Job #: 240-183255-1				
Project Name: Federal GWM Wells Site:		State of Origin: Ohio	Preservation Codes: 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 - Client ID (Lab ID)		Field Filtered Sample (Yes or No)	Percent MSMD (Yes or No)	9320_Ra228/PreSep_0 Radium-226 (GFC)	9315_Ra226/PreSep_21 Radium-226 (GFC)	Total Number of Containers	Special Instructions/Note:
Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Seawater, Other)	Preservation Code		
BAC-11-F-20230406-01 (240-183255-1)	4/6/23	10:13 Eastern	Water	Water			Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-09-F-20230406-01 (240-183255-2)	4/6/23	12:08 Eastern	Water	Water			Recount of TAR after 21 day ingrowth if > action limit; save planchet
DUP-004-BAC-09-F-20230406-01 (240-183255-3)	4/6/23	12:08 Eastern	Water	Water			Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-17-F-20230406-01 (240-183255-4)	4/6/23	13:57 Eastern	Water	Water			Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-15-F-20230406-01 (240-183255-5)	4/6/23	15:08 Eastern	Water	Water			Recount of TAR after 21 day ingrowth if > action limit; save planchet
EB-001-F-20230406-01 (240-183255-6)	4/7/23	15:30 Eastern	Water	Water			Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-13-F-20230407-01 (240-183255-7)	4/7/23	09:42 Eastern	Water	Water			Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-04-F-20230407-01 (240-183255-8)	4/7/23	10:35 Eastern	Water	Water			Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-05-F-20230407-01 (240-183255-9)	4/7/23	11:41 Eastern	Water	Water			Recount of TAR after 21 day ingrowth if > action limit; save planchet

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/test/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
Deliverable Requested: I, II, III, IV, Other (specify) _____ Primary Deliverable Rank: 2
Special Instructions/QC Requirements: _____

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client
 Disposal By Lab
 Archive For _____ Months

Emergency Kit Relinquished by: _____ Date: _____
 Relinquished by: _____ Date: _____
 Relinquished by: _____ Date: _____

Received by: *fedex* Date/Time: _____
 Received by: *Indira Shankar - Bangalore* Date/Time: 4/12/23 09:20
 Received by: _____ Date/Time: _____

Company: *BETK*
 Company: *ETAS*
 Company: _____

Cooler Temperature(s) °C and Other Remarks: _____



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-183255-1

Login Number: 183255

List Number: 2

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

List Creation: 04/12/23 07:03 PM

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



 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 6/6/2023 8:59:54 AM Revision 1

JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-183288-1

Eurofins Cleveland

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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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6/6/2023 8:59:54 AM
Revision 1

Authorized for release by
Roxanne Cisneros, Senior Project Manager
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(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

Qualifiers

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
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.
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.

General Chemistry

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
F3	Duplicate RPD exceeds the control limit
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.

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.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-183288-1

Job ID: 240-183288-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-183288-1

Revised 6/06/2023 to include Calcium per client request.

Receipt

The samples were received on 4/11/2023 1:45 PM. 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 0.4°C, 0.7°C, 0.9°C, 2.3°C, 3.7°C and 23.8°C

Metals

Method 6020B: The continuing calibration verification (CCV) associated with batch 240-569329 recovered above the upper control limit for beryllium. The samples associated with this CCV were less than the reporting limit for the affected analyte; therefore, the data have been reported. The associated samples are impacted: BAC-01-F-20230410-01 (240-183288-2), BAC-21-F-20230410-01 (240-183288-3), BAC-22-F-20230410-01 (240-183288-4) and EB-001-F-20230410-01 (240-183288-5).

Method 6020B: The continuing calibration verification (CCV) associated with batch lithium recovered above the upper control limit for lithium. The samples associated with this CCV were less than the reporting limit for the affected analyte; therefore, the data have been reported. The associated samples are impacted: BAC-01-F-20230410-01 (240-183288-2), BAC-21-F-20230410-01 (240-183288-3), BAC-22-F-20230410-01 (240-183288-4) and EB-001-F-20230410-01 (240-183288-5).

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

General Chemistry

Method 2320B: Reanalysis of the following samples was performed outside of the analytical holding time due to failure of quality control parameters in the initial analysis. BAC-02-F-20230410-01 (240-183288-1), BAC-01-F-20230410-01 (240-183288-2), BAC-21-F-20230410-01 (240-183288-3), BAC-22-F-20230410-01 (240-183288-4) and EB-001-F-20230410-01 (240-183288-5)

Method 300.0_28D: The following sample(s) was analyzed outside of analytical holding time due to instrument error. BAC-02-F-20230410-01 (240-183288-1).

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 160-608036 The following samples were prepared at a reduced aliquot due to Matrix: BAC-02-F-20230410-01 (240-183288-1), BAC-01-F-20230410-01 (240-183288-2), BAC-21-F-20230410-01 (240-183288-3), BAC-21-F-20230410-01 (240-183288-3[MSJ]), BAC-21-F-20230410-01 (240-183288-3[MSD]) and BAC-22-F-20230410-01 (240-183288-4). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method 9315_Ra226: Radium-226 batch 608036: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-02-F-20230410-01 (240-183288-1), BAC-01-F-20230410-01 (240-183288-2), BAC-21-F-20230410-01 (240-183288-3), BAC-21-F-20230410-01 (240-183288-3[MSJ]), BAC-21-F-20230410-01 (240-183288-3[MSD]), BAC-22-F-20230410-01 (240-183288-4), (LCS 160-608036/2-A), (LCSD 160-608036/3-A), (MB 160-608036/1-A)

Method 9315_Ra226: Radium-226 batch 608190: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. EB-001-F-20230410-01 (240-183288-5), (LCS 160-608190/2-A), (MB 160-608190/1-A)

Method 9320_Ra228: Radium-228 Prep Batch 160-608040: The following samples were prepared at a reduced aliquot due to Matrix:

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-183288-1

Job ID: 240-183288-1 (Continued)

Laboratory: Eurofins Cleveland (Continued)

BAC-02-F-20230410-01 (240-183288-1), BAC-01-F-20230410-01 (240-183288-2), BAC-21-F-20230410-01 (240-183288-3), BAC-21-F-20230410-01 (240-183288-3[MSJ]), BAC-21-F-20230410-01 (240-183288-3[MSD]) and BAC-22-F-20230410-01 (240-183288-4). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method 9320_Ra228: Radium-228 batch 608040: The detection goal was not met for the following sample. Samples were prepped at a reduced volume due to the presence of matrix interferences: BAC-02-F-20230410-01 (240-183288-1). Analytical results are reported with the detection limit achieved.

Method 9320_Ra228: Radium-228 batch 608040: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-02-F-20230410-01 (240-183288-1), BAC-01-F-20230410-01 (240-183288-2), BAC-21-F-20230410-01 (240-183288-3), BAC-21-F-20230410-01 (240-183288-3[MSJ]), BAC-21-F-20230410-01 (240-183288-3[MSD]), BAC-22-F-20230410-01 (240-183288-4), (LCS 160-608040/2-A), (LCSD 160-608040/3-A), (MB 160-608040/1-A)

Method 9320_Ra228: Radium-228 batch 608193: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. EB-001-F-20230410-01 (240-183288-5), (LCS 160-608193/2-A), (MB 160-608193/1-A)

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: 240-183288-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
SM 2540C	Solids, Total Dissolved (TDS)	SM	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: 240-183288-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-183288-1	BAC-02-F-20230410-01	Water	04/10/23 10:47	04/11/23 13:45
240-183288-2	BAC-01-F-20230410-01	Water	04/10/23 11:54	04/11/23 13:45
240-183288-3	BAC-21-F-20230410-01	Water	04/10/23 12:49	04/11/23 13:45
240-183288-4	BAC-22-F-20230410-01	Water	04/10/23 14:40	04/11/23 13:45
240-183288-5	EB-001-F-20230410-01	Water	04/10/23 15:15	04/11/23 13:45

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

Client Sample ID: BAC-02-F-20230410-01

Lab Sample ID: 240-183288-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1600		100	57	ug/L	1		6010D	Total Recoverable
Antimony	0.99	J	2.0	0.57	ug/L	1		6020B	Total Recoverable
Arsenic	4.5	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	91		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.67	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Chromium	6.8		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	3.3		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	4.1		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.7	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	38000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.5	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	3200		1000	220	ug/L	1		6020B	Total Recoverable
Selenium	1.2	J	5.0	0.89	ug/L	1		6020B	Total Recoverable
Sodium	68000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.61	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Calcium	140000		1000	250	ug/L	1		6020B	Total Recoverable
Chloride	76	H	1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.16	H	0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	390	H	5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	890		10	7.8	mg/L	1		SM 2540C	Total/NA
Total Alkalinity - RA	290	H	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3 - RA	290	H	5.0	2.6	mg/L	1		2320B-1997	Total/NA

Client Sample ID: BAC-01-F-20230410-01

Lab Sample ID: 240-183288-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	110		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	4.0	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	84		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	1.9	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.8		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	2.3		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.2	J^+	8.0	1.7	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: 240-183288-1

Client Sample ID: BAC-01-F-20230410-01 (Continued)

Lab Sample ID: 240-183288-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	11000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	11000		1000	330	ug/L	1		6020B	Total Recoverable
Calcium	91000		1000	250	ug/L	1		6020B	Total Recoverable
Total Alkalinity	210	*+	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	210		5.0	2.6	mg/L	1		2320B-1997	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	91		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	400		10	7.8	mg/L	1		SM 2540C	Total/NA
Total Alkalinity - RA	220	H	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3 - RA	220	H	5.0	2.6	mg/L	1		2320B-1997	Total/NA

Client Sample ID: BAC-21-F-20230410-01

Lab Sample ID: 240-183288-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	370		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	3.0	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	150		5.0	2.2	ug/L	1		6020B	Total Recoverable
Beryllium	0.77	J ^+	1.0	0.62	ug/L	1		6020B	Total Recoverable
Cobalt	0.51	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.70	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	7.7	J ^+	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	14000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.5	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2100		1000	220	ug/L	1		6020B	Total Recoverable
Selenium	1.0	J	5.0	0.89	ug/L	1		6020B	Total Recoverable
Sodium	27000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.44	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Calcium	120000		1000	250	ug/L	1		6020B	Total Recoverable
Total Alkalinity	250	*+	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	250		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	74		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.074	F1	0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	140		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	560		10	7.8	mg/L	1		SM 2540C	Total/NA
Total Alkalinity - RA	250	H	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3 - RA	250	H	5.0	2.6	mg/L	1		2320B-1997	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: 240-183288-1

Client Sample ID: BAC-22-F-20230410-01

Lab Sample ID: 240-183288-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	220		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	2.3	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	130		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.73	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.61	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	5.9	J ^+	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	18000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	18000		1000	330	ug/L	1		6020B	Total Recoverable
Calcium	140000		1000	250	ug/L	1		6020B	Total Recoverable
Total Alkalinity	230	*+	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	36		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.084		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	290		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	750		10	7.8	mg/L	1		SM 2540C	Total/NA
Total Alkalinity - RA	240	H	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3 - RA	240	H	5.0	2.6	mg/L	1		2320B-1997	Total/NA

Client Sample ID: EB-001-F-20230410-01

Lab Sample ID: 240-183288-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	2.0	J ^+	8.0	1.7	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

Client Sample ID: BAC-02-F-20230410-01

Lab Sample ID: 240-183288-1

Date Collected: 04/10/23 10:47

Matrix: Water

Date Received: 04/11/23 13:45

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1600		100	57	ug/L		04/12/23 14:00	04/13/23 13:46	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.99	J	2.0	0.57	ug/L		04/12/23 14:00	04/13/23 19:50	1
Arsenic	4.5	J	5.0	0.75	ug/L		04/12/23 14:00	04/13/23 19:50	1
Barium	91		5.0	2.2	ug/L		04/12/23 14:00	04/13/23 19:50	1
Beryllium	ND		1.0	0.62	ug/L		04/12/23 14:00	04/14/23 19:27	1
Cadmium	0.67	J	1.0	0.20	ug/L		04/12/23 14:00	04/13/23 19:50	1
Chromium	6.8		5.0	1.2	ug/L		04/12/23 14:00	04/13/23 19:50	1
Cobalt	3.3		1.0	0.19	ug/L		04/12/23 14:00	04/13/23 19:50	1
Lead	4.1		1.0	0.45	ug/L		04/12/23 14:00	04/13/23 19:50	1
Lithium	6.7	J	8.0	1.7	ug/L		04/12/23 14:00	04/14/23 19:27	1
Magnesium	38000		1000	61	ug/L		04/12/23 14:00	04/13/23 19:50	1
Molybdenum	1.5	J	5.0	1.1	ug/L		04/12/23 14:00	04/13/23 19:50	1
Potassium	3200		1000	220	ug/L		04/12/23 14:00	04/13/23 19:50	1
Selenium	1.2	J	5.0	0.89	ug/L		04/12/23 14:00	04/13/23 19:50	1
Sodium	68000		1000	330	ug/L		04/12/23 14:00	04/13/23 19:50	1
Thallium	0.61	J	1.0	0.20	ug/L		04/12/23 14:00	04/13/23 19:50	1
Calcium	140000		1000	250	ug/L		04/12/23 14:00	04/13/23 19:50	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		04/12/23 14:00	04/13/23 20:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	76	H	1.0	0.13	mg/L			05/09/23 00:13	1
Fluoride (EPA 300.0)	0.16	H	0.050	0.024	mg/L			05/09/23 00:13	1
Sulfate (EPA 300.0)	390	H	5.0	1.7	mg/L			05/09/23 01:13	5
Total Dissolved Solids (SM 2540C)	890		10	7.8	mg/L			04/13/23 11:49	1

General Chemistry - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	290	H	5.0	2.6	mg/L			04/25/23 13:09	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	290	H	5.0	2.6	mg/L			04/25/23 13:09	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND	H	5.0	2.6	mg/L			04/25/23 13:09	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	0.113	U	0.373	0.373	1.00	0.686	pCi/L	04/19/23 09:57	05/12/23 10:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.5		30 - 110					04/19/23 09:57	05/12/23 10:22	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

Client Sample ID: BAC-02-F-20230410-01

Lab Sample ID: 240-183288-1

Date Collected: 04/10/23 10:47

Matrix: Water

Date Received: 04/11/23 13:45

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	2.51	G	0.862	0.892	1.00	1.08	pCi/L	04/19/23 10:34	05/11/23 15:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.5		30 - 110					04/19/23 10:34	05/11/23 15:14	1
Y Carrier	94.6		30 - 110					04/19/23 10:34	05/11/23 15:14	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	2.62		0.939	0.967	5.00	1.08	pCi/L		05/12/23 13:59	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

Client Sample ID: BAC-01-F-20230410-01

Lab Sample ID: 240-183288-2

Date Collected: 04/10/23 11:54

Matrix: Water

Date Received: 04/11/23 13:45

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	110		100	57	ug/L		04/12/23 14:00	04/13/23 13:51	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		04/12/23 14:00	04/13/23 19:53	1
Arsenic	4.0	J	5.0	0.75	ug/L		04/12/23 14:00	04/13/23 19:53	1
Barium	84		5.0	2.2	ug/L		04/12/23 14:00	04/13/23 19:53	1
Beryllium	ND	^+	1.0	0.62	ug/L		04/12/23 14:00	04/13/23 19:53	1
Cadmium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 19:53	1
Chromium	1.9	J	5.0	1.2	ug/L		04/12/23 14:00	04/13/23 19:53	1
Cobalt	1.8		1.0	0.19	ug/L		04/12/23 14:00	04/13/23 19:53	1
Lead	2.3		1.0	0.45	ug/L		04/12/23 14:00	04/13/23 19:53	1
Lithium	6.2	J ^+	8.0	1.7	ug/L		04/12/23 14:00	04/13/23 19:53	1
Magnesium	11000		1000	61	ug/L		04/12/23 14:00	04/13/23 19:53	1
Molybdenum	ND		5.0	1.1	ug/L		04/12/23 14:00	04/13/23 19:53	1
Potassium	1600		1000	220	ug/L		04/12/23 14:00	04/13/23 19:53	1
Selenium	ND		5.0	0.89	ug/L		04/12/23 14:00	04/13/23 19:53	1
Sodium	11000		1000	330	ug/L		04/12/23 14:00	04/13/23 19:53	1
Thallium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 19:53	1
Calcium	91000		1000	250	ug/L		04/12/23 14:00	04/13/23 19:53	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		04/12/23 14:00	04/13/23 20:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	210	*+	5.0	2.6	mg/L			04/24/23 11:21	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	210		5.0	2.6	mg/L			04/24/23 11:21	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 11:21	1
Chloride (EPA 300.0)	27		1.0	0.13	mg/L			05/08/23 19:10	1
Fluoride (EPA 300.0)	0.12		0.050	0.024	mg/L			05/08/23 19:10	1
Sulfate (EPA 300.0)	91		1.0	0.35	mg/L			05/08/23 19:10	1
Total Dissolved Solids (SM 2540C)	400		10	7.8	mg/L			04/13/23 11:49	1

General Chemistry - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220	H	5.0	2.6	mg/L			04/25/23 13:18	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220	H	5.0	2.6	mg/L			04/25/23 13:18	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND	H	5.0	2.6	mg/L			04/25/23 13:18	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	0.207	U	0.238	0.239	1.00	0.387	pCi/L	04/19/23 09:57	05/12/23 10:22	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

Client Sample ID: BAC-01-F-20230410-01

Lab Sample ID: 240-183288-2

Date Collected: 04/10/23 11:54

Matrix: Water

Date Received: 04/11/23 13:45

<u>Carrier</u>	<u>%Yield</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Ba Carrier	83.8		30 - 110	04/19/23 09:57	05/12/23 10:22	1

Method: SW846 9320 - Radium-228 (GFPC)

<u>Analyte</u>	<u>Result</u>	<u>Qualifier</u>	<u>Count Uncert. (2σ+/-)</u>	<u>Total Uncert. (2σ+/-)</u>	<u>RL</u>	<u>MDC</u>	<u>Unit</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Radium-228	0.0517	U	0.433	0.433	1.00	0.802	pCi/L	04/19/23 10:34	05/11/23 15:14	1

<u>Carrier</u>	<u>%Yield</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Ba Carrier	83.8		30 - 110	04/19/23 10:34	05/11/23 15:14	1
Y Carrier	78.9		30 - 110	04/19/23 10:34	05/11/23 15:14	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

<u>Analyte</u>	<u>Result</u>	<u>Qualifier</u>	<u>Count Uncert. (2σ+/-)</u>	<u>Total Uncert. (2σ+/-)</u>	<u>RL</u>	<u>MDC</u>	<u>Unit</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Combined Radium 226 + 228	0.259	U	0.494	0.495	5.00	0.802	pCi/L		05/12/23 13:59	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

Client Sample ID: BAC-21-F-20230410-01

Lab Sample ID: 240-183288-3

Date Collected: 04/10/23 12:49

Matrix: Water

Date Received: 04/11/23 13:45

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	370		100	57	ug/L		04/12/23 14:00	04/13/23 13:25	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		04/12/23 14:00	04/13/23 19:30	1
Arsenic	3.0	J	5.0	0.75	ug/L		04/12/23 14:00	04/13/23 19:30	1
Barium	150		5.0	2.2	ug/L		04/12/23 14:00	04/13/23 19:30	1
Beryllium	0.77	J ^+	1.0	0.62	ug/L		04/12/23 14:00	04/13/23 19:30	1
Cadmium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 19:30	1
Chromium	ND		5.0	1.2	ug/L		04/12/23 14:00	04/13/23 19:30	1
Cobalt	0.51	J	1.0	0.19	ug/L		04/12/23 14:00	04/13/23 19:30	1
Lead	0.70	J	1.0	0.45	ug/L		04/12/23 14:00	04/13/23 19:30	1
Lithium	7.7	J ^+	8.0	1.7	ug/L		04/12/23 14:00	04/13/23 19:30	1
Magnesium	14000		1000	61	ug/L		04/12/23 14:00	04/13/23 19:30	1
Molybdenum	1.5	J	5.0	1.1	ug/L		04/12/23 14:00	04/13/23 19:30	1
Potassium	2100		1000	220	ug/L		04/12/23 14:00	04/13/23 19:30	1
Selenium	1.0	J	5.0	0.89	ug/L		04/12/23 14:00	04/13/23 19:30	1
Sodium	27000		1000	330	ug/L		04/12/23 14:00	04/13/23 19:30	1
Thallium	0.44	J	1.0	0.20	ug/L		04/12/23 14:00	04/13/23 19:30	1
Calcium	120000		1000	250	ug/L		04/12/23 14:00	04/13/23 19:30	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	F2	0.20	0.13	ug/L		04/12/23 14:00	04/13/23 20:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	250	*+	5.0	2.6	mg/L			04/24/23 11:25	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	250		5.0	2.6	mg/L			04/24/23 11:25	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 11:25	1
Chloride (EPA 300.0)	74		1.0	0.13	mg/L			05/08/23 17:10	1
Fluoride (EPA 300.0)	0.074	F1	0.050	0.024	mg/L			05/08/23 17:10	1
Sulfate (EPA 300.0)	140		1.0	0.35	mg/L			05/08/23 17:10	1
Total Dissolved Solids (SM 2540C)	560		10	7.8	mg/L			04/13/23 11:49	1

General Chemistry - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	250	H	5.0	2.6	mg/L			04/25/23 13:22	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	250	H	5.0	2.6	mg/L			04/25/23 13:22	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND	H	5.0	2.6	mg/L			04/25/23 13:22	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	0.308	U	0.234	0.236	1.00	0.330	pCi/L	04/19/23 09:57	05/12/23 10:23	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

Client Sample ID: BAC-21-F-20230410-01

Lab Sample ID: 240-183288-3

Date Collected: 04/10/23 12:49

Matrix: Water

Date Received: 04/11/23 13:45

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	82.3		30 - 110	04/19/23 09:57	05/12/23 10:23	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	0.499	U	0.526	0.528	1.00	0.855	pCi/L	04/19/23 10:34	05/11/23 15:14	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	82.3		30 - 110	04/19/23 10:34	05/11/23 15:14	1
Y Carrier	87.9		30 - 110	04/19/23 10:34	05/11/23 15:14	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	0.807	U	0.576	0.578	5.00	0.855	pCi/L		05/12/23 13:59	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

Client Sample ID: BAC-22-F-20230410-01

Lab Sample ID: 240-183288-4

Date Collected: 04/10/23 14:40

Matrix: Water

Date Received: 04/11/23 13:45

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	220		100	57	ug/L		04/12/23 14:00	04/13/23 13:55	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		04/12/23 14:00	04/13/23 19:56	1
Arsenic	2.3	J	5.0	0.75	ug/L		04/12/23 14:00	04/13/23 19:56	1
Barium	130		5.0	2.2	ug/L		04/12/23 14:00	04/13/23 19:56	1
Beryllium	ND	^+	1.0	0.62	ug/L		04/12/23 14:00	04/13/23 19:56	1
Cadmium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 19:56	1
Chromium	ND		5.0	1.2	ug/L		04/12/23 14:00	04/13/23 19:56	1
Cobalt	0.73	J	1.0	0.19	ug/L		04/12/23 14:00	04/13/23 19:56	1
Lead	0.61	J	1.0	0.45	ug/L		04/12/23 14:00	04/13/23 19:56	1
Lithium	5.9	J ^+	8.0	1.7	ug/L		04/12/23 14:00	04/13/23 19:56	1
Magnesium	18000		1000	61	ug/L		04/12/23 14:00	04/13/23 19:56	1
Molybdenum	ND		5.0	1.1	ug/L		04/12/23 14:00	04/13/23 19:56	1
Potassium	2600		1000	220	ug/L		04/12/23 14:00	04/13/23 19:56	1
Selenium	ND		5.0	0.89	ug/L		04/12/23 14:00	04/13/23 19:56	1
Sodium	18000		1000	330	ug/L		04/12/23 14:00	04/13/23 19:56	1
Thallium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 19:56	1
Calcium	140000		1000	250	ug/L		04/12/23 14:00	04/13/23 19:56	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		04/12/23 14:00	04/13/23 20:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230	*+	5.0	2.6	mg/L			04/24/23 11:34	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230		5.0	2.6	mg/L			04/24/23 11:34	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 11:34	1
Chloride (EPA 300.0)	36		1.0	0.13	mg/L			05/08/23 19:31	1
Fluoride (EPA 300.0)	0.084		0.050	0.024	mg/L			05/08/23 19:31	1
Sulfate (EPA 300.0)	290		5.0	1.7	mg/L			05/08/23 19:51	5
Total Dissolved Solids (SM 2540C)	750		10	7.8	mg/L			04/13/23 11:49	1

General Chemistry - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240	H	5.0	2.6	mg/L			04/25/23 13:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240	H	5.0	2.6	mg/L			04/25/23 13:31	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND	H	5.0	2.6	mg/L			04/25/23 13:31	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	0.351		0.250	0.252	1.00	0.343	pCi/L	04/19/23 09:57	05/12/23 10:24	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

Client Sample ID: BAC-22-F-20230410-01

Lab Sample ID: 240-183288-4

Date Collected: 04/10/23 14:40

Matrix: Water

Date Received: 04/11/23 13:45

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	81.8		30 - 110	04/19/23 09:57	05/12/23 10:24	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		0.668	0.680	1.00	0.949	pCi/L	04/19/23 10:34	05/11/23 15:15	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	81.8		30 - 110	04/19/23 10:34	05/11/23 15:15	1
Y Carrier	85.2		30 - 110	04/19/23 10:34	05/11/23 15:15	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	1.74		0.713	0.725	5.00	0.949	pCi/L		05/12/23 13:59	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

Client Sample ID: EB-001-F-20230410-01

Lab Sample ID: 240-183288-5

Date Collected: 04/10/23 15:15

Matrix: Water

Date Received: 04/11/23 13:45

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		04/12/23 14:00	04/13/23 13:59	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		04/12/23 14:00	04/13/23 19:59	1
Arsenic	ND		5.0	0.75	ug/L		04/12/23 14:00	04/13/23 19:59	1
Barium	ND		5.0	2.2	ug/L		04/12/23 14:00	04/13/23 19:59	1
Beryllium	ND	^+	1.0	0.62	ug/L		04/12/23 14:00	04/13/23 19:59	1
Cadmium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 19:59	1
Chromium	ND		5.0	1.2	ug/L		04/12/23 14:00	04/13/23 19:59	1
Cobalt	ND		1.0	0.19	ug/L		04/12/23 14:00	04/13/23 19:59	1
Lead	ND		1.0	0.45	ug/L		04/12/23 14:00	04/13/23 19:59	1
Lithium	2.0	J ^+	8.0	1.7	ug/L		04/12/23 14:00	04/13/23 19:59	1
Magnesium	ND		1000	61	ug/L		04/12/23 14:00	04/13/23 19:59	1
Molybdenum	ND		5.0	1.1	ug/L		04/12/23 14:00	04/13/23 19:59	1
Potassium	ND		1000	220	ug/L		04/12/23 14:00	04/13/23 19:59	1
Selenium	ND		5.0	0.89	ug/L		04/12/23 14:00	04/13/23 19:59	1
Sodium	ND		1000	330	ug/L		04/12/23 14:00	04/13/23 19:59	1
Thallium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 19:59	1
Calcium	ND		1000	250	ug/L		04/12/23 14:00	04/13/23 19:59	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		04/12/23 14:00	04/13/23 20:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND	*+	5.0	2.6	mg/L			04/24/23 11:38	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 11:38	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 11:38	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			05/08/23 20:11	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			05/08/23 20:11	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			05/08/23 20:11	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			04/13/23 11:49	1

General Chemistry - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND	H	5.0	2.6	mg/L			04/25/23 13:34	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND	H	5.0	2.6	mg/L			04/25/23 13:34	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND	H	5.0	2.6	mg/L			04/25/23 13:34	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	0.0819	U	0.105	0.105	1.00	0.175	pCi/L	04/20/23 09:47	05/15/23 10:07	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

Client Sample ID: EB-001-F-20230410-01

Lab Sample ID: 240-183288-5

Date Collected: 04/10/23 15:15

Matrix: Water

Date Received: 04/11/23 13:45

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	91.4		30 - 110	04/20/23 09:47	05/15/23 10:07	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	0.191	U	0.266	0.267	1.00	0.448	pCi/L	04/20/23 10:16	05/12/23 14:32	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	91.4		30 - 110	04/20/23 10:16	05/12/23 14:32	1
Y Carrier	85.6		30 - 110	04/20/23 10:16	05/12/23 14:32	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	0.273	U	0.286	0.287	5.00	0.448	pCi/L		05/16/23 09:58	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
240-183288-1	BAC-02-F-20230410-01	87.5	
240-183288-2	BAC-01-F-20230410-01	83.8	
240-183288-3	BAC-21-F-20230410-01	82.3	
240-183288-3 MS	BAC-21-F-20230410-01	86.0	
240-183288-3 MSD	BAC-21-F-20230410-01	81.6	
240-183288-4	BAC-22-F-20230410-01	81.8	
240-183288-5	EB-001-F-20230410-01	91.4	
LCS 160-608036/2-A	Lab Control Sample	79.9	
LCS 160-608190/2-A	Lab Control Sample	98.0	
LCSD 160-608036/3-A	Lab Control Sample Dup	79.6	
MB 160-608036/1-A	Method Blank	81.3	
MB 160-608190/1-A	Method Blank	88.5	
Tracer/Carrier Legend			
Ba = Ba Carrier			

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-183288-1	BAC-02-F-20230410-01	87.5	94.6
240-183288-2	BAC-01-F-20230410-01	83.8	78.9
240-183288-3	BAC-21-F-20230410-01	82.3	87.9
240-183288-3 MS	BAC-21-F-20230410-01	86.0	85.6
240-183288-3 MSD	BAC-21-F-20230410-01	81.6	87.5
240-183288-4	BAC-22-F-20230410-01	81.8	85.2
240-183288-5	EB-001-F-20230410-01	91.4	85.6
LCS 160-608040/2-A	Lab Control Sample	79.9	92.3
LCS 160-608193/2-A	Lab Control Sample	98.0	86.0
LCSD 160-608040/3-A	Lab Control Sample Dup	79.6	97.6
MB 160-608040/1-A	Method Blank	81.3	87.1
MB 160-608193/1-A	Method Blank	88.5	89.3
Tracer/Carrier Legend			
Ba = Ba Carrier			
Y = Y Carrier			

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-569066/1-A
Matrix: Water
Analysis Batch: 569319

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 569066

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		04/12/23 14:00	04/13/23 13:09	1

Lab Sample ID: LCS 240-569066/2-A
Matrix: Water
Analysis Batch: 569319

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 569066

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	954		ug/L		95	80 - 120

Lab Sample ID: 240-183288-3 MS
Matrix: Water
Analysis Batch: 569319

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total Recoverable
Prep Batch: 569066

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	370		1000	1310		ug/L		93	75 - 125

Lab Sample ID: 240-183288-3 MSD
Matrix: Water
Analysis Batch: 569319

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total Recoverable
Prep Batch: 569066

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	370		1000	1310		ug/L		94	75 - 125	1	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-569066/1-A
Matrix: Water
Analysis Batch: 569329

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 569066

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		04/12/23 14:00	04/13/23 19:24	1
Arsenic	ND		5.0	0.75	ug/L		04/12/23 14:00	04/13/23 19:24	1
Barium	ND		5.0	2.2	ug/L		04/12/23 14:00	04/13/23 19:24	1
Beryllium	ND	^+	1.0	0.62	ug/L		04/12/23 14:00	04/13/23 19:24	1
Cadmium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 19:24	1
Chromium	ND		5.0	1.2	ug/L		04/12/23 14:00	04/13/23 19:24	1
Cobalt	ND		1.0	0.19	ug/L		04/12/23 14:00	04/13/23 19:24	1
Lead	ND		1.0	0.45	ug/L		04/12/23 14:00	04/13/23 19:24	1
Lithium	ND	^+	8.0	1.7	ug/L		04/12/23 14:00	04/13/23 19:24	1
Magnesium	ND		1000	61	ug/L		04/12/23 14:00	04/13/23 19:24	1
Molybdenum	ND		5.0	1.1	ug/L		04/12/23 14:00	04/13/23 19:24	1
Potassium	ND		1000	220	ug/L		04/12/23 14:00	04/13/23 19:24	1
Selenium	ND		5.0	0.89	ug/L		04/12/23 14:00	04/13/23 19:24	1
Sodium	ND		1000	330	ug/L		04/12/23 14:00	04/13/23 19:24	1
Thallium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 19:24	1
Calcium	ND		1000	250	ug/L		04/12/23 14:00	04/13/23 19:24	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

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

Lab Sample ID: LCS 240-569066/3-A
Matrix: Water
Analysis Batch: 569329

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 569066

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	96.6		ug/L		97	80 - 120
Arsenic	1000	906		ug/L		91	80 - 120
Barium	1000	909		ug/L		91	80 - 120
Beryllium	500	528	^+	ug/L		106	80 - 120
Cadmium	500	465		ug/L		93	80 - 120
Chromium	500	468		ug/L		94	80 - 120
Cobalt	500	456		ug/L		91	80 - 120
Lead	500	457		ug/L		91	80 - 120
Lithium	500	498	^+	ug/L		100	80 - 120
Magnesium	25000	21900		ug/L		87	80 - 120
Molybdenum	500	465		ug/L		93	80 - 120
Potassium	25000	22400		ug/L		90	80 - 120
Selenium	1000	909		ug/L		91	80 - 120
Sodium	25000	22000		ug/L		88	80 - 120
Thallium	1000	930		ug/L		93	80 - 120
Calcium	25000	21600		ug/L		86	80 - 120

Lab Sample ID: 240-183288-3 MS
Matrix: Water
Analysis Batch: 569329

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total Recoverable
Prep Batch: 569066

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND		100	98.9		ug/L		99	80 - 120
Arsenic	3.0	J	1000	919		ug/L		92	80 - 120
Barium	150		1000	1070		ug/L		92	80 - 120
Beryllium	0.77	J ^+	500	537	^+	ug/L		107	80 - 120
Cadmium	ND		500	464		ug/L		93	80 - 120
Chromium	ND		500	466		ug/L		93	80 - 120
Cobalt	0.51	J	500	452		ug/L		90	80 - 120
Lead	0.70	J	500	458		ug/L		91	80 - 120
Lithium	7.7	J ^+	500	511	^+	ug/L		101	80 - 120
Magnesium	14000		25000	35300		ug/L		86	80 - 120
Molybdenum	1.5	J	500	473		ug/L		94	80 - 120
Potassium	2100		25000	24600		ug/L		90	80 - 120
Selenium	1.0	J	1000	924		ug/L		92	80 - 120
Sodium	27000		25000	48600		ug/L		88	80 - 120
Thallium	0.44	J	1000	924		ug/L		92	80 - 120
Calcium	120000		25000	146000	4	ug/L		94	80 - 120

Lab Sample ID: 240-183288-3 MSD
Matrix: Water
Analysis Batch: 569329

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total Recoverable
Prep Batch: 569066

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Antimony	ND		100	97.6		ug/L		98	80 - 120	1	20
Arsenic	3.0	J	1000	930		ug/L		93	80 - 120	1	20
Barium	150		1000	1080		ug/L		93	80 - 120	1	20
Beryllium	0.77	J ^+	500	528	^+	ug/L		105	80 - 120	2	20
Cadmium	ND		500	466		ug/L		93	80 - 120	0	20

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

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

Lab Sample ID: 240-183288-3 MSD
 Matrix: Water
 Analysis Batch: 569329

Client Sample ID: BAC-21-F-20230410-01
 Prep Type: Total Recoverable
 Prep Batch: 569066

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium	ND		500	474		ug/L		95	80 - 120	2	20
Cobalt	0.51	J	500	464		ug/L		93	80 - 120	3	20
Lead	0.70	J	500	464		ug/L		93	80 - 120	1	20
Lithium	7.7	J ^+	500	507	^+	ug/L		100	80 - 120	1	20
Magnesium	14000		25000	35600		ug/L		87	80 - 120	1	20
Molybdenum	1.5	J	500	478		ug/L		95	80 - 120	1	20
Potassium	2100		25000	24500		ug/L		90	80 - 120	0	20
Selenium	1.0	J	1000	923		ug/L		92	80 - 120	0	20
Sodium	27000		25000	48700		ug/L		88	80 - 120	0	20
Thallium	0.44	J	1000	935		ug/L		93	80 - 120	1	20
Calcium	120000		25000	148000	4	ug/L		102	80 - 120	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-569067/1-A
 Matrix: Water
 Analysis Batch: 569349

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 569067

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		04/12/23 14:00	04/13/23 20:14	1

Lab Sample ID: LCS 240-569067/2-A
 Matrix: Water
 Analysis Batch: 569349

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 569067

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.56		ug/L		111	80 - 120

Lab Sample ID: 240-183288-3 MS
 Matrix: Water
 Analysis Batch: 569349

Client Sample ID: BAC-21-F-20230410-01
 Prep Type: Total/NA
 Prep Batch: 569067

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND	F2	1.00	1.14		ug/L		114	80 - 120

Lab Sample ID: 240-183288-3 MSD
 Matrix: Water
 Analysis Batch: 569349

Client Sample ID: BAC-21-F-20230410-01
 Prep Type: Total/NA
 Prep Batch: 569067

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND	F2	1.00	0.927	F2	ug/L		93	80 - 120	21	20

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-570651/4
 Matrix: Water
 Analysis Batch: 570651

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			04/24/23 11:12	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

Method: 2320B-1997 - Alkalinity, Total (Continued)

Lab Sample ID: MB 240-570651/4
Matrix: Water
Analysis Batch: 570651

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 11:12	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 11:12	1

Lab Sample ID: 240-183288-3 DU
Matrix: Water
Analysis Batch: 570651

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total/NA

Analyte	Sample Sample		DU DU		Unit	D	RPD	RPD	Limit
	Result	Qualifier	Result	Qualifier					
Total Alkalinity	250	*+	245	*+	mg/L			0.1	20
Bicarbonate Alkalinity as CaCO3	250		245		mg/L			0.1	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L			NC	20

Lab Sample ID: MB 240-570826/4
Matrix: Water
Analysis Batch: 570826

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			04/25/23 13:05	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/25/23 13:05	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/25/23 13:05	1

Lab Sample ID: LCS 240-570826/3
Matrix: Water
Analysis Batch: 570826

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits

Lab Sample ID: 240-183288-1 DU
Matrix: Water
Analysis Batch: 570826

Client Sample ID: BAC-02-F-20230410-01
Prep Type: Total/NA

Analyte	Sample Sample		DU DU		Unit	D	RPD	RPD	Limit
	Result	Qualifier	Result	Qualifier					
Total Alkalinity	290	H	287		mg/L			0	20
Bicarbonate Alkalinity as CaCO3	290	H	287		mg/L			0	20
Carbonate Alkalinity as CaCO3	ND	H	ND		mg/L			NC	20

Lab Sample ID: 240-183288-3 DU
Matrix: Water
Analysis Batch: 570826

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total/NA

Analyte	Sample Sample		DU DU		Unit	D	RPD	RPD	Limit
	Result	Qualifier	Result	Qualifier					
Total Alkalinity	250	H	253		mg/L			0.3	20
Bicarbonate Alkalinity as CaCO3	250	H	253		mg/L			0.3	20
Carbonate Alkalinity as CaCO3	ND	H	ND		mg/L			NC	20

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-572493/3
Matrix: Water
Analysis Batch: 572493

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			05/08/23 13:48	1
Fluoride	ND		0.050	0.024	mg/L			05/08/23 13:48	1
Sulfate	ND		1.0	0.35	mg/L			05/08/23 13:48	1

Lab Sample ID: LCS 240-572493/4
Matrix: Water
Analysis Batch: 572493

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	2.62		mg/L		105	90 - 110
Sulfate	50.0	49.4		mg/L		99	90 - 110

Lab Sample ID: 240-183288-3 MS
Matrix: Water
Analysis Batch: 572493

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	74		50.0	126		mg/L		104	80 - 120
Fluoride	0.074	F1	2.50	3.09	F1	mg/L		121	80 - 120
Sulfate	140		50.0	198		mg/L		116	80 - 120

Lab Sample ID: 240-183288-3 MSD
Matrix: Water
Analysis Batch: 572493

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	74		50.0	125		mg/L		103	80 - 120	0	15
Fluoride	0.074	F1	2.50	3.04		mg/L		119	80 - 120	2	15
Sulfate	140		50.0	198		mg/L		115	80 - 120	0	15

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

Lab Sample ID: MB 240-569257/1
Matrix: Water
Analysis Batch: 569257

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			04/13/23 11:49	1

Lab Sample ID: LCS 240-569257/2
Matrix: Water
Analysis Batch: 569257

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	580	579		mg/L		100	80 - 120

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

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

Lab Sample ID: 240-183288-1 DU
 Matrix: Water
 Analysis Batch: 569257

Client Sample ID: BAC-02-F-20230410-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	890		1100	F3	mg/L		21	20

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-608036/1-A
 Matrix: Water
 Analysis Batch: 611284

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 608036

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.002087	U	0.201	0.201	1.00	0.392	pCi/L	04/19/23 09:57	05/12/23 06:25	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.3		30 - 110					04/19/23 09:57	05/12/23 06:25	1

Lab Sample ID: LCS 160-608036/2-A
 Matrix: Water
 Analysis Batch: 611284

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 608036

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	11.3	10.50		1.34	1.00	0.320	pCi/L	93	75 - 113
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	79.9		30 - 110						

Lab Sample ID: LCSD 160-608036/3-A
 Matrix: Water
 Analysis Batch: 611284

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 608036

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-226	11.3	10.28		1.31	1.00	0.272	pCi/L	91	75 - 113	0.08	1
Carrier	LCSD %Yield	LCSD Qualifier	Limits								
Ba Carrier	79.6		30 - 110								

Lab Sample ID: 240-183288-3 MS
 Matrix: Water
 Analysis Batch: 611284

Client Sample ID: BAC-21-F-20230410-01
 Prep Type: Total/NA
 Prep Batch: 608036

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	0.308	U	15.1	11.51		1.49	1.00	0.318	pCi/L	74	60 - 140
Carrier	MS %Yield	MS Qualifier	Limits								
Ba Carrier	86.0		30 - 110								

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: 240-183288-3 MSD
Matrix: Water
Analysis Batch: 611284

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total/NA
Prep Batch: 608036

Analyte	Sample	Sample	Spike Added	MSD	MSD	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
	Result	Qual		Result	Qual								
Radium-226	0.308	U	15.1	12.95		1.65	1.00	0.356	pCi/L	84	60 - 140	0.46	1
Carrier		MSD	MSD										
Ba Carrier		%Yield	Qualifier	Limits									
		81.6		30 - 110									

Lab Sample ID: MB 160-608190/1-A
Matrix: Water
Analysis Batch: 611502

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 608190

Analyte	MB	MB	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-226	0.04942	U	0.0841	0.0842	1.00	0.149	pCi/L	04/20/23 09:47	05/15/23 10:07	1
Carrier		MB	MB							
Ba Carrier		%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
		88.5		30 - 110	04/20/23 09:47	05/15/23 10:07	1			

Lab Sample ID: LCS 160-608190/2-A
Matrix: Water
Analysis Batch: 611502

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 608190

Analyte	Spike Added	LCS	LCS	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
		Result	Qual						
Radium-226	11.3	9.162		1.04	1.00	0.205	pCi/L	81	75 - 113
Carrier		LCS	LCS						
Ba Carrier		%Yield	Qualifier	Limits					
		98.0		30 - 110					

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-608040/1-A
Matrix: Water
Analysis Batch: 611046

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 608040

Analyte	MB	MB	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-228	0.2542	U	0.360	0.360	1.00	0.604	pCi/L	04/19/23 10:34	05/11/23 15:10	1
Carrier		MB	MB							
Ba Carrier		%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
		81.3		30 - 110	04/19/23 10:34	05/11/23 15:10	1			
Y Carrier		87.1		30 - 110	04/19/23 10:34	05/11/23 15:10	1			

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

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

Lab Sample ID: LCS 160-608040/2-A
Matrix: Water
Analysis Batch: 611046

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 608040

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	
									75	125
Radium-228	7.96	8.431		1.20	1.00	0.494	pCi/L	106	75	125
LCS LCS										
Carrier	%Yield	Qualifier	Limits							
Ba Carrier	79.9		30 - 110							
Y Carrier	92.3		30 - 110							

Lab Sample ID: LCSD 160-608040/3-A
Matrix: Water
Analysis Batch: 611046

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 608040

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		RER	RER Limit
									75	125	0.28	1
Radium-228	7.96	7.779		1.12	1.00	0.501	pCi/L	98	75	125	0.28	1
LCSD LCSD												
Carrier	%Yield	Qualifier	Limits									
Ba Carrier	79.6		30 - 110									
Y Carrier	97.6		30 - 110									

Lab Sample ID: 240-183288-3 MS
Matrix: Water
Analysis Batch: 611049

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total/NA
Prep Batch: 608040

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	
											60	140
Radium-228	0.499	U	10.6	11.95		1.67	1.00	0.690	pCi/L	108	60	140
MS MS												
Carrier	%Yield	Qualifier	Limits									
Ba Carrier	86.0		30 - 110									
Y Carrier	85.6		30 - 110									

Lab Sample ID: 240-183288-3 MSD
Matrix: Water
Analysis Batch: 611049

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total/NA
Prep Batch: 608040

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		RER	RER Limit
											60	140	0.39	1
Radium-228	0.499	U	10.6	10.68		1.57	1.00	0.752	pCi/L	96	60	140	0.39	1
MSD MSD														
Carrier	%Yield	Qualifier	Limits											
Ba Carrier	81.6		30 - 110											
Y Carrier	87.5		30 - 110											

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

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

Lab Sample ID: MB 160-608193/1-A
Matrix: Water
Analysis Batch: 611287

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 608193

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.05470	U	0.271	0.271	1.00	0.493	pCi/L	04/20/23 10:16	05/12/23 14:32	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	88.5		30 - 110					04/20/23 10:16	05/12/23 14:32	1
Y Carrier	89.3		30 - 110		04/20/23 10:16	05/12/23 14:32	1			

Lab Sample ID: LCS 160-608193/2-A
Matrix: Water
Analysis Batch: 611287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 608193

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec
				Uncert. (2σ+/-)					Limits
Radium-228	7.96	6.545		0.964	1.00	0.456	pCi/L	82	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits		Prepared	Analyzed	Dil Fac		
Ba Carrier	98.0		30 - 110					04/20/23 10:16	05/12/23 14:32
Y Carrier	86.0		30 - 110		04/20/23 10:16	05/12/23 14:32	1		

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

Metals

Prep Batch: 569066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183288-1	BAC-02-F-20230410-01	Total Recoverable	Water	3005A	
240-183288-2	BAC-01-F-20230410-01	Total Recoverable	Water	3005A	
240-183288-3	BAC-21-F-20230410-01	Total Recoverable	Water	3005A	
240-183288-4	BAC-22-F-20230410-01	Total Recoverable	Water	3005A	
240-183288-5	EB-001-F-20230410-01	Total Recoverable	Water	3005A	
MB 240-569066/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-569066/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-569066/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-183288-3 MS	BAC-21-F-20230410-01	Total Recoverable	Water	3005A	
240-183288-3 MS	BAC-21-F-20230410-01	Total Recoverable	Water	3005A	
240-183288-3 MSD	BAC-21-F-20230410-01	Total Recoverable	Water	3005A	
240-183288-3 MSD	BAC-21-F-20230410-01	Total Recoverable	Water	3005A	

Prep Batch: 569067

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183288-1	BAC-02-F-20230410-01	Total/NA	Water	7470A	
240-183288-2	BAC-01-F-20230410-01	Total/NA	Water	7470A	
240-183288-3	BAC-21-F-20230410-01	Total/NA	Water	7470A	
240-183288-4	BAC-22-F-20230410-01	Total/NA	Water	7470A	
240-183288-5	EB-001-F-20230410-01	Total/NA	Water	7470A	
MB 240-569067/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-569067/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-183288-3 MS	BAC-21-F-20230410-01	Total/NA	Water	7470A	
240-183288-3 MSD	BAC-21-F-20230410-01	Total/NA	Water	7470A	

Analysis Batch: 569319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183288-1	BAC-02-F-20230410-01	Total Recoverable	Water	6010D	569066
240-183288-2	BAC-01-F-20230410-01	Total Recoverable	Water	6010D	569066
240-183288-3	BAC-21-F-20230410-01	Total Recoverable	Water	6010D	569066
240-183288-4	BAC-22-F-20230410-01	Total Recoverable	Water	6010D	569066
240-183288-5	EB-001-F-20230410-01	Total Recoverable	Water	6010D	569066
MB 240-569066/1-A	Method Blank	Total Recoverable	Water	6010D	569066
LCS 240-569066/2-A	Lab Control Sample	Total Recoverable	Water	6010D	569066
240-183288-3 MS	BAC-21-F-20230410-01	Total Recoverable	Water	6010D	569066
240-183288-3 MSD	BAC-21-F-20230410-01	Total Recoverable	Water	6010D	569066

Analysis Batch: 569329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183288-1	BAC-02-F-20230410-01	Total Recoverable	Water	6020B	569066
240-183288-2	BAC-01-F-20230410-01	Total Recoverable	Water	6020B	569066
240-183288-3	BAC-21-F-20230410-01	Total Recoverable	Water	6020B	569066
240-183288-4	BAC-22-F-20230410-01	Total Recoverable	Water	6020B	569066
240-183288-5	EB-001-F-20230410-01	Total Recoverable	Water	6020B	569066
MB 240-569066/1-A	Method Blank	Total Recoverable	Water	6020B	569066
LCS 240-569066/3-A	Lab Control Sample	Total Recoverable	Water	6020B	569066
240-183288-3 MS	BAC-21-F-20230410-01	Total Recoverable	Water	6020B	569066
240-183288-3 MSD	BAC-21-F-20230410-01	Total Recoverable	Water	6020B	569066

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

Metals

Analysis Batch: 569349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183288-1	BAC-02-F-20230410-01	Total/NA	Water	7470A	569067
240-183288-2	BAC-01-F-20230410-01	Total/NA	Water	7470A	569067
240-183288-3	BAC-21-F-20230410-01	Total/NA	Water	7470A	569067
240-183288-4	BAC-22-F-20230410-01	Total/NA	Water	7470A	569067
240-183288-5	EB-001-F-20230410-01	Total/NA	Water	7470A	569067
MB 240-569067/1-A	Method Blank	Total/NA	Water	7470A	569067
LCS 240-569067/2-A	Lab Control Sample	Total/NA	Water	7470A	569067
240-183288-3 MS	BAC-21-F-20230410-01	Total/NA	Water	7470A	569067
240-183288-3 MSD	BAC-21-F-20230410-01	Total/NA	Water	7470A	569067

Analysis Batch: 569539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183288-1	BAC-02-F-20230410-01	Total Recoverable	Water	6020B	569066

General Chemistry

Analysis Batch: 569257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183288-1	BAC-02-F-20230410-01	Total/NA	Water	SM 2540C	
240-183288-2	BAC-01-F-20230410-01	Total/NA	Water	SM 2540C	
240-183288-3	BAC-21-F-20230410-01	Total/NA	Water	SM 2540C	
240-183288-4	BAC-22-F-20230410-01	Total/NA	Water	SM 2540C	
240-183288-5	EB-001-F-20230410-01	Total/NA	Water	SM 2540C	
MB 240-569257/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-569257/2	Lab Control Sample	Total/NA	Water	SM 2540C	
240-183288-1 DU	BAC-02-F-20230410-01	Total/NA	Water	SM 2540C	

Analysis Batch: 570651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183288-2	BAC-01-F-20230410-01	Total/NA	Water	2320B-1997	
240-183288-3	BAC-21-F-20230410-01	Total/NA	Water	2320B-1997	
240-183288-4	BAC-22-F-20230410-01	Total/NA	Water	2320B-1997	
240-183288-5	EB-001-F-20230410-01	Total/NA	Water	2320B-1997	
MB 240-570651/4	Method Blank	Total/NA	Water	2320B-1997	
240-183288-3 DU	BAC-21-F-20230410-01	Total/NA	Water	2320B-1997	

Analysis Batch: 570826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183288-1 - RA	BAC-02-F-20230410-01	Total/NA	Water	2320B-1997	
240-183288-2 - RA	BAC-01-F-20230410-01	Total/NA	Water	2320B-1997	
240-183288-3 - RA	BAC-21-F-20230410-01	Total/NA	Water	2320B-1997	
240-183288-4 - RA	BAC-22-F-20230410-01	Total/NA	Water	2320B-1997	
240-183288-5 - RA	EB-001-F-20230410-01	Total/NA	Water	2320B-1997	
MB 240-570826/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-570826/3	Lab Control Sample	Total/NA	Water	2320B-1997	
240-183288-1 DU	BAC-02-F-20230410-01	Total/NA	Water	2320B-1997	
240-183288-3 DU	BAC-21-F-20230410-01	Total/NA	Water	2320B-1997	

Analysis Batch: 572493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183288-1	BAC-02-F-20230410-01	Total/NA	Water	300.0	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-183288-1

General Chemistry (Continued)

Analysis Batch: 572493 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183288-1	BAC-02-F-20230410-01	Total/NA	Water	300.0	
240-183288-2	BAC-01-F-20230410-01	Total/NA	Water	300.0	
240-183288-3	BAC-21-F-20230410-01	Total/NA	Water	300.0	
240-183288-4	BAC-22-F-20230410-01	Total/NA	Water	300.0	
240-183288-4	BAC-22-F-20230410-01	Total/NA	Water	300.0	
240-183288-5	EB-001-F-20230410-01	Total/NA	Water	300.0	
MB 240-572493/3	Method Blank	Total/NA	Water	300.0	
LCS 240-572493/4	Lab Control Sample	Total/NA	Water	300.0	
240-183288-3 MS	BAC-21-F-20230410-01	Total/NA	Water	300.0	
240-183288-3 MSD	BAC-21-F-20230410-01	Total/NA	Water	300.0	

Rad

Prep Batch: 608036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183288-1	BAC-02-F-20230410-01	Total/NA	Water	PrecSep-21	
240-183288-2	BAC-01-F-20230410-01	Total/NA	Water	PrecSep-21	
240-183288-3	BAC-21-F-20230410-01	Total/NA	Water	PrecSep-21	
240-183288-4	BAC-22-F-20230410-01	Total/NA	Water	PrecSep-21	
MB 160-608036/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-608036/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-608036/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	
240-183288-3 MS	BAC-21-F-20230410-01	Total/NA	Water	PrecSep-21	
240-183288-3 MSD	BAC-21-F-20230410-01	Total/NA	Water	PrecSep-21	

Prep Batch: 608040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183288-1	BAC-02-F-20230410-01	Total/NA	Water	PrecSep_0	
240-183288-2	BAC-01-F-20230410-01	Total/NA	Water	PrecSep_0	
240-183288-3	BAC-21-F-20230410-01	Total/NA	Water	PrecSep_0	
240-183288-4	BAC-22-F-20230410-01	Total/NA	Water	PrecSep_0	
MB 160-608040/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-608040/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-608040/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	
240-183288-3 MS	BAC-21-F-20230410-01	Total/NA	Water	PrecSep_0	
240-183288-3 MSD	BAC-21-F-20230410-01	Total/NA	Water	PrecSep_0	

Prep Batch: 608190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183288-5	EB-001-F-20230410-01	Total/NA	Water	PrecSep-21	
MB 160-608190/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-608190/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 608193

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183288-5	EB-001-F-20230410-01	Total/NA	Water	PrecSep_0	
MB 160-608193/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-608193/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

Client Sample ID: BAC-02-F-20230410-01

Lab Sample ID: 240-183288-1

Date Collected: 04/10/23 10:47

Matrix: Water

Date Received: 04/11/23 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6010D		1	569319	KLC	EET CLE	04/13/23 13:46
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569329	RKT	EET CLE	04/13/23 19:50
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569539	RKT	EET CLE	04/14/23 19:27
Total/NA	Prep	7470A			569067	MRL	EET CLE	04/12/23 14:00
Total/NA	Analysis	7470A		1	569349	DSH	EET CLE	04/13/23 20:25
Total/NA	Analysis	2320B-1997	RA	1	570826	JWW	EET CLE	04/25/23 13:09
Total/NA	Analysis	300.0		1	572493	JWW	EET CLE	05/09/23 00:13
Total/NA	Analysis	300.0		5	572493	JWW	EET CLE	05/09/23 01:13
Total/NA	Analysis	SM 2540C		1	569257	GH	EET CLE	04/13/23 11:49
Total/NA	Prep	PrecSep-21			608036	KAC	EET SL	04/19/23 09:57
Total/NA	Analysis	9315		1	611284	FLC	EET SL	05/12/23 10:22
Total/NA	Prep	PrecSep_0			608040	KAC	EET SL	04/19/23 10:34
Total/NA	Analysis	9320		1	611049	FLC	EET SL	05/11/23 15:14
Total/NA	Analysis	Ra226_Ra228		1	611319	EMH	EET SL	05/12/23 13:59

Client Sample ID: BAC-01-F-20230410-01

Lab Sample ID: 240-183288-2

Date Collected: 04/10/23 11:54

Matrix: Water

Date Received: 04/11/23 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6010D		1	569319	KLC	EET CLE	04/13/23 13:51
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569329	RKT	EET CLE	04/13/23 19:53
Total/NA	Prep	7470A			569067	MRL	EET CLE	04/12/23 14:00
Total/NA	Analysis	7470A		1	569349	DSH	EET CLE	04/13/23 20:27
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 11:21
Total/NA	Analysis	2320B-1997	RA	1	570826	JWW	EET CLE	04/25/23 13:18
Total/NA	Analysis	300.0		1	572493	JWW	EET CLE	05/08/23 19:10
Total/NA	Analysis	SM 2540C		1	569257	GH	EET CLE	04/13/23 11:49
Total/NA	Prep	PrecSep-21			608036	KAC	EET SL	04/19/23 09:57
Total/NA	Analysis	9315		1	611284	FLC	EET SL	05/12/23 10:22
Total/NA	Prep	PrecSep_0			608040	KAC	EET SL	04/19/23 10:34
Total/NA	Analysis	9320		1	611049	FLC	EET SL	05/11/23 15:14
Total/NA	Analysis	Ra226_Ra228		1	611319	EMH	EET SL	05/12/23 13:59

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

Client Sample ID: BAC-21-F-20230410-01

Lab Sample ID: 240-183288-3

Date Collected: 04/10/23 12:49

Matrix: Water

Date Received: 04/11/23 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6010D		1	569319	KLC	EET CLE	04/13/23 13:25
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569329	RKT	EET CLE	04/13/23 19:30
Total/NA	Prep	7470A			569067	MRL	EET CLE	04/12/23 14:00
Total/NA	Analysis	7470A		1	569349	DSH	EET CLE	04/13/23 20:18
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 11:25
Total/NA	Analysis	2320B-1997	RA	1	570826	JWW	EET CLE	04/25/23 13:22
Total/NA	Analysis	300.0		1	572493	JWW	EET CLE	05/08/23 17:10
Total/NA	Analysis	SM 2540C		1	569257	GH	EET CLE	04/13/23 11:49
Total/NA	Prep	PrecSep-21			608036	KAC	EET SL	04/19/23 09:57
Total/NA	Analysis	9315		1	611284	FLC	EET SL	05/12/23 10:23
Total/NA	Prep	PrecSep_0			608040	KAC	EET SL	04/19/23 10:34
Total/NA	Analysis	9320		1	611049	FLC	EET SL	05/11/23 15:14
Total/NA	Analysis	Ra226_Ra228		1	611319	EMH	EET SL	05/12/23 13:59

Client Sample ID: BAC-22-F-20230410-01

Lab Sample ID: 240-183288-4

Date Collected: 04/10/23 14:40

Matrix: Water

Date Received: 04/11/23 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6010D		1	569319	KLC	EET CLE	04/13/23 13:55
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569329	RKT	EET CLE	04/13/23 19:56
Total/NA	Prep	7470A			569067	MRL	EET CLE	04/12/23 14:00
Total/NA	Analysis	7470A		1	569349	DSH	EET CLE	04/13/23 20:29
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 11:34
Total/NA	Analysis	2320B-1997	RA	1	570826	JWW	EET CLE	04/25/23 13:31
Total/NA	Analysis	300.0		1	572493	JWW	EET CLE	05/08/23 19:31
Total/NA	Analysis	300.0		5	572493	JWW	EET CLE	05/08/23 19:51
Total/NA	Analysis	SM 2540C		1	569257	GH	EET CLE	04/13/23 11:49
Total/NA	Prep	PrecSep-21			608036	KAC	EET SL	04/19/23 09:57
Total/NA	Analysis	9315		1	611284	FLC	EET SL	05/12/23 10:24
Total/NA	Prep	PrecSep_0			608040	KAC	EET SL	04/19/23 10:34
Total/NA	Analysis	9320		1	611049	FLC	EET SL	05/11/23 15:15
Total/NA	Analysis	Ra226_Ra228		1	611319	EMH	EET SL	05/12/23 13:59

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

Client Sample ID: EB-001-F-20230410-01

Lab Sample ID: 240-183288-5

Date Collected: 04/10/23 15:15

Matrix: Water

Date Received: 04/11/23 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6010D		1	569319	KLC	EET CLE	04/13/23 13:59
Total Recoverable	Prep	3005A			569066	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569329	RKT	EET CLE	04/13/23 19:59
Total/NA	Prep	7470A			569067	MRL	EET CLE	04/12/23 14:00
Total/NA	Analysis	7470A		1	569349	DSH	EET CLE	04/13/23 20:32
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 11:38
Total/NA	Analysis	2320B-1997	RA	1	570826	JWW	EET CLE	04/25/23 13:34
Total/NA	Analysis	300.0		1	572493	JWW	EET CLE	05/08/23 20:11
Total/NA	Analysis	SM 2540C		1	569257	GH	EET CLE	04/13/23 11:49
Total/NA	Prep	PrecSep-21			608190	KAC	EET SL	04/20/23 09:47
Total/NA	Analysis	9315		1	611502	FLC	EET SL	05/15/23 10:07
Total/NA	Prep	PrecSep_0			608193	KAC	EET SL	04/20/23 10:16
Total/NA	Analysis	9320		1	611287	FLC	EET SL	05/12/23 14:32
Total/NA	Analysis	Ra226_Ra228		1	611699	EMH	EET SL	05/16/23 09:58

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
 Project/Site: Federal CCR Wells

Job ID: 240-183288-1

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
California	State	2927	02-27-24
Connecticut	State	PH-0590	06-29-23
Florida	NELAP	E87225	05-24-23
Georgia	State	4062	02-28-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	05-31-23
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	05-24-23
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-23
Florida	NELAP	E87689	06-30-23
HI - RadChem Recognition	State	n/a	06-30-23
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana (All)	NELAP	04080	06-30-23
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-23
MI - RadChem Recognition	State	9005	06-30-23
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-23
New Jersey	NELAP	MO002	06-30-23
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-23
North Dakota	State	R-207	06-30-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-183288-1

Laboratory: Eurofins St. Louis (Continued)

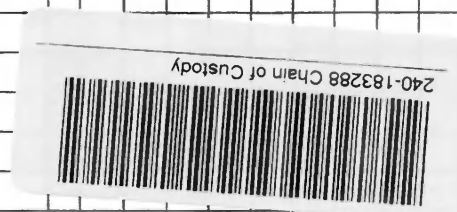
All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oklahoma	NELAP	9997	08-31-23
Oregon	NELAP	4157	09-01-23
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23
Texas	NELAP	T104704193	07-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00028	05-17-23
Utah	NELAP	MO000542021-14	07-31-23
Virginia	NELAP	10310	06-14-23
Washington	State	C592	08-30-23
West Virginia DEP	State	381	10-31-23

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: Federal - CCR Wells Site: Ohio		Lab PM: Cisneros, Roxanne E-Mail: roxanne.cisneros@eurofins.com PWSID:		Carrier Tracking No(s): State of Origin: Page 1 of 1 Job #:		COC No: 240-93018-34502	
Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: 2935505 WO #: Project #: 24019633 SSO#:		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 Other:		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Sample Identification Sample ID: BAC-02-F-20230410-01 BAC-01-F-20230410-01 BAC-21-F-20230410-01 BAC-21-F-20230410-MS BAC-22-F-20230410-MSD BAC-22-F-20230410-01 EB-001-F-20230410-01		Sample Date: 4-10-23 Sample Time: 1047 1154 1249 1249 1249 1440 1515		Sample Type (C=Comp, G=grab): G G G G G G G		Matrix (W=Water, S=Soil, O=Organic, A=Air): W W W W W W W	
Field Filtered Sample (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Perform MS/MSD (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 6010B, 7470, 6020(See Metals List) 2540C_Calcid, 300, 280(Chloride, Fluoride, Sulfate) 9315_Ra226, 9320_Ra228 2320B(Carbonate Alkalinity/Bi-Carbonate Alkalinity)		Total Number of Containers: <input checked="" type="checkbox"/>		Special Instructions/Note:			
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months		Deliverable Requested: I, II, III, IV, Other (specify)			
Empty Kit Relinquished by: Relinquished by: <i>Bobby C. St...</i> Relinquished by: <i>Tom Edwards</i> Relinquished by:		Method of Shipment: Date: 4-11-23 / 0845 Date: 4-11-23 / 13:45 Date:		Special Instructions/QC Requirements:			
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Company: <i>Auto Options Top</i> Company: <i>Auto Options Top</i> Company: <i>Auto Options Top</i> Company: <i>Auto Options Top</i>			



183288

Eurofins - Canton Sample Receipt Form/Narrative Login # : _____
Barberton Facility

Client LightStone Site Name _____ Cooler unpacked by: Rachelle Haidet

Cooler Received on 4/1/23 Opened on 4/1/23
FedEx: 1st Grd Exp UPS FAS Clipper 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# HC203864
- 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: _____

1
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15

Eurofins - Canton 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	23.6	23.8	Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #:	0.6	0.8	Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #:	2.1	2.3	Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #:	3.5	3.7	Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #:	0.2	0.4	Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #:	0.5	0.7	Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Water	Blue Ice None	Dry Ice

See Temperature Excursion Form

Temperature readings:

Client Sample ID	Lab ID	Container Type	Container		Preservative	
			pH	Temp	Added (mls)	Lot #
BAC-02-F-20230410-01	240-183288-C-1	Plastic 500ml - with Nitric Acid	<2			
BAC-02-F-20230410-01	240-183288-D-1	Plastic 1 liter - Nitric Acid	<2			
BAC-02-F-20230410-01	240-183288-E-1	Plastic 1 liter - Nitric Acid	<2			
BAC-01-F-20230410-01	240-183288-C-2	Plastic 500ml - with Nitric Acid	<2			
BAC-01-F-20230410-01	240-183288-D-2	Plastic 1 liter - Nitric Acid	<2			
BAC-01-F-20230410-01	240-183288-E-2	Plastic 1 liter - Nitric Acid	<2			
BAC-21-F-20230410-01	240-183288-G-3	Plastic 500ml - with Nitric Acid	<2			
BAC-21-F-20230410-01	240-183288-H-3	Plastic 500ml - with Nitric Acid	<2			
BAC-21-F-20230410-01	240-183288-I-3	Plastic 500ml - with Nitric Acid	<2			
BAC-21-F-20230410-01	240-183288-J-3	Plastic 1 liter - Nitric Acid	<2			
BAC-21-F-20230410-01	240-183288-K-3	Plastic 1 liter - Nitric Acid	<2			
BAC-21-F-20230410-01	240-183288-L-3	Plastic 1 liter - Nitric Acid	<2			
BAC-21-F-20230410-01	240-183288-M-3	Plastic 1 liter - Nitric Acid	<2			
BAC-21-F-20230410-01	240-183288-N-3	Plastic 1 liter - Nitric Acid	<2			
BAC-21-F-20230410-01	240-183288-O-3	Plastic 1 liter - Nitric Acid	<2			
BAC-ZZ-F-20230410-01	240-183288-C-4	Plastic 500ml - with Nitric Acid	<2			
BAC-ZZ-F-20230410-01	240-183288-D-4	Plastic 1 liter - Nitric Acid	<2			
BAC-ZZ-F-20230410-01	240-183288-E-4	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-20230410-01	240-183288-C-5	Plastic 500ml - with Nitric Acid	<2			
EB-001-F-20230410-01	240-183288-D-5	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-20230410-01	240-183288-E-5	Plastic 1 liter - Nitric Acid	<2			



Client Information (Sub Contract Lab)
 Client Contact: Cismeros, Roxanne
 Shipping/Receiving: roxanne.cismeros@et.eurofins.com
 Company: TestAmerica Laboratories, Inc.
 Address: 13715 Rider Trail North, Earth City, MO 63045
 Phone: 314-298-8566(Tel) 314-298-8757(Fax)
 Email: [Redacted]
 Project Name: Federal GWM Wells
 Site: [Redacted]

Lab P.M.: Cismeros, Roxanne
E-Mail: roxanne.cismeros@et.eurofins.com
Accreditations Required (See note): [Redacted]

Sampler: [Redacted]
Phone: [Redacted]
Due Date Requested: 4/24/2023
TAT Requested (days): [Redacted]

PO #: [Redacted]
WO #: [Redacted]
Project #: 24019633
SSOW#: [Redacted]

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=water/oil, BT= tissue, A=air)	Preservation Code:	Field Filtered Sample (Yes or No)	9320_Ra228/PreSep_0 Radium-228 (GFPC)	9315_Ra228/PreSep_21 Radium-226 (GFPC)	Ra228/Ra226_GFP/ Combined Radium-226 and Radium-228	Total Number of Containers	Special Instructions/Note:
BAC-02-F-20230410-01 (240-183288-1)	4/10/23	10:47 Eastern	Water	Water		X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit, save planelt
BAC-01-F-20230410-01 (240-183288-2)	4/10/23	11:54 Eastern	Water	Water		X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit, save planelt
BAC-21-F-20230410-01 (240-183288-3)	4/10/23	12:49 Eastern	Water	Water		X	X	X	X	6	Recount of TAR after 21 day ingrowth if > action limit, save planelt
BAC-21-F-20230410-01 (240-183288-3MS)	4/10/23	12:49 Eastern	MS	Water		X	X	X	X	1	Recount of TAR after 21 day ingrowth if > action limit, save planelt
BAC-21-F-20230410-01 (240-183288-3MSD)	4/10/23	12:49 Eastern	MSD	Water		X	X	X	X	1	Recount of TAR after 21 day ingrowth if > action limit, save planelt
BAC-ZZ-F-20230410-01 (240-183288-4)	4/10/23	14:40 Eastern	Water	Water		X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit, save planelt
EB-001-F-20230410-01 (240-183288-5)	4/10/23	15:15 Eastern	Water	Water		X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit, save planelt

Preservation Codes:
 A - HCL
 B - NaOH
 C - Zn Acetate
 D - Nitric Acid
 E - NaHSO4
 F - MeOH
 G - Anchlor
 H - Ascorbic Acid
 I - Ice
 J - DI Water
 K - EDTA
 L - EDA
 Other: [Redacted]

Preservation Codes:
 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)

Special Instructions/Note:
 16

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For Months

Special Instructions/QC Requirements:

Primary Deliverable Rank: 2

Relinquished by: [Signature]
Date/Time: 4/23/23 17:00
Company: BENK
Relinquished by: [Signature]
Date/Time: [Redacted]
Company: [Redacted]
Relinquished by: fedex
Date/Time: [Redacted]
Company: [Redacted]

Custody Seals Intact: [Redacted]
 Δ Yes Δ No

Cooler Temperature(s) °C and Other Remarks:



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-183288-1

Login Number: 183288

List Number: 2

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

List Creation: 04/12/23 06:53 PM

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



 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 6/6/2023 9:01:46 AM Revision 1

JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-183575-1

Eurofins Cleveland

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
6/6/2023 9:01:46 AM
Revision 1

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Qualifiers

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
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.

General Chemistry

Qualifier	Qualifier Description
E	Result exceeded calibration range.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.

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.
α	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

Eurofins Cleveland

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Job ID: 240-183575-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-183575-1

Revised 6/06/2023 to include Calcium per client request.

Receipt

The samples were received on 4/14/2023 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 1.1°C, 1.2°C, 1.4°C, 1.6°C, 1.8°C, 1.8°C, 2.0°C, 2.3°C, 2.6°C, 2.8°C, 3.2°C and 18.1°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: Sample was above the highest point of the curve for chloride. Sample is being reported for in hold results. Sample will be rerun out of hold at a dilution. BAC-14-F-20230411-01 (240-183575-5)

Method 300.0_28D: Reanalysis of the following sample was performed outside of the analytical holding time due to sample needing a higher dilution: BAC-14-F-20230411-01 (240-183575-5).

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 160-609082 The following samples were prepared at a reduced aliquot due to Matrix: BAC-10-F-20230411-01 (240-183575-1), BAC-14-F-20230411-01 (240-183575-5), BAC-12-F-20230411-01 (240-183575-6) and BAC-18-F-20230412-01 (240-183575-9). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method 9315_Ra226: Radium-226 Prep Batch 160-609082 Insufficient sample volume was available to perform a sample duplicate for the following samples: BAC-23-F-20230411-01 (240-183575-2), DUP-005-BAC-23-F-20230411-01 (240-183575-3), BAC-08-F-20230411-01 (240-183575-4), EB-001-F-20230411-01 (240-183575-7), BAC-07-F-20230412-01 (240-183575-8) and BAC-06-F-20230412-01 (240-183575-10). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method 9315_Ra226: Radium-22 Prep Batch 160-609093 Insufficient sample volume was available to perform a sample duplicate for the following samples: DUP-006-BAC-06-F-20230412-01 (240-183575-11), BAC-16-F-20230412-01 (240-183575-12) and EB-001-F-20230412-01 (240-183575-13). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method 9315_Ra226: Radium 226 prep batch 160-609082 The barium carrier recovery is outside the lower control limit (30%) for the following sample: BAC-12-F-20230411-01 (240-183575-6). 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 609082 The detection goal was not met for the following sample(s). Sample was prepped at a reduced volume due to the presence of matrix interferences: BAC-12-F-20230411-01 (240-183575-6). Analytical results are reported with the detection limit achieved.

Method 9315_Ra226: Radium-226 batch 609082 The lower control limit (40%) for the following sample: BAC-12-F-20230411-01 (240-183575-6). 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 609082 Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Job ID: 240-183575-1 (Continued)

Laboratory: Eurofins Cleveland (Continued)

Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-10-F-20230411-01 (240-183575-1), BAC-23-F-20230411-01 (240-183575-2), DUP-005-BAC-23-F-20230411-01 (240-183575-3), BAC-08-F-20230411-01 (240-183575-4), BAC-14-F-20230411-01 (240-183575-5), BAC-12-F-20230411-01 (240-183575-6), EB-001-F-20230411-01 (240-183575-7), BAC-07-F-20230412-01 (240-183575-8), BAC-18-F-20230412-01 (240-183575-9), BAC-06-F-20230412-01 (240-183575-10), (LCS 160-609082/2-A), (LCSD 160-609082/3-A) and (MB 160-609082/1-A)

Method 9315_Ra226: Radium-226 batch 609093 Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. DUP-006-BAC-06-F-20230412-01 (240-183575-11), BAC-16-F-20230412-01 (240-183575-12), EB-001-F-20230412-01 (240-183575-13), (LCS 160-609093/2-A), (LCSD 160-609093/3-A) and (MB 160-609093/1-A)

Method 9320_Ra228: Radium-228 Prep Batch 160-609091 The following samples were prepared at a reduced aliquot due to Matrix: BAC-10-F-20230411-01 (240-183575-1), BAC-14-F-20230411-01 (240-183575-5), BAC-12-F-20230411-01 (240-183575-6) and BAC-18-F-20230412-01 (240-183575-9). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method 9320_Ra228: Radium-228 Prep Batch 160-609091 Insufficient sample volume was available to perform a sample duplicate for the following samples: BAC-23-F-20230411-01 (240-183575-2), DUP-005-BAC-23-F-20230411-01 (240-183575-3), BAC-08-F-20230411-01 (240-183575-4), EB-001-F-20230411-01 (240-183575-7), BAC-07-F-20230412-01 (240-183575-8) and BAC-06-F-20230412-01 (240-183575-10). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method 9320_Ra228: Radium-228 Prep Batch 160-609099 Insufficient sample volume was available to perform a sample duplicate for the following samples: DUP-006-BAC-06-F-20230412-01 (240-183575-11), BAC-16-F-20230412-01 (240-183575-12) and EB-001-F-20230412-01 (240-183575-13). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method 9320_Ra228: Radium 228 prep batch 160-609091 The barium carrier recovery is outside the lower control limit (30%) for the following sample: BAC-12-F-20230411-01 (240-183575-6). 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 609091 The detection goal was not met for the following sample(s). Samples were prepped at a reduced volume due to the presence of matrix interferences: BAC-10-F-20230411-01 (240-183575-1), BAC-14-F-20230411-01 (240-183575-5) and BAC-12-F-20230411-01 (240-183575-6). Analytical results are reported with the detection limit achieved.

Method 9320_Ra228: Radium 228 batch 609091 The Ba Carrier recovery is outside lower control limit (40%) for the following sample: BAC-12-F-20230411-01 (240-183575-6). 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 609091 Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-10-F-20230411-01 (240-183575-1), BAC-23-F-20230411-01 (240-183575-2), DUP-005-BAC-23-F-20230411-01 (240-183575-3), BAC-08-F-20230411-01 (240-183575-4), BAC-14-F-20230411-01 (240-183575-5), BAC-12-F-20230411-01 (240-183575-6), EB-001-F-20230411-01 (240-183575-7), BAC-07-F-20230412-01 (240-183575-8), BAC-18-F-20230412-01 (240-183575-9), BAC-06-F-20230412-01 (240-183575-10), (LCS 160-609091/2-A), (LCSD 160-609091/3-A) and (MB 160-609091/1-A)

Method 9320_Ra228: Radium-228 batch 609099 Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. DUP-006-BAC-06-F-20230412-01 (240-183575-11),

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Job ID: 240-183575-1 (Continued)

Laboratory: Eurofins Cleveland (Continued)

BAC-16-F-20230412-01 (240-183575-12), EB-001-F-20230412-01 (240-183575-13), (LCS 160-609099/2-A), (LCSD 160-609099/3-A) and (MB 160-609099/1-A)

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.

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Method Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
SM 2540C	Solids, Total Dissolved (TDS)	SM	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: 240-183575-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-183575-1	BAC-10-F-20230411-01	Water	04/11/23 10:03	04/14/23 08:00
240-183575-2	BAC-23-F-20230411-01	Water	04/11/23 11:22	04/14/23 08:00
240-183575-3	DUP-005-BAC-23-F-20230411-01	Water	04/11/23 11:22	04/14/23 08:00
240-183575-4	BAC-08-F-20230411-01	Water	04/11/23 12:27	04/14/23 08:00
240-183575-5	BAC-14-F-20230411-01	Water	04/11/23 14:00	04/14/23 08:00
240-183575-6	BAC-12-F-20230411-01	Water	04/11/23 14:58	04/14/23 08:00
240-183575-7	EB-001-F-20230411-01	Water	04/11/23 15:30	04/14/23 08:00
240-183575-8	BAC-07-F-20230412-01	Water	04/12/23 10:34	04/14/23 08:00
240-183575-9	BAC-18-F-20230412-01	Water	04/12/23 11:31	04/14/23 08:00
240-183575-10	BAC-06-F-20230412-01	Water	04/12/23 13:00	04/14/23 08:00
240-183575-11	DUP-006-BAC-06-F-20230412-01	Water	04/12/23 13:00	04/14/23 08:00
240-183575-12	BAC-16-F-20230412-01	Water	04/12/23 14:29	04/14/23 08:00
240-183575-13	EB-001-F-20230412-01	Water	04/12/23 15:30	04/14/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: BAC-10-F-20230411-01

Lab Sample ID: 240-183575-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	750		100	57	ug/L	1		6010D	Total Recoverable
Antimony	0.70	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	78		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.31	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Chromium	6.3		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	5.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	3.5		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	7.2	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	30000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.7	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	57000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.62	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Calcium	120000		1000	250	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	51		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	310		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	680		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-23-F-20230411-01

Lab Sample ID: 240-183575-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	280		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	1.7	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	140		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.0		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	4.6	J ^+	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	15000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	18000		1000	330	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: 240-183575-1

Client Sample ID: BAC-23-F-20230411-01 (Continued)

Lab Sample ID: 240-183575-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	130000		1000	250	ug/L	1		6020B	Total Recoverable
Total Alkalinity	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	43		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.14		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	150		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	490		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-005-BAC-23-F-20230411-01

Lab Sample ID: 240-183575-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	290		100	57	ug/L	1		6010D	Total Recoverable
Antimony	0.75	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	140		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	5.6	J ^+	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	15000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.9	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	1900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	19000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.86	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Calcium	130000		1000	250	ug/L	1		6020B	Total Recoverable
Total Alkalinity	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	44		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.14		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	150		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	500		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-08-F-20230411-01

Lab Sample ID: 240-183575-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	110		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	3.3	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	180		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.6		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	5.6	J ^+	8.0	1.7	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: 240-183575-1

Client Sample ID: BAC-08-F-20230411-01 (Continued)

Lab Sample ID: 240-183575-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	12000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	2.3	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	1300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	12000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.29	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Calcium	93000		1000	250	ug/L	1		6020B	Total Recoverable
Total Alkalinity	210		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	210		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	24		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	89		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	350		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-14-F-20230411-01

Lab Sample ID: 240-183575-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2800		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	2.2	ug/L	1		6020B	Total Recoverable
Chromium	1.6	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.76	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.6	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	22000		1000	330	ug/L	1		6020B	Total Recoverable
Calcium	77000		1000	250	ug/L	1		6020B	Total Recoverable
Total Alkalinity	89		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	89		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	34		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.067		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	230	E	1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	470		10	7.8	mg/L	1		SM 2540C	Total/NA
Sulfate - RA	220	H	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: 240-183575-1

Client Sample ID: BAC-12-F-20230411-01

Lab Sample ID: 240-183575-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2000		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	16		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	210		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.23	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Chromium	8.0		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	22		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	15		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	14		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	17000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	2.4	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	3200		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	28000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.22	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Calcium	77000		1000	250	ug/L	1		6020B	Total Recoverable
Total Alkalinity	100		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	100		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	58		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.082		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	200		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	460		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-001-F-20230411-01

Lab Sample ID: 240-183575-7

No Detections.

Client Sample ID: BAC-07-F-20230412-01

Lab Sample ID: 240-183575-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1200		100	57	ug/L	1		6010D	Total Recoverable
Barium	45		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.7		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	7.7	J ^+	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Calcium	90000		1000	250	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: 240-183575-1

Client Sample ID: BAC-07-F-20230412-01 (Continued)

Lab Sample ID: 240-183575-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity	130		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	130		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	26		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.076		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	200		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	440		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-18-F-20230412-01

Lab Sample ID: 240-183575-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1500		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	1.2	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	39		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	1.3	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.9		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.73	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	7.7	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Calcium	81000		1000	250	ug/L	1		6020B	Total Recoverable
Total Alkalinity	95		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	95		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	25		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.057		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	200		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	410		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-06-F-20230412-01

Lab Sample ID: 240-183575-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1900		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	0.95	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	97		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	4.2		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	7.9	J ^+	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	26000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1400		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: 240-183575-1

Client Sample ID: BAC-06-F-20230412-01 (Continued)

Lab Sample ID: 240-183575-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Calcium	120000		1000	250	ug/L	1		6020B	Total Recoverable
Total Alkalinity	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	24		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.097		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	230		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	540		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-006-BAC-06-F-20230412-01

Lab Sample ID: 240-183575-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1900		100	57	ug/L	1		6010D	Total Recoverable
Barium	96		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	4.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	6.6	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	26000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Calcium	120000		1000	250	ug/L	1		6020B	Total Recoverable
Total Alkalinity	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	24		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.098		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	230		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	530		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-16-F-20230412-01

Lab Sample ID: 240-183575-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1500		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	1.1	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	62		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.3		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	6.9	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	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: 240-183575-1

Client Sample ID: BAC-16-F-20230412-01 (Continued)

Lab Sample ID: 240-183575-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	100000		1000	250	ug/L	1		6020B	Total Recoverable
Total Alkalinity	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	26		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.060		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	200		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	490		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-001-F-20230412-01

Lab Sample ID: 240-183575-13

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: BAC-10-F-20230411-01

Lab Sample ID: 240-183575-1

Date Collected: 04/11/23 10:03

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	750		100	57	ug/L		04/18/23 14:00	04/20/23 02:15	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.70	J	2.0	0.57	ug/L		04/18/23 14:00	04/20/23 01:13	1
Arsenic	4.7	J	5.0	0.75	ug/L		04/18/23 14:00	04/20/23 01:13	1
Barium	78		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 01:13	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 01:13	1
Cadmium	0.31	J	1.0	0.20	ug/L		04/18/23 14:00	04/20/23 01:13	1
Chromium	6.3		5.0	1.2	ug/L		04/18/23 14:00	04/20/23 01:13	1
Cobalt	5.1		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 01:13	1
Lead	3.5		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 01:13	1
Lithium	7.2	J	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 14:50	1
Magnesium	30000		1000	61	ug/L		04/18/23 14:00	04/20/23 01:13	1
Molybdenum	1.7	J	5.0	1.1	ug/L		04/18/23 14:00	04/20/23 01:13	1
Potassium	2600		1000	220	ug/L		04/18/23 14:00	04/20/23 01:13	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 01:13	1
Sodium	57000		1000	330	ug/L		04/18/23 14:00	04/20/23 01:13	1
Thallium	0.62	J	1.0	0.20	ug/L		04/18/23 14:00	04/20/23 01:13	1
Calcium	120000		1000	250	ug/L		04/18/23 14:00	04/20/23 01:13	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	F1	0.20	0.13	ug/L		04/18/23 14:00	04/19/23 20:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			04/24/23 14:21	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			04/24/23 14:21	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 14:21	1
Chloride (EPA 300.0)	51		1.0	0.13	mg/L			05/08/23 22:32	1
Fluoride (EPA 300.0)	0.13		0.050	0.024	mg/L			05/08/23 22:32	1
Sulfate (EPA 300.0)	310		5.0	1.7	mg/L			05/08/23 22:52	5
Total Dissolved Solids (SM 2540C)	680		10	7.8	mg/L			04/17/23 10:04	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.345	U	0.383	0.385	1.00	0.610	pCi/L	04/27/23 12:38	05/19/23 08:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	37.3		30 - 110					04/27/23 12:38	05/19/23 08:17	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	-0.614	U G	1.19	1.19	1.00	2.44	pCi/L	04/27/23 13:23	05/16/23 11:41	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: BAC-10-F-20230411-01

Lab Sample ID: 240-183575-1

Date Collected: 04/11/23 10:03

Matrix: Water

Date Received: 04/14/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	37.3		30 - 110	04/27/23 13:23	05/16/23 11:41	1
Y Carrier	84.1		30 - 110	04/27/23 13:23	05/16/23 11:41	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	-0.269	U	1.25	1.25	5.00	2.44	pCi/L		05/19/23 14:49	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: BAC-23-F-20230411-01

Lab Sample ID: 240-183575-2

Date Collected: 04/11/23 11:22

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	280		100	57	ug/L		04/18/23 14:00	04/20/23 02:44	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		04/18/23 14:00	04/20/23 01:16	1
Arsenic	1.7	J	5.0	0.75	ug/L		04/18/23 14:00	04/20/23 01:16	1
Barium	140		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 01:16	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 01:16	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 01:16	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/20/23 01:16	1
Cobalt	1.0		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 01:16	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 01:16	1
Lithium	4.6	J ^+	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 01:16	1
Magnesium	15000		1000	61	ug/L		04/18/23 14:00	04/20/23 01:16	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/20/23 01:16	1
Potassium	1900		1000	220	ug/L		04/18/23 14:00	04/20/23 01:16	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 01:16	1
Sodium	18000		1000	330	ug/L		04/18/23 14:00	04/20/23 01:16	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 01:16	1
Calcium	130000		1000	250	ug/L		04/18/23 14:00	04/20/23 01:16	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		04/18/23 14:00	04/19/23 20:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230		5.0	2.6	mg/L			04/24/23 14:25	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230		5.0	2.6	mg/L			04/24/23 14:25	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 14:25	1
Chloride (EPA 300.0)	43		1.0	0.13	mg/L			05/08/23 23:12	1
Fluoride (EPA 300.0)	0.14		0.050	0.024	mg/L			05/08/23 23:12	1
Sulfate (EPA 300.0)	150		1.0	0.35	mg/L			05/08/23 23:12	1
Total Dissolved Solids (SM 2540C)	490		10	7.8	mg/L			04/17/23 10:04	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	0.243		0.126	0.128	1.00	0.138	pCi/L	04/27/23 12:38	05/19/23 08:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.3		30 - 110					04/27/23 12:38	05/19/23 08:17	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	-0.0840	U	0.325	0.325	1.00	0.630	pCi/L	04/27/23 13:23	05/16/23 11:41	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: BAC-23-F-20230411-01

Lab Sample ID: 240-183575-2

Date Collected: 04/11/23 11:22

Matrix: Water

Date Received: 04/14/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	81.3		30 - 110	04/27/23 13:23	05/16/23 11:41	1
Y Carrier	84.9		30 - 110	04/27/23 13:23	05/16/23 11:41	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.159	U	0.349	0.349	5.00	0.630	pCi/L		05/19/23 14:49	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: DUP-005-BAC-23-F-20230411-01

Lab Sample ID: 240-183575-3

Date Collected: 04/11/23 11:22

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	290		100	57	ug/L		04/18/23 14:00	04/20/23 02:48	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.75	J	2.0	0.57	ug/L		04/18/23 14:00	04/20/23 01:39	1
Arsenic	1.9	J	5.0	0.75	ug/L		04/18/23 14:00	04/20/23 01:39	1
Barium	140		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 01:39	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 01:39	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 01:39	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/20/23 01:39	1
Cobalt	1.1		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 01:39	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 01:39	1
Lithium	5.6	J ^+	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 01:39	1
Magnesium	15000		1000	61	ug/L		04/18/23 14:00	04/20/23 01:39	1
Molybdenum	1.9	J	5.0	1.1	ug/L		04/18/23 14:00	04/20/23 01:39	1
Potassium	1900		1000	220	ug/L		04/18/23 14:00	04/20/23 01:39	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 01:39	1
Sodium	19000		1000	330	ug/L		04/18/23 14:00	04/20/23 01:39	1
Thallium	0.86	J	1.0	0.20	ug/L		04/18/23 14:00	04/20/23 01:39	1
Calcium	130000		1000	250	ug/L		04/18/23 14:00	04/20/23 01:39	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		04/18/23 14:00	04/19/23 20:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230		5.0	2.6	mg/L			04/24/23 14:34	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230		5.0	2.6	mg/L			04/24/23 14:34	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 14:34	1
Chloride (EPA 300.0)	44		1.0	0.13	mg/L			05/09/23 22:22	1
Fluoride (EPA 300.0)	0.14		0.050	0.024	mg/L			05/09/23 22:22	1
Sulfate (EPA 300.0)	150		1.0	0.35	mg/L			05/09/23 22:22	1
Total Dissolved Solids (SM 2540C)	500		10	7.8	mg/L			04/17/23 10:04	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	0.242		0.152	0.153	1.00	0.203	pCi/L	04/27/23 12:38	05/19/23 08:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.5		30 - 110					04/27/23 12:38	05/19/23 08:17	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	-0.216	U	0.380	0.381	1.00	0.757	pCi/L	04/27/23 13:23	05/16/23 11:42	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: DUP-005-BAC-23-F-20230411-01

Lab Sample ID: 240-183575-3

Date Collected: 04/11/23 11:22

Matrix: Water

Date Received: 04/14/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	73.5		30 - 110	04/27/23 13:23	05/16/23 11:42	1
Y Carrier	83.4		30 - 110	04/27/23 13:23	05/16/23 11:42	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.0252	U	0.409	0.411	5.00	0.757	pCi/L		05/19/23 14:49	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: BAC-08-F-20230411-01

Lab Sample ID: 240-183575-4

Date Collected: 04/11/23 12:27

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	110		100	57	ug/L		04/18/23 14:00	04/20/23 02:53	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		04/18/23 14:00	04/20/23 01:41	1
Arsenic	3.3	J	5.0	0.75	ug/L		04/18/23 14:00	04/20/23 01:41	1
Barium	180		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 01:41	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 01:41	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 01:41	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/20/23 01:41	1
Cobalt	2.6		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 01:41	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 01:41	1
Lithium	5.6	J ^+	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 01:41	1
Magnesium	12000		1000	61	ug/L		04/18/23 14:00	04/20/23 01:41	1
Molybdenum	2.3	J	5.0	1.1	ug/L		04/18/23 14:00	04/20/23 01:41	1
Potassium	1300		1000	220	ug/L		04/18/23 14:00	04/20/23 01:41	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 01:41	1
Sodium	12000		1000	330	ug/L		04/18/23 14:00	04/20/23 01:41	1
Thallium	0.29	J	1.0	0.20	ug/L		04/18/23 14:00	04/20/23 01:41	1
Calcium	93000		1000	250	ug/L		04/18/23 14:00	04/20/23 01:41	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		04/18/23 14:00	04/19/23 20:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	210		5.0	2.6	mg/L			04/24/23 14:40	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	210		5.0	2.6	mg/L			04/24/23 14:40	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 14:40	1
Chloride (EPA 300.0)	24		1.0	0.13	mg/L			05/09/23 01:33	1
Fluoride (EPA 300.0)	0.19		0.050	0.024	mg/L			05/09/23 01:33	1
Sulfate (EPA 300.0)	89		1.0	0.35	mg/L			05/09/23 01:33	1
Total Dissolved Solids (SM 2540C)	350		10	7.8	mg/L			04/17/23 10:04	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0283	U	0.0931	0.0931	1.00	0.181	pCi/L	04/27/23 12:38	05/19/23 08:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	70.8		30 - 110					04/27/23 12:38	05/19/23 08:17	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	-0.164	U	0.294	0.295	1.00	0.616	pCi/L	04/27/23 13:23	05/16/23 11:42	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: BAC-08-F-20230411-01

Lab Sample ID: 240-183575-4

Date Collected: 04/11/23 12:27

Matrix: Water

Date Received: 04/14/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	70.8		30 - 110	04/27/23 13:23	05/16/23 11:42	1
Y Carrier	85.6		30 - 110	04/27/23 13:23	05/16/23 11:42	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	-0.135	U	0.308	0.309	5.00	0.616	pCi/L		05/19/23 14:49	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: BAC-14-F-20230411-01

Lab Sample ID: 240-183575-5

Date Collected: 04/11/23 14:00

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2800		100	57	ug/L		04/18/23 14:00	04/20/23 02:57	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		04/18/23 14:00	04/20/23 01:44	1
Arsenic	3.9	J	5.0	0.75	ug/L		04/18/23 14:00	04/20/23 01:44	1
Barium	110		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 01:44	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 01:44	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 01:44	1
Chromium	1.6	J	5.0	1.2	ug/L		04/18/23 14:00	04/20/23 01:44	1
Cobalt	2.1		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 01:44	1
Lead	0.76	J	1.0	0.45	ug/L		04/18/23 14:00	04/20/23 01:44	1
Lithium	6.6	J	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 14:53	1
Magnesium	21000		1000	61	ug/L		04/18/23 14:00	04/20/23 01:44	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/20/23 01:44	1
Potassium	1600		1000	220	ug/L		04/18/23 14:00	04/20/23 01:44	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 01:44	1
Sodium	22000		1000	330	ug/L		04/18/23 14:00	04/20/23 01:44	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 01:44	1
Calcium	77000		1000	250	ug/L		04/18/23 14:00	04/20/23 01:44	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		04/18/23 14:00	04/19/23 20:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	89		5.0	2.6	mg/L			04/24/23 14:44	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	89		5.0	2.6	mg/L			04/24/23 14:44	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 14:44	1
Chloride (EPA 300.0)	34		1.0	0.13	mg/L			05/09/23 01:53	1
Fluoride (EPA 300.0)	0.067		0.050	0.024	mg/L			05/09/23 01:53	1
Sulfate (EPA 300.0)	230	E	1.0	0.35	mg/L			05/09/23 01:53	1
Total Dissolved Solids (SM 2540C)	470		10	7.8	mg/L			04/17/23 10:04	1

General Chemistry - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate (EPA 300.0)	220	H	5.0	1.7	mg/L			05/11/23 00:19	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	0.354		0.229	0.231	1.00	0.292	pCi/L	04/27/23 12:38	05/19/23 08:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	53.3		30 - 110					04/27/23 12:38	05/19/23 08:18	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: BAC-14-F-20230411-01

Lab Sample ID: 240-183575-5

Date Collected: 04/11/23 14:00

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.320	U G	0.693	0.694	1.00	1.37	pCi/L	04/27/23 13:23	05/16/23 11:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	53.3		30 - 110					04/27/23 13:23	05/16/23 11:42	1
Y Carrier	80.7		30 - 110					04/27/23 13:23	05/16/23 11:42	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	0.0335	U	0.730	0.731	5.00	1.37	pCi/L		05/19/23 14:49	1



Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: BAC-12-F-20230411-01

Lab Sample ID: 240-183575-6

Date Collected: 04/11/23 14:58

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2000		100	57	ug/L		04/18/23 14:00	04/20/23 03:01	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		04/18/23 14:00	04/20/23 01:47	1
Arsenic	16		5.0	0.75	ug/L		04/18/23 14:00	04/20/23 01:47	1
Barium	210		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 01:47	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 01:47	1
Cadmium	0.23	J	1.0	0.20	ug/L		04/18/23 14:00	04/20/23 01:47	1
Chromium	8.0		5.0	1.2	ug/L		04/18/23 14:00	04/20/23 01:47	1
Cobalt	22		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 01:47	1
Lead	15		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 01:47	1
Lithium	14		8.0	1.7	ug/L		04/18/23 14:00	04/20/23 14:55	1
Magnesium	17000		1000	61	ug/L		04/18/23 14:00	04/20/23 01:47	1
Molybdenum	2.4	J	5.0	1.1	ug/L		04/18/23 14:00	04/20/23 01:47	1
Potassium	3200		1000	220	ug/L		04/18/23 14:00	04/20/23 01:47	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 01:47	1
Sodium	28000		1000	330	ug/L		04/18/23 14:00	04/20/23 01:47	1
Thallium	0.22	J	1.0	0.20	ug/L		04/18/23 14:00	04/20/23 01:47	1
Calcium	77000		1000	250	ug/L		04/18/23 14:00	04/20/23 01:47	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		04/18/23 14:00	04/19/23 20:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	100		5.0	2.6	mg/L			04/24/23 14:48	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	100		5.0	2.6	mg/L			04/24/23 14:48	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 14:48	1
Chloride (EPA 300.0)	58		1.0	0.13	mg/L			05/09/23 02:13	1
Fluoride (EPA 300.0)	0.082		0.050	0.024	mg/L			05/09/23 02:13	1
Sulfate (EPA 300.0)	200		1.0	0.35	mg/L			05/09/23 02:13	1
Total Dissolved Solids (SM 2540C)	460		10	7.8	mg/L			04/17/23 10:04	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.406	U G	0.629	0.630	1.00	1.08	pCi/L	04/27/23 12:38	05/19/23 08:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	24.8	X	30 - 110					04/27/23 12:38	05/19/23 08:21	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	-1.43	U G	1.91	1.92	1.00	4.08	pCi/L	04/27/23 13:23	05/16/23 11:42	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: BAC-12-F-20230411-01

Lab Sample ID: 240-183575-6

Date Collected: 04/11/23 14:58

Matrix: Water

Date Received: 04/14/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	24.8	X	30 - 110	04/27/23 13:23	05/16/23 11:42	1
Y Carrier	81.9		30 - 110	04/27/23 13:23	05/16/23 11:42	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	-1.02	U	2.01	2.02	5.00	4.08	pCi/L		05/19/23 14:49	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: EB-001-F-20230411-01

Lab Sample ID: 240-183575-7

Date Collected: 04/11/23 15:30

Matrix: Water

Date Received: 04/14/23 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		04/18/23 14:00	04/20/23 03:06	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		04/18/23 14:00	04/20/23 01:49	1
Arsenic	ND		5.0	0.75	ug/L		04/18/23 14:00	04/20/23 01:49	1
Barium	ND		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 01:49	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 01:49	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 01:49	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/20/23 01:49	1
Cobalt	ND		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 01:49	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 01:49	1
Lithium	ND	^+	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 01:49	1
Magnesium	ND		1000	61	ug/L		04/18/23 14:00	04/20/23 01:49	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/20/23 01:49	1
Potassium	ND		1000	220	ug/L		04/18/23 14:00	04/20/23 01:49	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 01:49	1
Sodium	ND		1000	330	ug/L		04/18/23 14:00	04/20/23 01:49	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 01:49	1
Calcium	ND		1000	250	ug/L		04/18/23 14:00	04/20/23 01:49	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		04/18/23 14:00	04/19/23 20:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 14:52	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 14:52	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 14:52	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			05/08/23 21:11	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			05/08/23 21:11	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			05/08/23 21:11	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			04/17/23 10:04	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	-0.0166	U	0.0933	0.0933	1.00	0.196	pCi/L	04/27/23 12:38	05/19/23 08:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.1		30 - 110					04/27/23 12:38	05/19/23 08:21	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.398	U	0.342	0.344	1.00	0.536	pCi/L	04/27/23 13:23	05/16/23 11:42	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: EB-001-F-20230411-01

Lab Sample ID: 240-183575-7

Date Collected: 04/11/23 15:30

Matrix: Water

Date Received: 04/14/23 08:00

<u>Carrier</u>	<u>%Yield</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Ba Carrier	92.1		30 - 110	04/27/23 13:23	05/16/23 11:42	1
Y Carrier	81.5		30 - 110	04/27/23 13:23	05/16/23 11:42	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

<u>Analyte</u>	<u>Result</u>	<u>Qualifier</u>	<u>Count Uncert. (2σ+/-)</u>	<u>Total Uncert. (2σ+/-)</u>	<u>RL</u>	<u>MDC</u>	<u>Unit</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Combined Radium 226 + 228	0.381	U	0.354	0.356	5.00	0.536	pCi/L		05/19/23 14:49	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: BAC-07-F-20230412-01

Lab Sample ID: 240-183575-8

Date Collected: 04/12/23 10:34

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1200		100	57	ug/L		04/18/23 14:00	04/20/23 03:10	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		04/18/23 14:00	04/20/23 01:52	1
Arsenic	ND		5.0	0.75	ug/L		04/18/23 14:00	04/20/23 01:52	1
Barium	45		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 01:52	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 01:52	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 01:52	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/20/23 01:52	1
Cobalt	1.7		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 01:52	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 01:52	1
Lithium	7.7	J ^+	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 01:52	1
Magnesium	20000		1000	61	ug/L		04/18/23 14:00	04/20/23 01:52	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/20/23 01:52	1
Potassium	1300		1000	220	ug/L		04/18/23 14:00	04/20/23 01:52	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 01:52	1
Sodium	16000		1000	330	ug/L		04/18/23 14:00	04/20/23 01:52	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 01:52	1
Calcium	90000		1000	250	ug/L		04/18/23 14:00	04/20/23 01:52	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		04/18/23 14:00	04/19/23 20:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	130		5.0	2.6	mg/L			04/24/23 14:55	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	130		5.0	2.6	mg/L			04/24/23 14:55	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 14:55	1
Chloride (EPA 300.0)	26		1.0	0.13	mg/L			05/09/23 02:54	1
Fluoride (EPA 300.0)	0.076		0.050	0.024	mg/L			05/09/23 02:54	1
Sulfate (EPA 300.0)	200		1.0	0.35	mg/L			05/09/23 02:54	1
Total Dissolved Solids (SM 2540C)	440		10	7.8	mg/L			04/18/23 11:58	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	0.0649	U	0.114	0.114	1.00	0.200	pCi/L	04/27/23 12:38	05/19/23 08:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.5		30 - 110					04/27/23 12:38	05/19/23 08:21	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	0.109	U	0.357	0.357	1.00	0.633	pCi/L	04/27/23 13:23	05/16/23 11:42	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: BAC-07-F-20230412-01

Lab Sample ID: 240-183575-8

Date Collected: 04/12/23 10:34

Matrix: Water

Date Received: 04/14/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	88.5		30 - 110	04/27/23 13:23	05/16/23 11:42	1
Y Carrier	81.9		30 - 110	04/27/23 13:23	05/16/23 11:42	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.174	U	0.375	0.375	5.00	0.633	pCi/L		05/19/23 14:49	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: BAC-18-F-20230412-01

Lab Sample ID: 240-183575-9

Date Collected: 04/12/23 11:31

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1500		100	57	ug/L		04/18/23 14:00	04/20/23 03:14	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		04/18/23 14:00	04/20/23 01:55	1
Arsenic	1.2	J	5.0	0.75	ug/L		04/18/23 14:00	04/20/23 01:55	1
Barium	39		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 01:55	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 01:55	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 01:55	1
Chromium	1.3	J	5.0	1.2	ug/L		04/18/23 14:00	04/20/23 01:55	1
Cobalt	2.9		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 01:55	1
Lead	0.73	J	1.0	0.45	ug/L		04/18/23 14:00	04/20/23 01:55	1
Lithium	7.7	J	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 14:58	1
Magnesium	20000		1000	61	ug/L		04/18/23 14:00	04/20/23 01:55	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/20/23 01:55	1
Potassium	1300		1000	220	ug/L		04/18/23 14:00	04/20/23 01:55	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 01:55	1
Sodium	15000		1000	330	ug/L		04/18/23 14:00	04/20/23 01:55	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 01:55	1
Calcium	81000		1000	250	ug/L		04/18/23 14:00	04/20/23 01:55	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		04/18/23 14:00	04/19/23 20:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	95		5.0	2.6	mg/L			04/24/23 15:00	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	95		5.0	2.6	mg/L			04/24/23 15:00	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 15:00	1
Chloride (EPA 300.0)	25		1.0	0.13	mg/L			05/09/23 03:14	1
Fluoride (EPA 300.0)	0.057		0.050	0.024	mg/L			05/09/23 03:14	1
Sulfate (EPA 300.0)	200		1.0	0.35	mg/L			05/09/23 03:14	1
Total Dissolved Solids (SM 2540C)	410		10	7.8	mg/L			04/18/23 11:58	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	0.244	U	0.216	0.217	1.00	0.331	pCi/L	04/27/23 12:38	05/19/23 08:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	67.8		30 - 110					04/27/23 12:38	05/19/23 08:22	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	0.217	U	0.531	0.532	1.00	0.936	pCi/L	04/27/23 13:23	05/16/23 11:42	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: BAC-18-F-20230412-01

Lab Sample ID: 240-183575-9

Date Collected: 04/12/23 11:31

Matrix: Water

Date Received: 04/14/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	67.8		30 - 110	04/27/23 13:23	05/16/23 11:42	1
Y Carrier	86.7		30 - 110	04/27/23 13:23	05/16/23 11:42	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.460	U	0.573	0.575	5.00	0.936	pCi/L		05/19/23 14:49	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: BAC-06-F-20230412-01

Lab Sample ID: 240-183575-10

Date Collected: 04/12/23 13:00

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1900		100	57	ug/L		04/18/23 14:00	04/20/23 03:18	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		04/18/23 14:00	04/20/23 02:03	1
Arsenic	0.95	J	5.0	0.75	ug/L		04/18/23 14:00	04/20/23 02:03	1
Barium	97		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 02:03	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 02:03	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 02:03	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/20/23 02:03	1
Cobalt	4.2		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 02:03	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 02:03	1
Lithium	7.9	J ^+	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 02:03	1
Magnesium	26000		1000	61	ug/L		04/18/23 14:00	04/20/23 02:03	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/20/23 02:03	1
Potassium	1400		1000	220	ug/L		04/18/23 14:00	04/20/23 02:03	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 02:03	1
Sodium	16000		1000	330	ug/L		04/18/23 14:00	04/20/23 02:03	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 02:03	1
Calcium	120000		1000	250	ug/L		04/18/23 14:00	04/20/23 02:03	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		04/18/23 14:00	04/19/23 21:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	190		5.0	2.6	mg/L			04/24/23 15:04	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	190		5.0	2.6	mg/L			04/24/23 15:04	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 15:04	1
Chloride (EPA 300.0)	24		1.0	0.13	mg/L			05/10/23 17:56	1
Fluoride (EPA 300.0)	0.097		0.050	0.024	mg/L			05/10/23 17:56	1
Sulfate (EPA 300.0)	230		5.0	1.7	mg/L			05/10/23 18:16	5
Total Dissolved Solids (SM 2540C)	540		10	7.8	mg/L			04/18/23 11:58	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.284		0.167	0.168	1.00	0.229	pCi/L	04/27/23 12:38	05/19/23 08:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.8		30 - 110					04/27/23 12:38	05/19/23 08:22	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	-0.110	U	0.213	0.213	1.00	0.456	pCi/L	04/27/23 13:23	05/16/23 11:43	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: BAC-06-F-20230412-01

Lab Sample ID: 240-183575-10

Date Collected: 04/12/23 13:00

Matrix: Water

Date Received: 04/14/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	84.8		30 - 110	04/27/23 13:23	05/16/23 11:43	1
Y Carrier	86.7		30 - 110	04/27/23 13:23	05/16/23 11:43	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.174	U	0.271	0.271	5.00	0.456	pCi/L		05/19/23 14:49	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: DUP-006-BAC-06-F-20230412-01

Lab Sample ID: 240-183575-11

Date Collected: 04/12/23 13:00

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1900		100	57	ug/L		04/18/23 14:00	04/20/23 03:31	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		04/18/23 14:00	04/20/23 02:05	1
Arsenic	ND		5.0	0.75	ug/L		04/18/23 14:00	04/20/23 02:05	1
Barium	96		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 02:05	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 02:05	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 02:05	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/20/23 02:05	1
Cobalt	4.1		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 02:05	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 02:05	1
Lithium	6.6	J	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 15:06	1
Magnesium	26000		1000	61	ug/L		04/18/23 14:00	04/20/23 02:05	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/20/23 02:05	1
Potassium	1400		1000	220	ug/L		04/18/23 14:00	04/20/23 02:05	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 02:05	1
Sodium	16000		1000	330	ug/L		04/18/23 14:00	04/20/23 02:05	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 02:05	1
Calcium	120000		1000	250	ug/L		04/18/23 14:00	04/20/23 02:05	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		04/18/23 14:00	04/19/23 21:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	190		5.0	2.6	mg/L			04/24/23 15:08	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	190		5.0	2.6	mg/L			04/24/23 15:08	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 15:08	1
Chloride (EPA 300.0)	24		1.0	0.13	mg/L			05/10/23 18:36	1
Fluoride (EPA 300.0)	0.098		0.050	0.024	mg/L			05/10/23 18:36	1
Sulfate (EPA 300.0)	230		5.0	1.7	mg/L			05/10/23 19:37	5
Total Dissolved Solids (SM 2540C)	530		10	7.8	mg/L			04/18/23 11:58	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.226		0.125	0.127	1.00	0.161	pCi/L	04/27/23 13:34	05/19/23 19:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.4		30 - 110					04/27/23 13:34	05/19/23 19:38	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.618		0.343	0.347	1.00	0.487	pCi/L	04/27/23 14:08	05/16/23 11:15	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: DUP-006-BAC-06-F-20230412-01

Lab Sample ID: 240-183575-11

Date Collected: 04/12/23 13:00

Matrix: Water

Date Received: 04/14/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	91.4		30 - 110	04/27/23 14:08	05/16/23 11:15	1
Y Carrier	86.0		30 - 110	04/27/23 14:08	05/16/23 11:15	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.844		0.365	0.370	5.00	0.487	pCi/L		05/22/23 12:41	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: BAC-16-F-20230412-01

Lab Sample ID: 240-183575-12

Date Collected: 04/12/23 14:29

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1500		100	57	ug/L		04/18/23 14:00	04/20/23 03:35	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		04/18/23 14:00	04/20/23 02:08	1
Arsenic	1.1	J	5.0	0.75	ug/L		04/18/23 14:00	04/20/23 02:08	1
Barium	62		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 02:08	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 02:08	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 02:08	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/20/23 02:08	1
Cobalt	2.3		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 02:08	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 02:08	1
Lithium	6.9	J	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 15:09	1
Magnesium	22000		1000	61	ug/L		04/18/23 14:00	04/20/23 02:08	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/20/23 02:08	1
Potassium	1600		1000	220	ug/L		04/18/23 14:00	04/20/23 02:08	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 02:08	1
Sodium	15000		1000	330	ug/L		04/18/23 14:00	04/20/23 02:08	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 02:08	1
Calcium	100000		1000	250	ug/L		04/18/23 14:00	04/20/23 02:08	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		04/18/23 14:00	04/19/23 21:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	160		5.0	2.6	mg/L			04/24/23 15:23	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	160		5.0	2.6	mg/L			04/24/23 15:23	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 15:23	1
Chloride (EPA 300.0)	26		1.0	0.13	mg/L			05/10/23 19:57	1
Fluoride (EPA 300.0)	0.060		0.050	0.024	mg/L			05/10/23 19:57	1
Sulfate (EPA 300.0)	200		1.0	0.35	mg/L			05/10/23 19:57	1
Total Dissolved Solids (SM 2540C)	490		10	7.8	mg/L			04/18/23 11:58	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0691	U	0.0928	0.0930	1.00	0.156	pCi/L	04/27/23 13:34	05/19/23 19:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		30 - 110					04/27/23 13:34	05/19/23 19:38	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	-0.0666	U	0.232	0.232	1.00	0.463	pCi/L	04/27/23 14:08	05/16/23 11:15	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: BAC-16-F-20230412-01

Lab Sample ID: 240-183575-12

Date Collected: 04/12/23 14:29

Matrix: Water

Date Received: 04/14/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		30 - 110	04/27/23 14:08	05/16/23 11:15	1
Y Carrier	82.6		30 - 110	04/27/23 14:08	05/16/23 11:15	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.00257	U	0.250	0.250	5.00	0.463	pCi/L		05/22/23 12:41	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: EB-001-F-20230412-01

Lab Sample ID: 240-183575-13

Date Collected: 04/12/23 15:30

Matrix: Water

Date Received: 04/14/23 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		04/18/23 14:00	04/20/23 03:39	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		04/18/23 14:00	04/20/23 02:11	1
Arsenic	ND		5.0	0.75	ug/L		04/18/23 14:00	04/20/23 02:11	1
Barium	ND		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 02:11	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 02:11	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 02:11	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/20/23 02:11	1
Cobalt	ND		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 02:11	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 02:11	1
Lithium	ND	^+	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 02:11	1
Magnesium	ND		1000	61	ug/L		04/18/23 14:00	04/20/23 02:11	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/20/23 02:11	1
Potassium	ND		1000	220	ug/L		04/18/23 14:00	04/20/23 02:11	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 02:11	1
Sodium	ND		1000	330	ug/L		04/18/23 14:00	04/20/23 02:11	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 02:11	1
Calcium	ND		1000	250	ug/L		04/18/23 14:00	04/20/23 02:11	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		04/18/23 14:00	04/19/23 21:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 15:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 15:31	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 15:31	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			05/10/23 20:37	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			05/10/23 20:37	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			05/10/23 20:37	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			04/18/23 11:58	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	-0.0403	U	0.0647	0.0648	1.00	0.156	pCi/L	04/27/23 13:34	05/19/23 19:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.5		30 - 110					04/27/23 13:34	05/19/23 19:38	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	0.214	U	0.262	0.263	1.00	0.434	pCi/L	04/27/23 14:08	05/16/23 11:15	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: EB-001-F-20230412-01

Lab Sample ID: 240-183575-13

Date Collected: 04/12/23 15:30

Matrix: Water

Date Received: 04/14/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	97.5		30 - 110	04/27/23 14:08	05/16/23 11:15	1
Y Carrier	83.4		30 - 110	04/27/23 14:08	05/16/23 11:15	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.174	U	0.270	0.271	5.00	0.434	pCi/L		05/22/23 12:41	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (30-110)	
240-183575-1	BAC-10-F-20230411-01	37.3	
240-183575-2	BAC-23-F-20230411-01	81.3	
240-183575-3	DUP-005-BAC-23-F-20230411-01	73.5	
240-183575-4	BAC-08-F-20230411-01	70.8	
240-183575-5	BAC-14-F-20230411-01	53.3	
240-183575-6	BAC-12-F-20230411-01	24.8 X	
240-183575-7	EB-001-F-20230411-01	92.1	
240-183575-8	BAC-07-F-20230412-01	88.5	
240-183575-9	BAC-18-F-20230412-01	67.8	
240-183575-10	BAC-06-F-20230412-01	84.8	
240-183575-11	DUP-006-BAC-06-F-20230412-01	91.4	
240-183575-12	BAC-16-F-20230412-01	92.9	
240-183575-13	EB-001-F-20230412-01	97.5	
LCS 160-609082/2-A	Lab Control Sample	95.8	
LCS 160-609093/2-A	Lab Control Sample	94.3	
LCSD 160-609082/3-A	Lab Control Sample Dup	94.8	
LCSD 160-609093/3-A	Lab Control Sample Dup	99.5	
MB 160-609082/1-A	Method Blank	95.1	
MB 160-609093/1-A	Method Blank	92.9	

Tracer/Carrier Legend
 Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (30-110)	Y (30-110)
240-183575-1	BAC-10-F-20230411-01	37.3	84.1
240-183575-2	BAC-23-F-20230411-01	81.3	84.9
240-183575-3	DUP-005-BAC-23-F-20230411-01	73.5	83.4
240-183575-4	BAC-08-F-20230411-01	70.8	85.6
240-183575-5	BAC-14-F-20230411-01	53.3	80.7
240-183575-6	BAC-12-F-20230411-01	24.8 X	81.9
240-183575-7	EB-001-F-20230411-01	92.1	81.5
240-183575-8	BAC-07-F-20230412-01	88.5	81.9
240-183575-9	BAC-18-F-20230412-01	67.8	86.7
240-183575-10	BAC-06-F-20230412-01	84.8	86.7
240-183575-11	DUP-006-BAC-06-F-20230412-01	91.4	86.0
240-183575-12	BAC-16-F-20230412-01	92.9	82.6
240-183575-13	EB-001-F-20230412-01	97.5	83.4
LCS 160-609091/2-A	Lab Control Sample	95.8	85.6
LCS 160-609099/2-A	Lab Control Sample	94.3	86.4
LCSD 160-609091/3-A	Lab Control Sample Dup	94.8	83.7
LCSD 160-609099/3-A	Lab Control Sample Dup	99.5	84.9
MB 160-609091/1-A	Method Blank	95.1	84.5

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Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-183575-1

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

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
MB 160-609099/1-A	Method Blank	92.9	86.7

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-569820/1-A
Matrix: Water
Analysis Batch: 570110

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 569820

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		04/18/23 14:00	04/20/23 02:02	1

Lab Sample ID: LCS 240-569820/2-A
Matrix: Water
Analysis Batch: 570110

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 569820

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

Lab Sample ID: 240-183575-1 MS
Matrix: Water
Analysis Batch: 570110

Client Sample ID: BAC-10-F-20230411-01
Prep Type: Total Recoverable
Prep Batch: 569820

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	750		1000	1730		ug/L		98	75 - 125

Lab Sample ID: 240-183575-1 MSD
Matrix: Water
Analysis Batch: 570110

Client Sample ID: BAC-10-F-20230411-01
Prep Type: Total Recoverable
Prep Batch: 569820

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Boron	750		1000	1770		ug/L		101	75 - 125	2	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-569820/1-A
Matrix: Water
Analysis Batch: 570098

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 569820

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		04/18/23 14:00	04/20/23 01:08	1
Arsenic	ND		5.0	0.75	ug/L		04/18/23 14:00	04/20/23 01:08	1
Barium	ND		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 01:08	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 01:08	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 01:08	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/20/23 01:08	1
Cobalt	ND		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 01:08	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 01:08	1
Lithium	ND	^+	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 01:08	1
Magnesium	ND		1000	61	ug/L		04/18/23 14:00	04/20/23 01:08	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/20/23 01:08	1
Potassium	ND		1000	220	ug/L		04/18/23 14:00	04/20/23 01:08	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 01:08	1
Sodium	ND		1000	330	ug/L		04/18/23 14:00	04/20/23 01:08	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 01:08	1
Calcium	ND		1000	250	ug/L		04/18/23 14:00	04/20/23 01:08	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

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

Lab Sample ID: LCS 240-569820/3-A
Matrix: Water
Analysis Batch: 570098

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 569820

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	105		ug/L		105	80 - 120
Arsenic	1000	951		ug/L		95	80 - 120
Barium	1000	978		ug/L		98	80 - 120
Beryllium	500	485		ug/L		97	80 - 120
Cadmium	500	492		ug/L		98	80 - 120
Chromium	500	489		ug/L		98	80 - 120
Cobalt	500	487		ug/L		97	80 - 120
Lead	500	464		ug/L		93	80 - 120
Lithium	500	531	^+	ug/L		106	80 - 120
Magnesium	25000	23600		ug/L		94	80 - 120
Molybdenum	500	487		ug/L		97	80 - 120
Potassium	25000	24100		ug/L		96	80 - 120
Selenium	1000	940		ug/L		94	80 - 120
Sodium	25000	23700		ug/L		95	80 - 120
Thallium	1000	973		ug/L		97	80 - 120
Calcium	25000	23800		ug/L		95	80 - 120

Lab Sample ID: 240-183575-2 MS
Matrix: Water
Analysis Batch: 570098

Client Sample ID: BAC-23-F-20230411-01
Prep Type: Total Recoverable
Prep Batch: 569820

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	1.7	J	1000	966		ug/L		96	80 - 120
Barium	140		1000	1120		ug/L		99	80 - 120
Beryllium	ND		500	474		ug/L		95	80 - 120
Cadmium	ND		500	484		ug/L		97	80 - 120
Chromium	ND		500	494		ug/L		99	80 - 120
Cobalt	1.0		500	484		ug/L		97	80 - 120
Lead	ND		500	462		ug/L		92	80 - 120
Lithium	4.6	J ^+	500	535	^+	ug/L		106	80 - 120
Magnesium	15000		25000	37800		ug/L		91	80 - 120
Molybdenum	ND		500	498		ug/L		100	80 - 120
Potassium	1900		25000	25900		ug/L		96	80 - 120
Selenium	ND		1000	944		ug/L		94	80 - 120
Sodium	18000		25000	41400		ug/L		92	80 - 120
Thallium	ND		1000	963		ug/L		96	80 - 120
Calcium	130000		25000	152000	4	ug/L		87	80 - 120

Lab Sample ID: 240-183575-2 MSD
Matrix: Water
Analysis Batch: 570098

Client Sample ID: BAC-23-F-20230411-01
Prep Type: Total Recoverable
Prep Batch: 569820

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Antimony	ND		100	106		ug/L		106	80 - 120	1	20
Arsenic	1.7	J	1000	970		ug/L		97	80 - 120	0	20
Barium	140		1000	1130		ug/L		99	80 - 120	0	20
Beryllium	ND		500	474		ug/L		95	80 - 120	0	20
Cadmium	ND		500	483		ug/L		97	80 - 120	0	20

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

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

Lab Sample ID: 240-183575-2 MSD
 Matrix: Water
 Analysis Batch: 570098

Client Sample ID: BAC-23-F-20230411-01
 Prep Type: Total Recoverable
 Prep Batch: 569820

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium	ND		500	477		ug/L		95	80 - 120	4	20
Cobalt	1.0		500	485		ug/L		97	80 - 120	0	20
Lead	ND		500	458		ug/L		92	80 - 120	1	20
Lithium	4.6	J ^+	500	538	^+	ug/L		107	80 - 120	1	20
Magnesium	15000		25000	37300		ug/L		89	80 - 120	1	20
Molybdenum	ND		500	499		ug/L		100	80 - 120	0	20
Potassium	1900		25000	25300		ug/L		93	80 - 120	2	20
Selenium	ND		1000	918		ug/L		92	80 - 120	3	20
Sodium	18000		25000	40800		ug/L		89	80 - 120	2	20
Thallium	ND		1000	948		ug/L		95	80 - 120	2	20
Calcium	130000		25000	150000	4	ug/L		80	80 - 120	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-569826/1-A
 Matrix: Water
 Analysis Batch: 570094

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 569826

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		04/18/23 14:00	04/19/23 20:28	1

Lab Sample ID: LCS 240-569826/2-A
 Matrix: Water
 Analysis Batch: 570094

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 569826

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.65		ug/L		113	80 - 120

Lab Sample ID: 240-183575-1 MS
 Matrix: Water
 Analysis Batch: 570094

Client Sample ID: BAC-10-F-20230411-01
 Prep Type: Total/NA
 Prep Batch: 569826

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND	F1	1.00	1.26	F1	ug/L		126	80 - 120

Lab Sample ID: 240-183575-1 MSD
 Matrix: Water
 Analysis Batch: 570094

Client Sample ID: BAC-10-F-20230411-01
 Prep Type: Total/NA
 Prep Batch: 569826

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND	F1	1.00	1.04		ug/L		104	80 - 120	19	20

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-570651/30
 Matrix: Water
 Analysis Batch: 570651

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			04/24/23 13:02	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Method: 2320B-1997 - Alkalinity, Total (Continued)

Lab Sample ID: MB 240-570651/30
Matrix: Water
Analysis Batch: 570651

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			04/24/23 13:02	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 13:02	1

Lab Sample ID: MB 240-570651/4
Matrix: Water
Analysis Batch: 570651

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			04/24/23 11:12	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 11:12	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 11:12	1

Lab Sample ID: MB 240-570651/56
Matrix: Water
Analysis Batch: 570651

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			04/24/23 15:17	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 15:17	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 15:17	1

Lab Sample ID: LCS 240-570651/29
Matrix: Water
Analysis Batch: 570651

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	148		mg/L		101	86 - 123

Lab Sample ID: LCS 240-570651/55
Matrix: Water
Analysis Batch: 570651

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	146		mg/L		100	86 - 123

Lab Sample ID: 240-183575-2 DU
Matrix: Water
Analysis Batch: 570651

Client Sample ID: BAC-23-F-20230411-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	230		236		mg/L		0.9	20
Bicarbonate Alkalinity as CaCO3	230		236		mg/L		0.9	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Lab Sample ID: 240-183575-12 DU
Matrix: Water
Analysis Batch: 570651

Client Sample ID: BAC-16-F-20230412-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	160		171		mg/L		5	20

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Method: 2320B-1997 - Alkalinity, Total (Continued)

Lab Sample ID: 240-183575-12 DU
 Matrix: Water
 Analysis Batch: 570651

Client Sample ID: BAC-16-F-20230412-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	160		171		mg/L		5	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-572493/3
 Matrix: Water
 Analysis Batch: 572493

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			05/08/23 13:48	1
Fluoride	ND		0.050	0.024	mg/L			05/08/23 13:48	1
Sulfate	ND		1.0	0.35	mg/L			05/08/23 13:48	1

Lab Sample ID: LCS 240-572493/4
 Matrix: Water
 Analysis Batch: 572493

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	2.62		mg/L		105	90 - 110
Sulfate	50.0	49.4		mg/L		99	90 - 110

Lab Sample ID: MB 240-572672/3
 Matrix: Water
 Analysis Batch: 572672

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			05/09/23 18:40	1
Fluoride	ND		0.050	0.024	mg/L			05/09/23 18:40	1
Sulfate	ND		1.0	0.35	mg/L			05/09/23 18:40	1

Lab Sample ID: LCS 240-572672/4
 Matrix: Water
 Analysis Batch: 572672

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	50.1		mg/L		100	90 - 110
Fluoride	2.50	2.60		mg/L		104	90 - 110
Sulfate	50.0	52.1		mg/L		104	90 - 110

Lab Sample ID: MB 240-572836/3
 Matrix: Water
 Analysis Batch: 572836

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			05/10/23 15:35	1
Fluoride	ND		0.050	0.024	mg/L			05/10/23 15:35	1
Sulfate	ND		1.0	0.35	mg/L			05/10/23 15:35	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 240-572836/4
Matrix: Water
Analysis Batch: 572836

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	50.3		mg/L		101	90 - 110
Fluoride	2.50	2.61		mg/L		104	90 - 110
Sulfate	50.0	51.9		mg/L		104	90 - 110

Lab Sample ID: 240-183575-5 MS
Matrix: Water
Analysis Batch: 572836

Client Sample ID: BAC-14-F-20230411-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	33	H	250	277		mg/L		98	80 - 120
Sulfate	220	H	250	480		mg/L		102	80 - 120

Lab Sample ID: 240-183575-5 MSD
Matrix: Water
Analysis Batch: 572836

Client Sample ID: BAC-14-F-20230411-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	33	H	250	281		mg/L		99	80 - 120	2	15
Sulfate	220	H	250	488		mg/L		106	80 - 120	2	15

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

Lab Sample ID: MB 240-569585/1
Matrix: Water
Analysis Batch: 569585

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			04/17/23 10:04	1

Lab Sample ID: LCS 240-569585/2
Matrix: Water
Analysis Batch: 569585

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	580	554		mg/L		96	80 - 120

Lab Sample ID: 240-183575-1 DU
Matrix: Water
Analysis Batch: 569585

Client Sample ID: BAC-10-F-20230411-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	680		675		mg/L		0.9	20

Lab Sample ID: MB 240-569791/1
Matrix: Water
Analysis Batch: 569791

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			04/18/23 11:58	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

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

Lab Sample ID: LCS 240-569791/2
 Matrix: Water
 Analysis Batch: 569791

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	580	550		mg/L		95	80 - 120

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-609082/1-A
 Matrix: Water
 Analysis Batch: 612289

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 609082

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.01321	U	0.0689	0.0689	1.00	0.139	pCi/L	04/27/23 12:38	05/19/23 08:13	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.1		30 - 110					04/27/23 12:38	05/19/23 08:13	1

Lab Sample ID: LCS 160-609082/2-A
 Matrix: Water
 Analysis Batch: 612289

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 609082

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	11.3	9.961		1.12	1.00	0.127	pCi/L	88	75 - 113
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	95.8		30 - 110						

Lab Sample ID: LCSD 160-609082/3-A
 Matrix: Water
 Analysis Batch: 612289

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 609082

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-226	11.3	9.774		1.10	1.00	0.168	pCi/L	86	75 - 113	0.08	1
Carrier	LCSD %Yield	LCSD Qualifier	Limits								
Ba Carrier	94.8		30 - 110								

Lab Sample ID: MB 160-609093/1-A
 Matrix: Water
 Analysis Batch: 612288

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 609093

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.05188	U	0.0943	0.0944	1.00	0.166	pCi/L	04/27/23 13:34	05/19/23 19:37	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		30 - 110					04/27/23 13:34	05/19/23 19:37	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: LCS 160-609093/2-A
Matrix: Water
Analysis Batch: 612288

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 609093

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	
Radium-226	11.3	9.643		1.07	1.00	0.175	pCi/L	85	75 - 113	
Carrier	%Yield	LCS Qualifier	Limits							
Ba Carrier	94.3		30 - 110							

Lab Sample ID: LCSD 160-609093/3-A
Matrix: Water
Analysis Batch: 612288

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 609093

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-226	11.3	10.10		1.11	1.00	0.174	pCi/L	89	75 - 113	0.21	1
Carrier	%Yield	LCSD Qualifier	Limits								
Ba Carrier	99.5		30 - 110								

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-609091/1-A
Matrix: Water
Analysis Batch: 611701

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 609091

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.07801	U	0.279	0.279	1.00	0.504	pCi/L	04/27/23 13:23	05/16/23 11:37	1
Carrier	%Yield	MB Qualifier	Limits							
Ba Carrier	95.1		30 - 110							
Y Carrier	84.5		30 - 110							
								Prepared	Analyzed	Dil Fac
								04/27/23 13:23	05/16/23 11:37	1
								04/27/23 13:23	05/16/23 11:37	1

Lab Sample ID: LCS 160-609091/2-A
Matrix: Water
Analysis Batch: 611701

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 609091

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	7.95	8.210		1.15	1.00	0.492	pCi/L	103	75 - 125
Carrier	%Yield	LCS Qualifier	Limits						
Ba Carrier	95.8		30 - 110						
Y Carrier	85.6		30 - 110						

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

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

Lab Sample ID: LCSD 160-609091/3-A
Matrix: Water
Analysis Batch: 611701

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 609091

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec		RER	RER Limit
									Limits	RER		
Radium-228	7.95	9.480		1.30	1.00	0.596	pCi/L	119	75 - 125	0.52		1
Carrier	%Yield	LCSD Qualifier	Limits									
Ba Carrier	94.8		30 - 110									
Y Carrier	83.7		30 - 110									

Lab Sample ID: MB 160-609099/1-A
Matrix: Water
Analysis Batch: 611850

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 609099

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared		Analyzed		Dil Fac
								Prepared	Analyzed	Prepared	Analyzed	
Radium-228	0.09285	U	0.270	0.271	1.00	0.481	pCi/L	04/27/23 14:08	05/16/23 11:14	05/16/23 11:14		1
Carrier	%Yield	MB Qualifier	Limits									
Ba Carrier	92.9		30 - 110									
Y Carrier	86.7		30 - 110									

Lab Sample ID: LCS 160-609099/2-A
Matrix: Water
Analysis Batch: 611850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 609099

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec		RER	RER Limit
									Limits	RER		
Radium-228	7.95	8.033		1.12	1.00	0.469	pCi/L	101	75 - 125			
Carrier	%Yield	LCS Qualifier	Limits									
Ba Carrier	94.3		30 - 110									
Y Carrier	86.4		30 - 110									

Lab Sample ID: LCSD 160-609099/3-A
Matrix: Water
Analysis Batch: 611850

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 609099

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec		RER	RER Limit
									Limits	RER		
Radium-228	7.95	8.070		1.10	1.00	0.411	pCi/L	101	75 - 125	0.02		1
Carrier	%Yield	LCSD Qualifier	Limits									
Ba Carrier	99.5		30 - 110									
Y Carrier	84.9		30 - 110									

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Metals

Prep Batch: 569820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183575-1	BAC-10-F-20230411-01	Total Recoverable	Water	3005A	
240-183575-2	BAC-23-F-20230411-01	Total Recoverable	Water	3005A	
240-183575-3	DUP-005-BAC-23-F-20230411-01	Total Recoverable	Water	3005A	
240-183575-4	BAC-08-F-20230411-01	Total Recoverable	Water	3005A	
240-183575-5	BAC-14-F-20230411-01	Total Recoverable	Water	3005A	
240-183575-6	BAC-12-F-20230411-01	Total Recoverable	Water	3005A	
240-183575-7	EB-001-F-20230411-01	Total Recoverable	Water	3005A	
240-183575-8	BAC-07-F-20230412-01	Total Recoverable	Water	3005A	
240-183575-9	BAC-18-F-20230412-01	Total Recoverable	Water	3005A	
240-183575-10	BAC-06-F-20230412-01	Total Recoverable	Water	3005A	
240-183575-11	DUP-006-BAC-06-F-20230412-01	Total Recoverable	Water	3005A	
240-183575-12	BAC-16-F-20230412-01	Total Recoverable	Water	3005A	
240-183575-13	EB-001-F-20230412-01	Total Recoverable	Water	3005A	
MB 240-569820/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-569820/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-569820/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-183575-1 MS	BAC-10-F-20230411-01	Total Recoverable	Water	3005A	
240-183575-1 MSD	BAC-10-F-20230411-01	Total Recoverable	Water	3005A	
240-183575-2 MS	BAC-23-F-20230411-01	Total Recoverable	Water	3005A	
240-183575-2 MSD	BAC-23-F-20230411-01	Total Recoverable	Water	3005A	

Prep Batch: 569826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183575-1	BAC-10-F-20230411-01	Total/NA	Water	7470A	
240-183575-2	BAC-23-F-20230411-01	Total/NA	Water	7470A	
240-183575-3	DUP-005-BAC-23-F-20230411-01	Total/NA	Water	7470A	
240-183575-4	BAC-08-F-20230411-01	Total/NA	Water	7470A	
240-183575-5	BAC-14-F-20230411-01	Total/NA	Water	7470A	
240-183575-6	BAC-12-F-20230411-01	Total/NA	Water	7470A	
240-183575-7	EB-001-F-20230411-01	Total/NA	Water	7470A	
240-183575-8	BAC-07-F-20230412-01	Total/NA	Water	7470A	
240-183575-9	BAC-18-F-20230412-01	Total/NA	Water	7470A	
240-183575-10	BAC-06-F-20230412-01	Total/NA	Water	7470A	
240-183575-11	DUP-006-BAC-06-F-20230412-01	Total/NA	Water	7470A	
240-183575-12	BAC-16-F-20230412-01	Total/NA	Water	7470A	
240-183575-13	EB-001-F-20230412-01	Total/NA	Water	7470A	
MB 240-569826/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-569826/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-183575-1 MS	BAC-10-F-20230411-01	Total/NA	Water	7470A	
240-183575-1 MSD	BAC-10-F-20230411-01	Total/NA	Water	7470A	

Analysis Batch: 570094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183575-1	BAC-10-F-20230411-01	Total/NA	Water	7470A	569826
240-183575-2	BAC-23-F-20230411-01	Total/NA	Water	7470A	569826
240-183575-3	DUP-005-BAC-23-F-20230411-01	Total/NA	Water	7470A	569826
240-183575-4	BAC-08-F-20230411-01	Total/NA	Water	7470A	569826
240-183575-5	BAC-14-F-20230411-01	Total/NA	Water	7470A	569826
240-183575-6	BAC-12-F-20230411-01	Total/NA	Water	7470A	569826
240-183575-7	EB-001-F-20230411-01	Total/NA	Water	7470A	569826
240-183575-8	BAC-07-F-20230412-01	Total/NA	Water	7470A	569826

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Metals (Continued)

Analysis Batch: 570094 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183575-9	BAC-18-F-20230412-01	Total/NA	Water	7470A	569826
240-183575-10	BAC-06-F-20230412-01	Total/NA	Water	7470A	569826
240-183575-11	DUP-006-BAC-06-F-20230412-01	Total/NA	Water	7470A	569826
240-183575-12	BAC-16-F-20230412-01	Total/NA	Water	7470A	569826
240-183575-13	EB-001-F-20230412-01	Total/NA	Water	7470A	569826
MB 240-569826/1-A	Method Blank	Total/NA	Water	7470A	569826
LCS 240-569826/2-A	Lab Control Sample	Total/NA	Water	7470A	569826
240-183575-1 MS	BAC-10-F-20230411-01	Total/NA	Water	7470A	569826
240-183575-1 MSD	BAC-10-F-20230411-01	Total/NA	Water	7470A	569826

Analysis Batch: 570098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183575-1	BAC-10-F-20230411-01	Total Recoverable	Water	6020B	569820
240-183575-2	BAC-23-F-20230411-01	Total Recoverable	Water	6020B	569820
240-183575-3	DUP-005-BAC-23-F-20230411-01	Total Recoverable	Water	6020B	569820
240-183575-4	BAC-08-F-20230411-01	Total Recoverable	Water	6020B	569820
240-183575-5	BAC-14-F-20230411-01	Total Recoverable	Water	6020B	569820
240-183575-6	BAC-12-F-20230411-01	Total Recoverable	Water	6020B	569820
240-183575-7	EB-001-F-20230411-01	Total Recoverable	Water	6020B	569820
240-183575-8	BAC-07-F-20230412-01	Total Recoverable	Water	6020B	569820
240-183575-9	BAC-18-F-20230412-01	Total Recoverable	Water	6020B	569820
240-183575-10	BAC-06-F-20230412-01	Total Recoverable	Water	6020B	569820
240-183575-11	DUP-006-BAC-06-F-20230412-01	Total Recoverable	Water	6020B	569820
240-183575-12	BAC-16-F-20230412-01	Total Recoverable	Water	6020B	569820
240-183575-13	EB-001-F-20230412-01	Total Recoverable	Water	6020B	569820
MB 240-569820/1-A	Method Blank	Total Recoverable	Water	6020B	569820
LCS 240-569820/3-A	Lab Control Sample	Total Recoverable	Water	6020B	569820
240-183575-2 MS	BAC-23-F-20230411-01	Total Recoverable	Water	6020B	569820
240-183575-2 MSD	BAC-23-F-20230411-01	Total Recoverable	Water	6020B	569820

Analysis Batch: 570110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183575-1	BAC-10-F-20230411-01	Total Recoverable	Water	6010D	569820
240-183575-2	BAC-23-F-20230411-01	Total Recoverable	Water	6010D	569820
240-183575-3	DUP-005-BAC-23-F-20230411-01	Total Recoverable	Water	6010D	569820
240-183575-4	BAC-08-F-20230411-01	Total Recoverable	Water	6010D	569820
240-183575-5	BAC-14-F-20230411-01	Total Recoverable	Water	6010D	569820
240-183575-6	BAC-12-F-20230411-01	Total Recoverable	Water	6010D	569820
240-183575-7	EB-001-F-20230411-01	Total Recoverable	Water	6010D	569820
240-183575-8	BAC-07-F-20230412-01	Total Recoverable	Water	6010D	569820
240-183575-9	BAC-18-F-20230412-01	Total Recoverable	Water	6010D	569820
240-183575-10	BAC-06-F-20230412-01	Total Recoverable	Water	6010D	569820
240-183575-11	DUP-006-BAC-06-F-20230412-01	Total Recoverable	Water	6010D	569820
240-183575-12	BAC-16-F-20230412-01	Total Recoverable	Water	6010D	569820
240-183575-13	EB-001-F-20230412-01	Total Recoverable	Water	6010D	569820
MB 240-569820/1-A	Method Blank	Total Recoverable	Water	6010D	569820
LCS 240-569820/2-A	Lab Control Sample	Total Recoverable	Water	6010D	569820
240-183575-1 MS	BAC-10-F-20230411-01	Total Recoverable	Water	6010D	569820
240-183575-1 MSD	BAC-10-F-20230411-01	Total Recoverable	Water	6010D	569820

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Metals

Analysis Batch: 570329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183575-1	BAC-10-F-20230411-01	Total Recoverable	Water	6020B	569820
240-183575-5	BAC-14-F-20230411-01	Total Recoverable	Water	6020B	569820
240-183575-6	BAC-12-F-20230411-01	Total Recoverable	Water	6020B	569820
240-183575-9	BAC-18-F-20230412-01	Total Recoverable	Water	6020B	569820
240-183575-11	DUP-006-BAC-06-F-20230412-01	Total Recoverable	Water	6020B	569820
240-183575-12	BAC-16-F-20230412-01	Total Recoverable	Water	6020B	569820

General Chemistry

Analysis Batch: 569585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183575-1	BAC-10-F-20230411-01	Total/NA	Water	SM 2540C	
240-183575-2	BAC-23-F-20230411-01	Total/NA	Water	SM 2540C	
240-183575-3	DUP-005-BAC-23-F-20230411-01	Total/NA	Water	SM 2540C	
240-183575-4	BAC-08-F-20230411-01	Total/NA	Water	SM 2540C	
240-183575-5	BAC-14-F-20230411-01	Total/NA	Water	SM 2540C	
240-183575-6	BAC-12-F-20230411-01	Total/NA	Water	SM 2540C	
240-183575-7	EB-001-F-20230411-01	Total/NA	Water	SM 2540C	
MB 240-569585/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-569585/2	Lab Control Sample	Total/NA	Water	SM 2540C	
240-183575-1 DU	BAC-10-F-20230411-01	Total/NA	Water	SM 2540C	

Analysis Batch: 569791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183575-8	BAC-07-F-20230412-01	Total/NA	Water	SM 2540C	
240-183575-9	BAC-18-F-20230412-01	Total/NA	Water	SM 2540C	
240-183575-10	BAC-06-F-20230412-01	Total/NA	Water	SM 2540C	
240-183575-11	DUP-006-BAC-06-F-20230412-01	Total/NA	Water	SM 2540C	
240-183575-12	BAC-16-F-20230412-01	Total/NA	Water	SM 2540C	
240-183575-13	EB-001-F-20230412-01	Total/NA	Water	SM 2540C	
MB 240-569791/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-569791/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 570651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183575-1	BAC-10-F-20230411-01	Total/NA	Water	2320B-1997	
240-183575-2	BAC-23-F-20230411-01	Total/NA	Water	2320B-1997	
240-183575-3	DUP-005-BAC-23-F-20230411-01	Total/NA	Water	2320B-1997	
240-183575-4	BAC-08-F-20230411-01	Total/NA	Water	2320B-1997	
240-183575-5	BAC-14-F-20230411-01	Total/NA	Water	2320B-1997	
240-183575-6	BAC-12-F-20230411-01	Total/NA	Water	2320B-1997	
240-183575-7	EB-001-F-20230411-01	Total/NA	Water	2320B-1997	
240-183575-8	BAC-07-F-20230412-01	Total/NA	Water	2320B-1997	
240-183575-9	BAC-18-F-20230412-01	Total/NA	Water	2320B-1997	
240-183575-10	BAC-06-F-20230412-01	Total/NA	Water	2320B-1997	
240-183575-11	DUP-006-BAC-06-F-20230412-01	Total/NA	Water	2320B-1997	
240-183575-12	BAC-16-F-20230412-01	Total/NA	Water	2320B-1997	
240-183575-13	EB-001-F-20230412-01	Total/NA	Water	2320B-1997	
MB 240-570651/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-570651/4	Method Blank	Total/NA	Water	2320B-1997	
MB 240-570651/56	Method Blank	Total/NA	Water	2320B-1997	

Eurofins Cleveland

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

General Chemistry (Continued)

Analysis Batch: 570651 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-570651/29	Lab Control Sample	Total/NA	Water	2320B-1997	
LCS 240-570651/55	Lab Control Sample	Total/NA	Water	2320B-1997	
240-183575-2 DU	BAC-23-F-20230411-01	Total/NA	Water	2320B-1997	
240-183575-12 DU	BAC-16-F-20230412-01	Total/NA	Water	2320B-1997	

Analysis Batch: 572493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183575-1	BAC-10-F-20230411-01	Total/NA	Water	300.0	
240-183575-1	BAC-10-F-20230411-01	Total/NA	Water	300.0	
240-183575-2	BAC-23-F-20230411-01	Total/NA	Water	300.0	
240-183575-4	BAC-08-F-20230411-01	Total/NA	Water	300.0	
240-183575-5	BAC-14-F-20230411-01	Total/NA	Water	300.0	
240-183575-6	BAC-12-F-20230411-01	Total/NA	Water	300.0	
240-183575-7	EB-001-F-20230411-01	Total/NA	Water	300.0	
240-183575-8	BAC-07-F-20230412-01	Total/NA	Water	300.0	
240-183575-9	BAC-18-F-20230412-01	Total/NA	Water	300.0	
MB 240-572493/3	Method Blank	Total/NA	Water	300.0	
LCS 240-572493/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 572672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183575-3	DUP-005-BAC-23-F-20230411-01	Total/NA	Water	300.0	
MB 240-572672/3	Method Blank	Total/NA	Water	300.0	
LCS 240-572672/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 572836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183575-5 - RA	BAC-14-F-20230411-01	Total/NA	Water	300.0	
240-183575-10	BAC-06-F-20230412-01	Total/NA	Water	300.0	
240-183575-10	BAC-06-F-20230412-01	Total/NA	Water	300.0	
240-183575-11	DUP-006-BAC-06-F-20230412-01	Total/NA	Water	300.0	
240-183575-11	DUP-006-BAC-06-F-20230412-01	Total/NA	Water	300.0	
240-183575-12	BAC-16-F-20230412-01	Total/NA	Water	300.0	
240-183575-13	EB-001-F-20230412-01	Total/NA	Water	300.0	
MB 240-572836/3	Method Blank	Total/NA	Water	300.0	
LCS 240-572836/4	Lab Control Sample	Total/NA	Water	300.0	
240-183575-5 MS	BAC-14-F-20230411-01	Total/NA	Water	300.0	
240-183575-5 MSD	BAC-14-F-20230411-01	Total/NA	Water	300.0	

Rad

Prep Batch: 609082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183575-1	BAC-10-F-20230411-01	Total/NA	Water	PrecSep-21	
240-183575-2	BAC-23-F-20230411-01	Total/NA	Water	PrecSep-21	
240-183575-3	DUP-005-BAC-23-F-20230411-01	Total/NA	Water	PrecSep-21	
240-183575-4	BAC-08-F-20230411-01	Total/NA	Water	PrecSep-21	
240-183575-5	BAC-14-F-20230411-01	Total/NA	Water	PrecSep-21	
240-183575-6	BAC-12-F-20230411-01	Total/NA	Water	PrecSep-21	
240-183575-7	EB-001-F-20230411-01	Total/NA	Water	PrecSep-21	
240-183575-8	BAC-07-F-20230412-01	Total/NA	Water	PrecSep-21	

Eurofins Cleveland

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Rad (Continued)

Prep Batch: 609082 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183575-9	BAC-18-F-20230412-01	Total/NA	Water	PrecSep-21	
240-183575-10	BAC-06-F-20230412-01	Total/NA	Water	PrecSep-21	
MB 160-609082/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-609082/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-609082/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 609091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183575-1	BAC-10-F-20230411-01	Total/NA	Water	PrecSep_0	
240-183575-2	BAC-23-F-20230411-01	Total/NA	Water	PrecSep_0	
240-183575-3	DUP-005-BAC-23-F-20230411-01	Total/NA	Water	PrecSep_0	
240-183575-4	BAC-08-F-20230411-01	Total/NA	Water	PrecSep_0	
240-183575-5	BAC-14-F-20230411-01	Total/NA	Water	PrecSep_0	
240-183575-6	BAC-12-F-20230411-01	Total/NA	Water	PrecSep_0	
240-183575-7	EB-001-F-20230411-01	Total/NA	Water	PrecSep_0	
240-183575-8	BAC-07-F-20230412-01	Total/NA	Water	PrecSep_0	
240-183575-9	BAC-18-F-20230412-01	Total/NA	Water	PrecSep_0	
240-183575-10	BAC-06-F-20230412-01	Total/NA	Water	PrecSep_0	
MB 160-609091/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-609091/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-609091/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Prep Batch: 609093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183575-11	DUP-006-BAC-06-F-20230412-01	Total/NA	Water	PrecSep-21	
240-183575-12	BAC-16-F-20230412-01	Total/NA	Water	PrecSep-21	
240-183575-13	EB-001-F-20230412-01	Total/NA	Water	PrecSep-21	
MB 160-609093/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-609093/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-609093/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 609099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183575-11	DUP-006-BAC-06-F-20230412-01	Total/NA	Water	PrecSep_0	
240-183575-12	BAC-16-F-20230412-01	Total/NA	Water	PrecSep_0	
240-183575-13	EB-001-F-20230412-01	Total/NA	Water	PrecSep_0	
MB 160-609099/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-609099/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-609099/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: BAC-10-F-20230411-01

Lab Sample ID: 240-183575-1

Date Collected: 04/11/23 10:03

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CLE	04/20/23 02:15
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 01:13
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570329	DSH	EET CLE	04/20/23 14:50
Total/NA	Prep	7470A			569826	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 20:32
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 14:21
Total/NA	Analysis	300.0		1	572493	JWW	EET CLE	05/08/23 22:32
Total/NA	Analysis	300.0		5	572493	JWW	EET CLE	05/08/23 22:52
Total/NA	Analysis	SM 2540C		1	569585	GH	EET CLE	04/17/23 10:04
Total/NA	Prep	PrecSep-21			609082	KAC	EET SL	04/27/23 12:38
Total/NA	Analysis	9315		1	612289	FLC	EET SL	05/19/23 08:17
Total/NA	Prep	PrecSep_0			609091	KAC	EET SL	04/27/23 13:23
Total/NA	Analysis	9320		1	611704	FLC	EET SL	05/16/23 11:41
Total/NA	Analysis	Ra226_Ra228		1	612456	EMH	EET SL	05/19/23 14:49

Client Sample ID: BAC-23-F-20230411-01

Lab Sample ID: 240-183575-2

Date Collected: 04/11/23 11:22

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CLE	04/20/23 02:44
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 01:16
Total/NA	Prep	7470A			569826	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 20:44
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 14:25
Total/NA	Analysis	300.0		1	572493	JWW	EET CLE	05/08/23 23:12
Total/NA	Analysis	SM 2540C		1	569585	GH	EET CLE	04/17/23 10:04
Total/NA	Prep	PrecSep-21			609082	KAC	EET SL	04/27/23 12:38
Total/NA	Analysis	9315		1	612289	FLC	EET SL	05/19/23 08:17
Total/NA	Prep	PrecSep_0			609091	KAC	EET SL	04/27/23 13:23
Total/NA	Analysis	9320		1	611704	FLC	EET SL	05/16/23 11:41
Total/NA	Analysis	Ra226_Ra228		1	612456	EMH	EET SL	05/19/23 14:49

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: DUP-005-BAC-23-F-20230411-01

Lab Sample ID: 240-183575-3

Date Collected: 04/11/23 11:22

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CLE	04/20/23 02:48
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 01:39
Total/NA	Prep	7470A			569826	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 20:46
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 14:34
Total/NA	Analysis	300.0		1	572672	JWW	EET CLE	05/09/23 22:22
Total/NA	Analysis	SM 2540C		1	569585	GH	EET CLE	04/17/23 10:04
Total/NA	Prep	PrecSep-21			609082	KAC	EET SL	04/27/23 12:38
Total/NA	Analysis	9315		1	612289	FLC	EET SL	05/19/23 08:17
Total/NA	Prep	PrecSep_0			609091	KAC	EET SL	04/27/23 13:23
Total/NA	Analysis	9320		1	611704	FLC	EET SL	05/16/23 11:42
Total/NA	Analysis	Ra226_Ra228		1	612456	EMH	EET SL	05/19/23 14:49

Client Sample ID: BAC-08-F-20230411-01

Lab Sample ID: 240-183575-4

Date Collected: 04/11/23 12:27

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CLE	04/20/23 02:53
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 01:41
Total/NA	Prep	7470A			569826	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 20:48
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 14:40
Total/NA	Analysis	300.0		1	572493	JWW	EET CLE	05/09/23 01:33
Total/NA	Analysis	SM 2540C		1	569585	GH	EET CLE	04/17/23 10:04
Total/NA	Prep	PrecSep-21			609082	KAC	EET SL	04/27/23 12:38
Total/NA	Analysis	9315		1	612289	FLC	EET SL	05/19/23 08:17
Total/NA	Prep	PrecSep_0			609091	KAC	EET SL	04/27/23 13:23
Total/NA	Analysis	9320		1	611704	FLC	EET SL	05/16/23 11:42
Total/NA	Analysis	Ra226_Ra228		1	612456	EMH	EET SL	05/19/23 14:49

Client Sample ID: BAC-14-F-20230411-01

Lab Sample ID: 240-183575-5

Date Collected: 04/11/23 14:00

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CLE	04/20/23 02:57
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 01:44

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: BAC-14-F-20230411-01

Lab Sample ID: 240-183575-5

Date Collected: 04/11/23 14:00

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570329	DSH	EET CLE	04/20/23 14:53
Total/NA	Prep	7470A			569826	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 20:50
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 14:44
Total/NA	Analysis	300.0		1	572493	JWW	EET CLE	05/09/23 01:53
Total/NA	Analysis	300.0	RA	5	572836	JWW	EET CLE	05/11/23 00:19
Total/NA	Analysis	SM 2540C		1	569585	GH	EET CLE	04/17/23 10:04
Total/NA	Prep	PrecSep-21			609082	KAC	EET SL	04/27/23 12:38
Total/NA	Analysis	9315		1	612289	FLC	EET SL	05/19/23 08:18
Total/NA	Prep	PrecSep_0			609091	KAC	EET SL	04/27/23 13:23
Total/NA	Analysis	9320		1	611704	FLC	EET SL	05/16/23 11:42
Total/NA	Analysis	Ra226_Ra228		1	612456	EMH	EET SL	05/19/23 14:49

Client Sample ID: BAC-12-F-20230411-01

Lab Sample ID: 240-183575-6

Date Collected: 04/11/23 14:58

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CLE	04/20/23 03:01
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 01:47
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570329	DSH	EET CLE	04/20/23 14:55
Total/NA	Prep	7470A			569826	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 20:52
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 14:48
Total/NA	Analysis	300.0		1	572493	JWW	EET CLE	05/09/23 02:13
Total/NA	Analysis	SM 2540C		1	569585	GH	EET CLE	04/17/23 10:04
Total/NA	Prep	PrecSep-21			609082	KAC	EET SL	04/27/23 12:38
Total/NA	Analysis	9315		1	612290	FLC	EET SL	05/19/23 08:21
Total/NA	Prep	PrecSep_0			609091	KAC	EET SL	04/27/23 13:23
Total/NA	Analysis	9320		1	611704	FLC	EET SL	05/16/23 11:42
Total/NA	Analysis	Ra226_Ra228		1	612456	EMH	EET SL	05/19/23 14:49

Client Sample ID: EB-001-F-20230411-01

Lab Sample ID: 240-183575-7

Date Collected: 04/11/23 15:30

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CLE	04/20/23 03:06

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: EB-001-F-20230411-01

Lab Sample ID: 240-183575-7

Date Collected: 04/11/23 15:30

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 01:49
Total/NA	Prep	7470A			569826	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 20:54
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 14:52
Total/NA	Analysis	300.0		1	572493	JWW	EET CLE	05/08/23 21:11
Total/NA	Analysis	SM 2540C		1	569585	GH	EET CLE	04/17/23 10:04
Total/NA	Prep	PrecSep-21			609082	KAC	EET SL	04/27/23 12:38
Total/NA	Analysis	9315		1	612290	FLC	EET SL	05/19/23 08:21
Total/NA	Prep	PrecSep_0			609091	KAC	EET SL	04/27/23 13:23
Total/NA	Analysis	9320		1	611704	FLC	EET SL	05/16/23 11:42
Total/NA	Analysis	Ra226_Ra228		1	612456	EMH	EET SL	05/19/23 14:49

Client Sample ID: BAC-07-F-20230412-01

Lab Sample ID: 240-183575-8

Date Collected: 04/12/23 10:34

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CLE	04/20/23 03:10
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 01:52
Total/NA	Prep	7470A			569826	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 20:57
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 14:55
Total/NA	Analysis	300.0		1	572493	JWW	EET CLE	05/09/23 02:54
Total/NA	Analysis	SM 2540C		1	569791	GH	EET CLE	04/18/23 11:58
Total/NA	Prep	PrecSep-21			609082	KAC	EET SL	04/27/23 12:38
Total/NA	Analysis	9315		1	612290	FLC	EET SL	05/19/23 08:21
Total/NA	Prep	PrecSep_0			609091	KAC	EET SL	04/27/23 13:23
Total/NA	Analysis	9320		1	611704	FLC	EET SL	05/16/23 11:42
Total/NA	Analysis	Ra226_Ra228		1	612456	EMH	EET SL	05/19/23 14:49

Client Sample ID: BAC-18-F-20230412-01

Lab Sample ID: 240-183575-9

Date Collected: 04/12/23 11:31

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CLE	04/20/23 03:14
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 01:55
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570329	DSH	EET CLE	04/20/23 14:58

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: BAC-18-F-20230412-01

Lab Sample ID: 240-183575-9

Date Collected: 04/12/23 11:31

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			569826	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 20:59
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 15:00
Total/NA	Analysis	300.0		1	572493	JWW	EET CLE	05/09/23 03:14
Total/NA	Analysis	SM 2540C		1	569791	GH	EET CLE	04/18/23 11:58
Total/NA	Prep	PrecSep-21			609082	KAC	EET SL	04/27/23 12:38
Total/NA	Analysis	9315		1	612290	FLC	EET SL	05/19/23 08:22
Total/NA	Prep	PrecSep_0			609091	KAC	EET SL	04/27/23 13:23
Total/NA	Analysis	9320		1	611704	FLC	EET SL	05/16/23 11:42
Total/NA	Analysis	Ra226_Ra228		1	612456	EMH	EET SL	05/19/23 14:49

Client Sample ID: BAC-06-F-20230412-01

Lab Sample ID: 240-183575-10

Date Collected: 04/12/23 13:00

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CLE	04/20/23 03:18
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 02:03
Total/NA	Prep	7470A			569826	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 21:01
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 15:04
Total/NA	Analysis	300.0		1	572836	JWW	EET CLE	05/10/23 17:56
Total/NA	Analysis	300.0		5	572836	JWW	EET CLE	05/10/23 18:16
Total/NA	Analysis	SM 2540C		1	569791	GH	EET CLE	04/18/23 11:58
Total/NA	Prep	PrecSep-21			609082	KAC	EET SL	04/27/23 12:38
Total/NA	Analysis	9315		1	612290	FLC	EET SL	05/19/23 08:22
Total/NA	Prep	PrecSep_0			609091	KAC	EET SL	04/27/23 13:23
Total/NA	Analysis	9320		1	611704	FLC	EET SL	05/16/23 11:43
Total/NA	Analysis	Ra226_Ra228		1	612456	EMH	EET SL	05/19/23 14:49

Client Sample ID: DUP-006-BAC-06-F-20230412-01

Lab Sample ID: 240-183575-11

Date Collected: 04/12/23 13:00

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CLE	04/20/23 03:31
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 02:05
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570329	DSH	EET CLE	04/20/23 15:06

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: DUP-006-BAC-06-F-20230412-01

Lab Sample ID: 240-183575-11

Date Collected: 04/12/23 13:00

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			569826	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 21:03
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 15:08
Total/NA	Analysis	300.0		1	572836	JWW	EET CLE	05/10/23 18:36
Total/NA	Analysis	300.0		5	572836	JWW	EET CLE	05/10/23 19:37
Total/NA	Analysis	SM 2540C		1	569791	GH	EET CLE	04/18/23 11:58
Total/NA	Prep	PrecSep-21			609093	KAC	EET SL	04/27/23 13:34
Total/NA	Analysis	9315		1	612288	FLC	EET SL	05/19/23 19:38
Total/NA	Prep	PrecSep_0			609099	KAC	EET SL	04/27/23 14:08
Total/NA	Analysis	9320		1	611850	FLC	EET SL	05/16/23 11:15
Total/NA	Analysis	Ra226_Ra228		1	612631	SCB	EET SL	05/22/23 12:41

Client Sample ID: BAC-16-F-20230412-01

Lab Sample ID: 240-183575-12

Date Collected: 04/12/23 14:29

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CLE	04/20/23 03:35
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 02:08
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570329	DSH	EET CLE	04/20/23 15:09
Total/NA	Prep	7470A			569826	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 21:10
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 15:23
Total/NA	Analysis	300.0		1	572836	JWW	EET CLE	05/10/23 19:57
Total/NA	Analysis	SM 2540C		1	569791	GH	EET CLE	04/18/23 11:58
Total/NA	Prep	PrecSep-21			609093	KAC	EET SL	04/27/23 13:34
Total/NA	Analysis	9315		1	612288	FLC	EET SL	05/19/23 19:38
Total/NA	Prep	PrecSep_0			609099	KAC	EET SL	04/27/23 14:08
Total/NA	Analysis	9320		1	611850	FLC	EET SL	05/16/23 11:15
Total/NA	Analysis	Ra226_Ra228		1	612631	SCB	EET SL	05/22/23 12:41

Client Sample ID: EB-001-F-20230412-01

Lab Sample ID: 240-183575-13

Date Collected: 04/12/23 15:30

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CLE	04/20/23 03:39
Total Recoverable	Prep	3005A			569820	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 02:11

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-183575-1

Client Sample ID: EB-001-F-20230412-01

Lab Sample ID: 240-183575-13

Date Collected: 04/12/23 15:30

Matrix: Water

Date Received: 04/14/23 08:00

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total/NA	Prep	7470A			569826	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 21:12
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 15:31
Total/NA	Analysis	300.0		1	572836	JWW	EET CLE	05/10/23 20:37
Total/NA	Analysis	SM 2540C		1	569791	GH	EET CLE	04/18/23 11:58
Total/NA	Prep	PrecSep-21			609093	KAC	EET SL	04/27/23 13:34
Total/NA	Analysis	9315		1	612288	FLC	EET SL	05/19/23 19:38
Total/NA	Prep	PrecSep_0			609099	KAC	EET SL	04/27/23 14:08
Total/NA	Analysis	9320		1	611850	FLC	EET SL	05/16/23 11:15
Total/NA	Analysis	Ra226_Ra228		1	612631	SCB	EET SL	05/22/23 12:41

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
 Project/Site: Federal CCR Wells

Job ID: 240-183575-1

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
California	State	2927	02-27-24
Connecticut	State	PH-0590	06-29-23
Florida	NELAP	E87225	05-24-23
Georgia	State	4062	02-28-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	05-31-23
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	05-24-23
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-23
Florida	NELAP	E87689	06-30-23
HI - RadChem Recognition	State	n/a	06-30-23
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana (All)	NELAP	04080	06-30-23
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-23
MI - RadChem Recognition	State	9005	06-30-23
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-23
New Jersey	NELAP	MO002	06-30-23
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-23
North Dakota	State	R-207	06-30-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-183575-1

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
Oklahoma	NELAP	9997	08-31-23
Oregon	NELAP	4157	09-01-23
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23
Texas	NELAP	T104704193	07-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO000542021-14	07-31-23
Virginia	NELAP	10310	06-14-23
Washington	State	C592	08-30-23
West Virginia DEP	State	381	10-31-23

Client Information		Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): 240-93018-34502
Client Contact: Taylor Huffman		E-Mail: roxanne.cisneros@Eurofins.com	Page: Page 1 of 2
Company: Lightstone Generation Gavin Power LLC		PWSID:	Job #: Pg 1 of 2
Address: 7397 OH-7		Analysis Requested	
City: Cheshire	State: OH, Zip: 45620	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 Other:	
Phone: 740-925-3171(Tel)	PO #: 2935505	M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - H2SO4 S - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Email: taylor.huffman@lightstonegen.com	WO #: 740-925-3171(Tel)	Total Number of Containers	
Project Name: Federal - CCR Wells	Project #: 24019633	Special Instructions/Note:	
Site: Ohio	SSOW#:	240-189575 Chain of Custody	

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=Water, S=Soil, O=Other, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540C_Calc, 300.0_28D(Chloride, Fluoride, Sulfate)	9315_Ra226, 9320_Ra228	2320B(Carbonate Alkalinity/Bi-Carbonate Alkalinity)
BAC-16-F-20230411-01	4-11-23	1003	G	W	X	D	N	N	N
BAC-23-F-20230411-01	4-11-23	1122	G	W	X	D	N	N	N
DUP-005-BAC-23-F-20230411-01	4-11-23	1122	G	W	X	D	N	N	N
BAC-08-F-20230411-01	4-11-23	1227	G	W	X	D	N	N	N
BAC-14-F-20230411-01	4-11-23	1400	G	W	X	D	N	N	N
BAC-12-F-20230411-01	4-11-23	1458	G	W	X	D	N	N	N
EB-001-F-20230411-01	4-11-23	1530	G	W	X	D	N	N	N
BAC-07-F-20230412-01	4-12-23	1034	G	W	X	D	N	N	N
BAC-18-F-20230412-01	4-12-23	1131	G	W	X	D	N	N	N
BAC-06-F-20230412-01	4-12-23	1300	G	W	X	D	N	N	N
DUP-006-BAC-06-F-20230412-01	4-12-23	1300	G	W	X	D	N	N	N

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological
 Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For Months

Special Instructions/OC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: <i>Bobby Caste</i>	4-13-23	0840	Received by: <i>SEMRO</i>
Relinquished by: <i>Bobby Caste</i>	4-13-23	1700	Received by: <i>Roxanne Cisneros</i>
Relinquished by: <i>Bobby Caste</i>	4-13-23	1700	Received by: <i>Roxanne Cisneros</i>
Custody Seal No.:	Company:	Date/Time:	Company:
Δ Yes Δ No	ETA	4-13-23 11:30	ETA
	ETA	4-13-23 8:00	ETA
	ETA	4-13-23 8:00	ETA
	ETA	4-13-23 8:00	ETA

Cooler Temperature(s) °C and Other Remarks:



Client Information		Sampler: <u>Bobby Cisto</u>		Lab PM: Cisneros, Roxanne		Carrier Tracking No(s): 240-93018-34502	
Client Contact: Taylor Huffman		Phone: <u>740-373-4308</u>		E-Mail: roxanne.cisneros@eurofins.com		Page: <u>Page 1 of 1</u>	
Company: Lightstone Generation Gavin Power LLC		PWSID:		Job #:		Job #:	
Address: 7397 OH-7		City: Cheshire		State: OH		Zip: 45620	
Phone: 740-925-3171(Tel)		PO #: 2935505		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		TAT Requested (days):	
Email: taylor.huffman@lightstonegen.com		WO #:		Project #:		24019633	
Federal - CCR Wells		Site: Ohio		SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Seawater, Other)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2500C, Calcd, 300.0, 28D(Chloride, Fluoride, Sulfate)		9315_Ra226, 9320_Ra228		2320R(Carbonate Alkalinity/Bi-Carbonate Alkalinity)		Special Instructions/Note:
							D	N	D	N	D	N	
BAC-16-F-20230412-01	4-12-23	1429	G	W	W	W	1	1	1	1	1	1	
EB-001-F-20230412-01	4-12-23	1530	G	W	W	W	1	1	1	1	1	1	

Due Date Requested: _____

Preservation Codes:
 A - HCL, M - Hexane, N - None, O - AsNaO2, P - NaZSO4, Q - Na2SO3, R - Na2SO4, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, X - EDTA, Y - EDA, Z - other (specify) Other: _____

Special Instructions/Note: _____

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Special Instructions/QC Requirements: _____

Eurofins - Canton Sample Receipt Form/Narrative
Barberton Facility

Login # : _____

Client Lightstone

Site Name _____

Cooler unpacked by:

Cooler Received on 4 14 23

Opened on 4 14 23

Rachelle Haide +

FedEx: 1st Grd Exp UPS FAS Clipper

Client Drop Off Eurofins Courier Other

Receipt After-hours: Drop-off Date/Time

Storage Location

Eurofins Cooler # E C 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 # 22 (CF +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 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 NA

-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# HC203864

14. Were VOAs on the COC? Yes No NA

15. Were air bubbles >6 mm in any VOA vials? Yes No NA  ← Larger than this.

16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No NA

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: _____

Temperature readings:


<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-10-F-20230411-01	240-183575-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-10-F-20230411-01	240-183575-D-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-10-F-20230411-01	240-183575-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-23-F-20230411-01	240-183575-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-23-F-20230411-01	240-183575-D-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-23-F-20230411-01	240-183575-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-005-BAC-23-F-20230411-01	240-183575-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-005-BAC-23-F-20230411-01	240-183575-D-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-005-BAC-23-F-20230411-01	240-183575-E-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-08-F-20230411-01	240-183575-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-08-F-20230411-01	240-183575-D-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-08-F-20230411-01	240-183575-E-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-14-F-20230411-01	240-183575-C-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-14-F-20230411-01	240-183575-D-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-14-F-20230411-01	240-183575-E-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-12-F-20230411-01	240-183575-C-6	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-12-F-20230411-01	240-183575-D-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-12-F-20230411-01	240-183575-E-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230411-01	240-183575-C-7	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230411-01	240-183575-D-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230411-01	240-183575-E-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-20230412-01	240-183575-C-8	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-07-F-20230412-01	240-183575-D-8	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-20230412-01	240-183575-E-8	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-18-F-20230412-01	240-183575-C-9	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-18-F-20230412-01	240-183575-D-9	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-18-F-20230412-01	240-183575-E-9	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-20230412-01	240-183575-C-10	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-06-F-20230412-01	240-183575-D-10	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-20230412-01	240-183575-E-10	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-006-BAC-06-F-20230412-01	240-183575-C-11	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-006-BAC-06-F-20230412-01	240-183575-D-11	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
DUP-006-BAC-06-F-20230412-01	240-183575-E-11	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-16-F-20230412-01	240-183575-C-12	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-16-F-20230412-01	240-183575-D-12	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-16-F-20230412-01	240-183575-E-12	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230412-01	240-183575-C-13	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230412-01	240-183575-D-13	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230412-01	240-183575-E-13	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

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Eurofins - Canton Sample Receipt Multiple Cooler Form				
Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
EC Client <u>Box</u> Other	IR GUN #: 22	18.1	18.1	Wet Ice Blue Ice Dry Ice Water <u>None</u>
<u>EC</u> Client Box Other	IR GUN #: 22	2.6	2.6	<u>Wet Ice</u> Blue Ice Dry Ice Water None
<u>EC</u> Client Box Other	IR GUN #: 22	2.8	2.8	<u>Wet Ice</u> Blue Ice Dry Ice Water None
<u>EC</u> Client Box Other	IR GUN #: 22	1.8	1.8	<u>Wet Ice</u> Blue Ice Dry Ice Water None
<u>EC</u> Client Box Other	IR GUN #: 22	2.0	2.0	<u>Wet Ice</u> Blue Ice Dry Ice Water None
<u>EC</u> Client Box Other	IR GUN #: 22	1.6	1.6	<u>Wet Ice</u> Blue Ice Dry Ice Water None
<u>EC</u> Client Box Other	IR GUN #: 22	1.4	1.4	<u>Wet Ice</u> Blue Ice Dry Ice Water None
<u>EC</u> Client Box Other	IR GUN #: 22	2.3	2.3	<u>Wet Ice</u> Blue Ice Dry Ice Water None
<u>EC</u> Client Box Other	IR GUN #: 22	1.8	1.8	<u>Wet Ice</u> Blue Ice Dry Ice Water None
<u>EC</u> Client Box Other	IR GUN #: 22	1.1	1.1	<u>Wet Ice</u> Blue Ice Dry Ice Water None
<u>EC</u> Client Box Other	IR GUN #: 22	1.2	1.2	<u>Wet Ice</u> Blue Ice Dry Ice Water None
<u>EC</u> Client Box Other	IR GUN #: 22	3.2	3.2	<u>Wet Ice</u> Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 22			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	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

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: Federal - CCR Wells Site: Ohio		Lab PM: Cisneros, Roxanne E-Mail: roxanne.cisneros@eurofins.com Carmer Tracking No(s): 240-93018-34502 State of Origin:	
Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PO #: 2935505 WO #:		Analysis Requested Field Filtered Sample (Yes or No): Perform MS/MSD (Yes or No): 2540C_Calcd, 300.0_250(Chloride, Fluoride, Sulfate) 9315_Ra228, 9320_Ra228 2320B(Carbonate Alkalinity/Bi-Carbonate Alkalinity)	
Sample Identification Sample Date Sample Time Sample Type (C=Comp, G=grab) Matrix (W=Water, S=Sediment, O=Other) Preservation Code:		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 Other: M - Hexane N - None O - AsNsO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - EDTA Z - other (specify)	
Sample Date Sample Time Sample Type Matrix Preservation Code		Special Instructions/Note: Total Number of Containers:	
BAC-16-F-2023 0411-01 BAC-23-F-20230411-01 DUP-005-BAC-23-F-20230411-01 BAC-08-F-20230411-01 BAC-14-F-20230411-01 BAC-12-F-20230411-01 EB-001-F-20230411-01 BAC-07-F-20230412-01 BAC-18-F-20230412-01 BAC-06-F-20230412-01 DUP-006-BAC-06-F-20230412-01		240-183575 Chain of Custody 	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months	
Empty Kit Relinquished by: Relinquished by: Bobby Caste Date/Time: 4-13-23 10:40 Relinquished by:		Method of Shipment: Received by:	
Relinquished by:		Date/Time: 4-13-23 11:30 Company: ESTA	
Relinquished by:		Date/Time: 4-13-23 8:00 Company: ESTA	
Custody Seal No.: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks:	

Client Information		Sampler: Bobby Cisto		Lab PM: Cisneros, Roxanne		Carrier Tracking No(s): 240-93018-34502	
Client Contact: Taylor Huffman		Phone: 740-573-4308		E-Mail: roxanne.cisneros@eurofinsel.com		Page: Page 1 of 1 - Pg 2 of 2	
Company: Lightstone Generation Gavin Power LLC		PWSID:		State of Origin:		Job #:	
Address: 7397 OH-7		Due Date Requested:		Analysis Requested:		Preservation Codes:	
City: Cheshire		TAT Requested (days):		Perform MS/MSD (Yes or No)		A - HCL M - Hexane N - None O - AshNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
State, Zip: OH, 45620		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		2540C, Calcd, 300.0_28D(Chloride, Fluoride, Sulfate)		Other:	
Phone: 740-925-3171(Tel)		PO #: 2935505		6010B, 7470, 6020(See Metals List)		I - Ice J - DI Water K - EDTA L - EDA	
Email: taylor.huffman@lightstonegen.com		WO #:		2320B(Carbonate Alkalinity/Bi-Carbonate Alkalinity)		Special Instructions/Note:	
Project Name: Federal - CCR Wells		Project #: 24019633		2320B(Carbonate Alkalinity/Bi-Carbonate Alkalinity)		Total Number of containers	
Site: Ohio		SSOW#:		9315_Ra226, 9320_Ra228		X	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
BAC-16-F-20230412-01		4-12-23		1429		W	
FB-001-F-20230412-01		4-12-23		1530		W	
Matrix (Water, Soil, Dewatered, Other)		Preservation Code:		Field Filtered Sample (Yes or No)		2540C, Calcd, 300.0_28D(Chloride, Fluoride, Sulfate)	
		W		W		2320B(Carbonate Alkalinity/Bi-Carbonate Alkalinity)	
Possible Hazard Identification		Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological <input type="checkbox"/>		Perform MS/MSD (Yes or No)		6010B, 7470, 6020(See Metals List)	
Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/>		Deliverable Requested: I, II, III, IV, Other (specify)		Field Filtered Sample (Yes or No)		9315_Ra226, 9320_Ra228	
Empty Kit Relinquished by:		Date:		Sample Date		Sample Time	
Relinquished by: Taylor Huffman		Date: 4-13-23 / 0840		4-12-23		1429	
Relinquished by: Bobby Cisto		Date: 4-13-23 / 1200		4-12-23		1530	
Relinquished by: Bobby Cisto		Date: 4-13-23 / 1423		4-12-23		1429	
Custody Seal No. <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks:		Special Instructions/QC Requirements:	
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For <input type="checkbox"/> Months		Method of Shipment:		Company: ESR	
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For <input type="checkbox"/> Months		Method of Shipment:		Company: ESR	



Eurofins - Canton Sample Receipt Form/Narrative
Barberton Facility

Login # : _____

Client Lightstone

Site Name _____

Cooler unpacked by:

Rachelle Haide

Cooler Received on 4 14 23

Opened on 4 14 23

FedEx: 1st Grd Exp UPS FAS Clipper

Client Drop Off Eurofins Courier Other _____

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

Storage Location _____


Eurofins Cooler # E C ~~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 # 22 (CF +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 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 NA
-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# HC203864
- 14. Were VOAs on the COC? Yes No NA
- 15. Were air bubbles >6 mm in any VOA vials? Yes No NA  ← Larger than this.
- 16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No NA
- 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: _____

Temperature readings:

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-10-F-20230411-01	240-183575-C-1	Plastic 500ml - with Nitric Acid	<2			
BAC-10-F-20230411-01	240-183575-D-1	Plastic 1 liter - Nitric Acid	<2			
BAC-10-F-20230411-01	240-183575-E-1	Plastic 1 liter - Nitric Acid	<2			
BAC-23-F-20230411-01	240-183575-C-2	Plastic 500ml - with Nitric Acid	<2			
BAC-23-F-20230411-01	240-183575-D-2	Plastic 1 liter - Nitric Acid	<2			
BAC-23-F-20230411-01	240-183575-E-2	Plastic 1 liter - Nitric Acid	<2			
DUP-005-BAC-23-F-20230411-01	240-183575-C-3	Plastic 500ml - with Nitric Acid	<2			
DUP-005-BAC-23-F-20230411-01	240-183575-D-3	Plastic 1 liter - Nitric Acid	<2			
DUP-005-BAC-23-F-20230411-01	240-183575-E-3	Plastic 1 liter - Nitric Acid	<2			
BAC-08-F-20230411-01	240-183575-C-4	Plastic 500ml - with Nitric Acid	<2			
BAC-08-F-20230411-01	240-183575-D-4	Plastic 1 liter - Nitric Acid	<2			
BAC-08-F-20230411-01	240-183575-E-4	Plastic 1 liter - Nitric Acid	<2			
BAC-14-F-20230411-01	240-183575-C-5	Plastic 500ml - with Nitric Acid	<2			
BAC-14-F-20230411-01	240-183575-D-5	Plastic 1 liter - Nitric Acid	<2			
BAC-14-F-20230411-01	240-183575-E-5	Plastic 1 liter - Nitric Acid	<2			
BAC-12-F-20230411-01	240-183575-C-6	Plastic 500ml - with Nitric Acid	<2			
BAC-12-F-20230411-01	240-183575-D-6	Plastic 1 liter - Nitric Acid	<2			
BAC-12-F-20230411-01	240-183575-E-6	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-20230411-01	240-183575-C-7	Plastic 500ml - with Nitric Acid	<2			
EB-001-F-20230411-01	240-183575-D-7	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-20230411-01	240-183575-E-7	Plastic 1 liter - Nitric Acid	<2			
BAC-07-F-20230412-01	240-183575-C-8	Plastic 500ml - with Nitric Acid	<2			
BAC-07-F-20230412-01	240-183575-D-8	Plastic 1 liter - Nitric Acid	<2			
BAC-07-F-20230412-01	240-183575-E-8	Plastic 1 liter - Nitric Acid	<2			
BAC-18-F-20230412-01	240-183575-C-9	Plastic 500ml - with Nitric Acid	<2			
BAC-18-F-20230412-01	240-183575-D-9	Plastic 1 liter - Nitric Acid	<2			
BAC-18-F-20230412-01	240-183575-E-9	Plastic 1 liter - Nitric Acid	<2			
BAC-06-F-20230412-01	240-183575-C-10	Plastic 500ml - with Nitric Acid	<2			
BAC-06-F-20230412-01	240-183575-D-10	Plastic 1 liter - Nitric Acid	<2			
BAC-06-F-20230412-01	240-183575-E-10	Plastic 1 liter - Nitric Acid	<2			
DUP-006-BAC-06-F-20230412-01	240-183575-C-11	Plastic 500ml - with Nitric Acid	<2			
DUP-006-BAC-06-F-20230412-01	240-183575-D-11	Plastic 1 liter - Nitric Acid	<2			

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
DUP-006-BAC-06-F-20230412-01	240-183575-E-11	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-16-F-20230412-01	240-183575-C-12	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-16-F-20230412-01	240-183575-D-12	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-16-F-20230412-01	240-183575-E-12	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230412-01	240-183575-C-13	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230412-01	240-183575-D-13	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230412-01	240-183575-E-13	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

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Client Information (Sub Contract Lab)		Lab PM:	Carrier Tracking No(s):	COC No:						
Client Contact: Shipping/Receiving		Cisneros, Roxanne		240-166535-1						
Company: TestAmerica Laboratories, Inc.		E-Mail: roxanne.cisneros@et.eurofins.com	State of Origin: Ohio	Page: Page 1 of 2						
Address: 19715 Rider Trail North,		Job #: 240-183575-1								
City: Earth City	Due Date Requested: 5/18/2023	Preservation Codes:								
State: MO	TAT Requested (days):	M - Hexane								
Zip: MO, 63045	PO #:	A - HCL								
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	WO #:	N - None								
E-Mail:	Project #:	O - AsNaO2								
Project Name: Federal CCR Wells	SSOW#:	P - Na2O4S								
Site:		R - Na2SO3								
		S - H2SO4								
		T - TSP Dodecahydrate								
		U - Acetone								
		V - MCAA								
		W - pH 4-5								
		Y - Trizma								
		Z - other (specify)								
		Other:								
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Spiked, On-site soil, B1-Tissue, A=sk)	Preservation Code:	Field Filtered Sample (Yes or No)	Perform Method (Yes or No)	Analysis Requested	Total Number of Containers	Special Instructions/Note:
BAC-10-F-20230411-01 (240-183575-1)	4/11/23	10:03 Eastern		Water			X	9320_Raz28/Precep_0 Radium-228 (GFC)	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-23-F-20230411-01 (240-183575-2)	4/11/23	11:22 Eastern		Water			X	9315_Raz28/Precep_21 Radium-228 (GFC)	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
DUP-005-BAC-23-F-20230411-01 (240-183575-3)	4/11/23	11:22 Eastern		Water			X	Radium-228	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-08-F-20230411-01 (240-183575-4)	4/11/23	12:27 Eastern		Water			X		2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-14-F-20230411-01 (240-183575-5)	4/11/23	14:00 Eastern		Water			X		2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-12-F-20230411-01 (240-183575-6)	4/11/23	14:58 Eastern		Water			X		2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
EB-001-F-20230411-01 (240-183575-7)	4/11/23	15:30 Eastern		Water			X		2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-07-F-20230412-01 (240-183575-8)	4/12/23	10:34 Eastern		Water			X		2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-18-F-20230412-01 (240-183575-9)	4/12/23	11:31 Eastern		Water			X		2	Recount of TAR after 21 day ingrowth if > action limit; save planchet

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/test/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
 Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For Months

Special Instructions/QC Requirements:

Empty Kit Relinquished by: _____ Date: _____ Time: _____ Method of Shipment: _____
 Relinquished by: *Sarah Hester* Date: *4/17/23* Time: *8:00* Received by: _____ Date/Time: _____
 Relinquished by: _____ Date/Time: _____ Received by: *Carol Foxwell* Date/Time: *APR 18 2023* Company: *ETA STL*
 Relinquished by: _____ Date/Time: _____ Received by: _____ Date/Time: _____ Company: _____

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



Chain of Custody Record

euofins Cleveland
 180 S. Van Buren Avenue
 Barberton, OH 44203
 Phone: 330-497-9396 Fax: 330-497-0772

Client Information (Sub Contract Lab)		Lab PM: Cisneros, Roxanne		COC No: 240-166535.2	
Client Contact: Shipping/Receiving		E-Mail: roxanne.cisneros@et.euofins.com		Page: Page 2 of 2	
Company: TstAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 240-183575-1	
Address: 18715 Rider Trail North, Earth City State, Zip: MO, 63045		Due Date Requested: 5/18/2023		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)	
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		TAT Requested (days):		Analysis Requested	
E-mail:		PO #:		Total Number of Containers	
Project Name: Federal CCR Wells		WO #:		Special Instructions/Note:	
Site:		Project #: 24019633		. Recount of TAR after 21 day ingrowth if > action limit; save planchet	
SSOW#:		SSOW#:		. Recount of TAR after 21 day ingrowth if > action limit; save planchet	
Sample Identification - Client ID (Lab ID)		Sample Date		. Recount of TAR after 21 day ingrowth if > action limit; save planchet	
BAC-06-F-20230412-01 (240-183575-10)		4/12/23		. Recount of TAR after 21 day ingrowth if > action limit; save planchet	
DUP-006-BAC-06-F-20230412-01 (240-183575-11)		4/12/23			
BAC-16-F-20230412-01 (240-183575-12)		4/12/23			
EB-001-F-20230412-01 (240-183575-13)		4/12/23			
Sample Time		Sample Date			
13:00 Eastern		4/12/23			
13:00 Eastern		4/12/23			
14:29 Eastern		4/12/23			
15:30 Eastern		4/12/23			
Matrix (Water, Solid, Oil, Tissue, Aque)		Preservation Code:			
Water		Water			
Water		Water			
Water		Water			
Water		Water			
Field Filtered & Sample (Yes or No)		Perform MS/MS (Yes or No)			
X		X			
Radium-228 (GFC) / Combined Radium-226 and 9315_Ra226/PreSep_21 Radium-226 (GFC)		9320_Ra228/PreSep_0 Radium-228 (GFC)			
X		X			
X		X			
X		X			
X		X			

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/test/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
 Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2
 Empty Kit Relinquished by: _____ Date: _____
 Relinquished by: *[Signature]* Date Time: 4/17/23 12:00
 Relinquished by: _____ Date Time: _____
 Relinquished by: _____ Date Time: _____
 Custody Seals Intact: _____ Custody Seal No.: _____
 Δ Yes Δ No

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
 Special Instructions/QC Requirements:

Received by: _____ Date/Time: _____
 Received by: *[Signature]* Date/Time: APR 18 2023
 Received by: _____ Date/Time: _____
 Cooler Temperature(s) °C and Other Remarks:



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-183575-1

Login Number: 183575

List Number: 2

Creator: Worthington, Sierra M

List Source: Eurofins St. Louis

List Creation: 04/18/23 01:40 PM

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



 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 10/31/2023 4:21:36 PM

JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-192599-1

Eurofins Cleveland

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



Generated
10/31/2023 4:21:36 PM

Authorized for release by
Opal Johnson, Project Manager II
Opal.Johnson@et.eurofinsus.com
Designee for
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roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

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.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Job ID: 240-192599-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-192599-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample 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 9/30/2023 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 7 coolers at receipt time were 0.1°C, 0.8°C, 1.1°C, 2.0°C, 3.7°C, 14.4°C and 21.3°C

Metals

Method 6020B: The continuing calibration verification (CCV) associated with batch 240-589577 recovered above the upper control limit for Lithium. The samples associated with this CCV were below the reporting limits for the affected analytes; therefore, the data have been reported. The associated samples are impacted: BAC-10-F-20230926-01 (240-192599-1), BAC-06-F-20230927-01 (240-192599-3) and MW-1-F-20230928-01 (240-192599-10).

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: BAC-11-F-20230927-01 (240-192599-6). 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 160-630672

The barium carrier recovery is outside the upper control limit (110%) for the following sample: BAC-11-F-20230927-01 (240-192599-6). 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 630672

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

BAC-10-F-20230926-01 (240-192599-1), BAC-07-F-20230927-01 (240-192599-2), BAC-06-F-20230927-01 (240-192599-3), BAC-19-F-20230927-01 (240-192599-4), BAC-18-F-20230927-01 (240-192599-5), BAC-02-F-20230927-01 (240-192599-7), DUP-005-F-20230927-01 (240-192599-8), EB-001-F-20230927-01 (240-192599-9), MW-1-F-20230928-01 (240-192599-10), MW-1-F-20230928-01 (240-192599-10[MS]), MW-1-F-20230928-01 (240-192599-10[MSD]), BAC-21-F-20230928-01 (240-192599-11), BAC-22-F-20230928-01 (240-192599-12), BAC-23-F-20230928-01 (240-192599-13), BAC-08-F-20230928-01 (240-192599-14), EB-001-F-20230928-01 (240-192599-15), (LCS 160-630672/2-A) and (MB 160-630672/1-A)

Method 9315_Ra226: Radium 226 batch 630672

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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Job ID: 240-192599-1 (Continued)

Laboratory: Eurofins Cleveland (Continued)

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.

BAC-11-F-20230927-01 (240-192599-6)

Method 9320_Ra228: Radium 228 prep batch 106-630677

The barium carrier recovery is outside the upper control limit (110%) for the following sample: BAC-11-F-20230927-01 (240-192599-6). 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 630677

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.

BAC-11-F-20230927-01 (240-192599-6)

Method 9320_Ra228: Radium-228 batch 630677

The detection goal was not met for the following sample(s). Samples were prepped at a reduced volume due to the presence of matrix interferences: BAC-02-F-20230927-01 (240-192599-7), DUP-005-F-20230927-01 (240-192599-8) and BAC-21-F-20230928-01 (240-192599-11). Analytical results are reported with the detection limit achieved.

Method 9320_Ra228: Radium-228 batch 630677

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

BAC-10-F-20230926-01 (240-192599-1), BAC-07-F-20230927-01 (240-192599-2), BAC-06-F-20230927-01 (240-192599-3), BAC-19-F-20230927-01 (240-192599-4), BAC-18-F-20230927-01 (240-192599-5), BAC-11-F-20230927-01 (240-192599-6), BAC-02-F-20230927-01 (240-192599-7), DUP-005-F-20230927-01 (240-192599-8), EB-001-F-20230927-01 (240-192599-9), MW-1-F-20230928-01 (240-192599-10), MW-1-F-20230928-01 (240-192599-10[MS]), MW-1-F-20230928-01 (240-192599-10[MSD]), BAC-21-F-20230928-01 (240-192599-11), BAC-22-F-20230928-01 (240-192599-12), BAC-23-F-20230928-01 (240-192599-13), BAC-08-F-20230928-01 (240-192599-14), EB-001-F-20230928-01 (240-192599-15), (LCS 160-630677/2-A) and (MB 160-630677/1-A)

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: 240-192599-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
SM 2540C	Solids, Total Dissolved (TDS)	SM	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: 240-192599-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-192599-1	BAC-10-F-20230926-01	Water	09/26/23 14:38	09/30/23 08:00
240-192599-2	BAC-07-F-20230927-01	Water	09/27/23 10:09	09/30/23 08:00
240-192599-3	BAC-06-F-20230927-01	Water	09/27/23 11:07	09/30/23 08:00
240-192599-4	BAC-19-F-20230927-01	Water	09/27/23 12:27	09/30/23 08:00
240-192599-5	BAC-18-F-20230927-01	Water	09/27/23 13:05	09/30/23 08:00
240-192599-6	BAC-11-F-20230927-01	Water	09/27/23 14:19	09/30/23 08:00
240-192599-7	BAC-02-F-20230927-01	Water	09/27/23 15:04	09/30/23 08:00
240-192599-8	DUP-005-F-20230927-01	Water	09/27/23 00:00	09/30/23 08:00
240-192599-9	EB-001-F-20230927-01	Water	09/27/23 15:40	09/30/23 08:00
240-192599-10	MW-1-F-20230928-01	Water	09/28/23 09:46	09/30/23 08:00
240-192599-11	BAC-21-F-20230928-01	Water	09/28/23 10:58	09/30/23 08:00
240-192599-12	BAC-22-F-20230928-01	Water	09/28/23 12:07	09/30/23 08:00
240-192599-13	BAC-23-F-20230928-01	Water	09/28/23 13:02	09/30/23 08:00
240-192599-14	BAC-08-F-20230928-01	Water	09/28/23 14:05	09/30/23 08:00
240-192599-15	EB-001-F-20230928-01	Water	09/28/23 14:45	09/30/23 08:00



Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-10-F-20230926-01

Lab Sample ID: 240-192599-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	550		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	1.2	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	42		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	110000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	2.3	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.5		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.5		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.3	J ^+ ^2	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	29000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	50000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	48		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.097		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	200		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	580		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-07-F-20230927-01

Lab Sample ID: 240-192599-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1100		100	57	ug/L	1		6010D	Total Recoverable
Barium	37		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	82000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	1.3		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	6.0	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	130		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	130		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	25		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.078		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	170		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	410		10	7.8	mg/L	1		SM 2540C	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: 240-192599-1

Client Sample ID: BAC-06-F-20230927-01

Lab Sample ID: 240-192599-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1800		100	57	ug/L	1		6010D	Total Recoverable
Barium	86		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	110000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	3.3		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	6.9	J ^+ ^2	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	26000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	24		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.10		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	230		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	560		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-19-F-20230927-01

Lab Sample ID: 240-192599-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	220		100	57	ug/L	1		6010D	Total Recoverable
Barium	570		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	91000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	0.26	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	30		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	19000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	7.5		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	470000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	150		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	150		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	920		10	1.3	mg/L	10		300.0	Total/NA
Fluoride	0.56		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	9.4		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	1500		20	16	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-18-F-20230927-01

Lab Sample ID: 240-192599-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1400		100	57	ug/L	1		6010D	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: 240-192599-1

Client Sample ID: BAC-18-F-20230927-01 (Continued)

Lab Sample ID: 240-192599-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	24		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	72000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	0.80	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	6.2	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	19000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1200		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	86		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	86		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	25		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.061		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	390		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-11-F-20230927-01

Lab Sample ID: 240-192599-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	400		100	57	ug/L	1		6010D	Total Recoverable
Barium	160000		200	89	ug/L	40		6020B	Total Recoverable
Calcium	2600000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	3.7	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.2		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.91	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	350		320	66	ug/L	40		6020B	Total Recoverable
Magnesium	770000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	2.1	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	25000		1000	220	ug/L	1		6020B	Total Recoverable
Selenium	1.1	J	5.0	0.89	ug/L	1		6020B	Total Recoverable
Sodium	11000000		40000	13000	ug/L	40		6020B	Total Recoverable
Total Alkalinity	32		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	32		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	33000		1000	130	mg/L	1000		300.0	Total/NA
Sulfate	72	J	100	35	mg/L	100		300.0	Total/NA
Total Dissolved Solids	38000		1000	780	mg/L	1		SM 2540C	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: 240-192599-1

Client Sample ID: BAC-02-F-20230927-01

Lab Sample ID: 240-192599-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1100		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	4.3	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	130		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.32	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Calcium	130000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	5.7		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	3.2		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	4.8		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	4.1	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	36000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	3100		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	71000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	250		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	250		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	63		2.0	0.26	mg/L	2		300.0	Total/NA
Fluoride	0.23		0.10	0.048	mg/L	2		300.0	Total/NA
Sulfate	310		2.0	0.70	mg/L	2		300.0	Total/NA
Total Dissolved Solids	690		40	31	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-005-F-20230927-01

Lab Sample ID: 240-192599-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1300		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	4.1	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	91		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.36	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Calcium	140000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	5.5		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	3.2		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	4.9		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	4.7	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	39000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	3200		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: 240-192599-1

Client Sample ID: DUP-005-F-20230927-01 (Continued)

Lab Sample ID: 240-192599-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	71000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	260		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	260		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	62		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.22		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	310		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	800		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-001-F-20230927-01

Lab Sample ID: 240-192599-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	6.9		5.0	2.2	ug/L	1		6020B	Total Recoverable
Lithium	2.6	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Sodium	1000		1000	330	ug/L	1		6020B	Total Recoverable

Client Sample ID: MW-1-F-20230928-01

Lab Sample ID: 240-192599-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	62	J	100	57	ug/L	1		6010D	Total Recoverable
Antimony	0.60	J	2.0	0.57	ug/L	1		6020B	Total Recoverable
Barium	130		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.24	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Calcium	130000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	1.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.83	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.0	J ^+	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	17000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.1	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	1700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	20000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.71	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	39		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.078		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	130		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	480		10	7.8	mg/L	1		SM 2540C	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: 240-192599-1

Client Sample ID: BAC-21-F-20230928-01

Lab Sample ID: 240-192599-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	390		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	5.0		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	180		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	140000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	4.2	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.6		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	2.9		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.2	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	16000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	32000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	74		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.052		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	130		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	530		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-22-F-20230928-01

Lab Sample ID: 240-192599-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	280		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	4.0	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	190		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	210000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	3.3	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.2		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	2.5		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.6	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	26000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	3900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	26000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	35		1.0	0.13	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: 240-192599-1

Client Sample ID: BAC-22-F-20230928-01 (Continued)

Lab Sample ID: 240-192599-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.061		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	240		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	630		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-23-F-20230928-01

Lab Sample ID: 240-192599-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	240		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	1.2	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	120		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	120000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	0.87	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	3.2	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	15000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	19000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	42		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.096		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	140		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	520		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-08-F-20230928-01

Lab Sample ID: 240-192599-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	100		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	1.0	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	110		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	90000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	1.4		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	2.1	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	13000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	13000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	23		1.0	0.13	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: 240-192599-1

Client Sample ID: BAC-08-F-20230928-01 (Continued)

Lab Sample ID: 240-192599-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.090		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	78		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	350		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-001-F-20230928-01

Lab Sample ID: 240-192599-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	470	J	1000	330	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-10-F-20230926-01

Lab Sample ID: 240-192599-1

Date Collected: 09/26/23 14:38

Matrix: Water

Date Received: 09/30/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	550		100	57	ug/L		10/02/23 14:00	10/05/23 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		10/02/23 14:00	10/03/23 16:14	1
Arsenic	1.2	J	5.0	0.75	ug/L		10/02/23 14:00	10/03/23 16:14	1
Barium	42		5.0	2.2	ug/L		10/02/23 14:00	10/03/23 16:14	1
Beryllium	ND		1.0	0.62	ug/L		10/02/23 14:00	10/03/23 16:14	1
Cadmium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 16:14	1
Calcium	110000		1000	250	ug/L		10/02/23 14:00	10/03/23 16:14	1
Chromium	2.3	J	5.0	1.2	ug/L		10/02/23 14:00	10/03/23 16:14	1
Cobalt	1.5		1.0	0.19	ug/L		10/02/23 14:00	10/03/23 16:14	1
Lead	1.5		1.0	0.45	ug/L		10/02/23 14:00	10/03/23 16:14	1
Lithium	6.3	J ^+ ^2	8.0	1.7	ug/L		10/02/23 14:00	10/03/23 16:14	1
Magnesium	29000		1000	61	ug/L		10/02/23 14:00	10/03/23 16:14	1
Molybdenum	ND		5.0	1.1	ug/L		10/02/23 14:00	10/03/23 16:14	1
Potassium	1800		1000	220	ug/L		10/02/23 14:00	10/03/23 16:14	1
Selenium	ND		5.0	0.89	ug/L		10/02/23 14:00	10/03/23 16:14	1
Sodium	50000		1000	330	ug/L		10/02/23 14:00	10/03/23 16:14	1
Thallium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 16:14	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		10/02/23 14:00	10/03/23 18:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			10/04/23 18:50	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			10/04/23 18:50	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/04/23 18:50	1
Chloride (EPA 300.0)	48		1.0	0.13	mg/L			10/06/23 16:23	1
Fluoride (EPA 300.0)	0.097		0.050	0.024	mg/L			10/06/23 16:23	1
Sulfate (EPA 300.0)	200		1.0	0.35	mg/L			10/06/23 16:23	1
Total Dissolved Solids (SM 2540C)	580		10	7.8	mg/L			10/02/23 08:29	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.180	U	0.210	0.210	1.00	0.342	pCi/L	10/04/23 11:23	10/27/23 07:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.8		30 - 110					10/04/23 11:23	10/27/23 07:37	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.725	U	0.483	0.487	1.00	0.726	pCi/L	10/04/23 11:31	10/26/23 11:20	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-10-F-20230926-01

Lab Sample ID: 240-192599-1

Date Collected: 09/26/23 14:38

Matrix: Water

Date Received: 09/30/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	85.8		30 - 110	10/04/23 11:31	10/26/23 11:20	1
Y Carrier	87.9		30 - 110	10/04/23 11:31	10/26/23 11:20	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.905		0.527	0.530	5.00	0.726	pCi/L		10/30/23 10:31	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-07-F-20230927-01

Lab Sample ID: 240-192599-2

Date Collected: 09/27/23 10:09

Matrix: Water

Date Received: 09/30/23 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		10/02/23 14:00	10/05/23 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		10/02/23 14:00	10/03/23 16:16	1
Arsenic	ND		5.0	0.75	ug/L		10/02/23 14:00	10/03/23 16:16	1
Barium	37		5.0	2.2	ug/L		10/02/23 14:00	10/03/23 16:16	1
Beryllium	ND		1.0	0.62	ug/L		10/02/23 14:00	10/03/23 16:16	1
Cadmium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 16:16	1
Calcium	82000		1000	250	ug/L		10/02/23 14:00	10/03/23 16:16	1
Chromium	ND		5.0	1.2	ug/L		10/02/23 14:00	10/03/23 16:16	1
Cobalt	1.3		1.0	0.19	ug/L		10/02/23 14:00	10/03/23 16:16	1
Lead	ND		1.0	0.45	ug/L		10/02/23 14:00	10/03/23 16:16	1
Lithium	6.0	J	8.0	1.7	ug/L		10/02/23 14:00	10/04/23 12:31	1
Magnesium	20000		1000	61	ug/L		10/02/23 14:00	10/03/23 16:16	1
Molybdenum	ND		5.0	1.1	ug/L		10/02/23 14:00	10/03/23 16:16	1
Potassium	1300		1000	220	ug/L		10/02/23 14:00	10/03/23 16:16	1
Selenium	ND		5.0	0.89	ug/L		10/02/23 14:00	10/03/23 16:16	1
Sodium	16000		1000	330	ug/L		10/02/23 14:00	10/03/23 16:16	1
Thallium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 16:16	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		10/02/23 14:00	10/03/23 18:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	130		5.0	2.6	mg/L			10/04/23 19:04	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	130		5.0	2.6	mg/L			10/04/23 19:04	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/04/23 19:04	1
Chloride (EPA 300.0)	25		1.0	0.13	mg/L			10/05/23 19:54	1
Fluoride (EPA 300.0)	0.078		0.050	0.024	mg/L			10/05/23 19:54	1
Sulfate (EPA 300.0)	170		1.0	0.35	mg/L			10/05/23 19:54	1
Total Dissolved Solids (SM 2540C)	410		10	7.8	mg/L			10/02/23 12:00	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	-0.0123	U	0.128	0.128	1.00	0.270	pCi/L	10/04/23 11:23	10/27/23 07:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.7		30 - 110					10/04/23 11:23	10/27/23 07:38	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.406	U	0.336	0.338	1.00	0.525	pCi/L	10/04/23 11:31	10/26/23 11:20	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-07-F-20230927-01

Lab Sample ID: 240-192599-2

Date Collected: 09/27/23 10:09

Matrix: Water

Date Received: 09/30/23 08:00

<u>Carrier</u>	<u>%Yield</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Ba Carrier	90.7		30 - 110	10/04/23 11:31	10/26/23 11:20	1
Y Carrier	85.6		30 - 110	10/04/23 11:31	10/26/23 11:20	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

<u>Analyte</u>	<u>Result</u>	<u>Qualifier</u>	<u>Count Uncert. (2σ+/-)</u>	<u>Total Uncert. (2σ+/-)</u>	<u>RL</u>	<u>MDC</u>	<u>Unit</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Combined Radium 226 + 228	0.393	U	0.360	0.361	5.00	0.525	pCi/L		10/30/23 10:31	1



Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-06-F-20230927-01

Lab Sample ID: 240-192599-3

Date Collected: 09/27/23 11:07

Matrix: Water

Date Received: 09/30/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1800		100	57	ug/L		10/02/23 14:00	10/05/23 00:30	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		10/02/23 14:00	10/03/23 16:19	1
Arsenic	ND		5.0	0.75	ug/L		10/02/23 14:00	10/03/23 16:19	1
Barium	86		5.0	2.2	ug/L		10/02/23 14:00	10/03/23 16:19	1
Beryllium	ND		1.0	0.62	ug/L		10/02/23 14:00	10/03/23 16:19	1
Cadmium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 16:19	1
Calcium	110000		1000	250	ug/L		10/02/23 14:00	10/03/23 16:19	1
Chromium	ND		5.0	1.2	ug/L		10/02/23 14:00	10/03/23 16:19	1
Cobalt	3.3		1.0	0.19	ug/L		10/02/23 14:00	10/03/23 16:19	1
Lead	ND		1.0	0.45	ug/L		10/02/23 14:00	10/03/23 16:19	1
Lithium	6.9	J ^+ ^2	8.0	1.7	ug/L		10/02/23 14:00	10/03/23 16:19	1
Magnesium	26000		1000	61	ug/L		10/02/23 14:00	10/03/23 16:19	1
Molybdenum	ND		5.0	1.1	ug/L		10/02/23 14:00	10/03/23 16:19	1
Potassium	1400		1000	220	ug/L		10/02/23 14:00	10/03/23 16:19	1
Selenium	ND		5.0	0.89	ug/L		10/02/23 14:00	10/03/23 16:19	1
Sodium	16000		1000	330	ug/L		10/02/23 14:00	10/03/23 16:19	1
Thallium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 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		10/02/23 14:00	10/03/23 18:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	200		5.0	2.6	mg/L			10/04/23 19:14	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	200		5.0	2.6	mg/L			10/04/23 19:14	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/04/23 19:14	1
Chloride (EPA 300.0)	24		1.0	0.13	mg/L			10/08/23 15:05	1
Fluoride (EPA 300.0)	0.10		0.050	0.024	mg/L			10/08/23 15:05	1
Sulfate (EPA 300.0)	230		5.0	1.7	mg/L			10/08/23 15:25	5
Total Dissolved Solids (SM 2540C)	560		10	7.8	mg/L			10/02/23 12:00	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	0.304		0.193	0.195	1.00	0.260	pCi/L	10/04/23 11:23	10/27/23 07:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.4		30 - 110					10/04/23 11:23	10/27/23 07:38	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	0.391	U	0.339	0.341	1.00	0.535	pCi/L	10/04/23 11:31	10/26/23 11:20	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-06-F-20230927-01

Lab Sample ID: 240-192599-3

Date Collected: 09/27/23 11:07

Matrix: Water

Date Received: 09/30/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	92.4		30 - 110	10/04/23 11:31	10/26/23 11:20	1
Y Carrier	85.6		30 - 110	10/04/23 11:31	10/26/23 11:20	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.695		0.390	0.393	5.00	0.535	pCi/L		10/30/23 10:31	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-19-F-20230927-01

Lab Sample ID: 240-192599-4

Date Collected: 09/27/23 12:27

Matrix: Water

Date Received: 09/30/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	220		100	57	ug/L		10/02/23 14:00	10/05/23 00:42	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		10/02/23 14:00	10/03/23 16:21	1
Arsenic	ND		5.0	0.75	ug/L		10/02/23 14:00	10/03/23 16:21	1
Barium	570		5.0	2.2	ug/L		10/02/23 14:00	10/03/23 16:21	1
Beryllium	ND		1.0	0.62	ug/L		10/02/23 14:00	10/03/23 16:21	1
Cadmium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 16:21	1
Calcium	91000		1000	250	ug/L		10/02/23 14:00	10/03/23 16:21	1
Chromium	ND		5.0	1.2	ug/L		10/02/23 14:00	10/03/23 16:21	1
Cobalt	0.26	J	1.0	0.19	ug/L		10/02/23 14:00	10/03/23 16:21	1
Lead	ND		1.0	0.45	ug/L		10/02/23 14:00	10/03/23 16:21	1
Lithium	30		8.0	1.7	ug/L		10/02/23 14:00	10/04/23 12:34	1
Magnesium	19000		1000	61	ug/L		10/02/23 14:00	10/03/23 16:21	1
Molybdenum	7.5		5.0	1.1	ug/L		10/02/23 14:00	10/03/23 16:21	1
Potassium	2900		1000	220	ug/L		10/02/23 14:00	10/03/23 16:21	1
Selenium	ND		5.0	0.89	ug/L		10/02/23 14:00	10/03/23 16:21	1
Sodium	470000		1000	330	ug/L		10/02/23 14:00	10/03/23 16:21	1
Thallium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 16:21	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		10/02/23 14:00	10/03/23 18:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	150		5.0	2.6	mg/L			10/04/23 19:19	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	150		5.0	2.6	mg/L			10/04/23 19:19	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/04/23 19:19	1
Chloride (EPA 300.0)	920		10	1.3	mg/L			10/08/23 22:48	10
Fluoride (EPA 300.0)	0.56		0.050	0.024	mg/L			10/08/23 21:48	1
Sulfate (EPA 300.0)	9.4		1.0	0.35	mg/L			10/08/23 21:48	1
Total Dissolved Solids (SM 2540C)	1500		20	16	mg/L			10/02/23 12:00	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	0.475		0.229	0.233	1.00	0.272	pCi/L	10/04/23 11:23	10/27/23 10:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.1		30 - 110					10/04/23 11:23	10/27/23 10:38	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	0.990		0.423	0.433	1.00	0.557	pCi/L	10/04/23 11:31	10/26/23 11:20	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-19-F-20230927-01

Lab Sample ID: 240-192599-4

Date Collected: 09/27/23 12:27

Matrix: Water

Date Received: 09/30/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	83.1		30 - 110	10/04/23 11:31	10/26/23 11:20	1
Y Carrier	84.5		30 - 110	10/04/23 11:31	10/26/23 11:20	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	1.47		0.481	0.492	5.00	0.557	pCi/L		10/30/23 10:31	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-18-F-20230927-01

Lab Sample ID: 240-192599-5

Date Collected: 09/27/23 13:05

Matrix: Water

Date Received: 09/30/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1400		100	57	ug/L		10/02/23 14:00	10/05/23 00:47	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		10/02/23 14:00	10/03/23 16:24	1
Arsenic	ND		5.0	0.75	ug/L		10/02/23 14:00	10/03/23 16:24	1
Barium	24		5.0	2.2	ug/L		10/02/23 14:00	10/03/23 16:24	1
Beryllium	ND		1.0	0.62	ug/L		10/02/23 14:00	10/03/23 16:24	1
Cadmium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 16:24	1
Calcium	72000		1000	250	ug/L		10/02/23 14:00	10/03/23 16:24	1
Chromium	ND		5.0	1.2	ug/L		10/02/23 14:00	10/03/23 16:24	1
Cobalt	0.80	J	1.0	0.19	ug/L		10/02/23 14:00	10/03/23 16:24	1
Lead	ND		1.0	0.45	ug/L		10/02/23 14:00	10/03/23 16:24	1
Lithium	6.2	J	8.0	1.7	ug/L		10/02/23 14:00	10/04/23 12:36	1
Magnesium	19000		1000	61	ug/L		10/02/23 14:00	10/03/23 16:24	1
Molybdenum	ND		5.0	1.1	ug/L		10/02/23 14:00	10/03/23 16:24	1
Potassium	1200		1000	220	ug/L		10/02/23 14:00	10/03/23 16:24	1
Selenium	ND		5.0	0.89	ug/L		10/02/23 14:00	10/03/23 16:24	1
Sodium	16000		1000	330	ug/L		10/02/23 14:00	10/03/23 16:24	1
Thallium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 16:24	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		10/02/23 14:00	10/03/23 18:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	86		5.0	2.6	mg/L			10/04/23 19:25	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	86		5.0	2.6	mg/L			10/04/23 19:25	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/04/23 19:25	1
Chloride (EPA 300.0)	25		1.0	0.13	mg/L			10/08/23 13:44	1
Fluoride (EPA 300.0)	0.061		0.050	0.024	mg/L			10/08/23 13:44	1
Sulfate (EPA 300.0)	190		1.0	0.35	mg/L			10/08/23 13:44	1
Total Dissolved Solids (SM 2540C)	390		10	7.8	mg/L			10/02/23 12:00	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0718	U	0.154	0.154	1.00	0.277	pCi/L	10/04/23 11:23	10/27/23 10:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.6		30 - 110					10/04/23 11:23	10/27/23 10:38	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	-0.0238	U	0.249	0.249	1.00	0.482	pCi/L	10/04/23 11:31	10/26/23 11:20	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-18-F-20230927-01

Lab Sample ID: 240-192599-5

Date Collected: 09/27/23 13:05

Matrix: Water

Date Received: 09/30/23 08:00

<u>Carrier</u>	<u>%Yield</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Ba Carrier	86.6		30 - 110	10/04/23 11:31	10/26/23 11:20	1
Y Carrier	86.0		30 - 110	10/04/23 11:31	10/26/23 11:20	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

<u>Analyte</u>	<u>Result</u>	<u>Qualifier</u>	<u>Count</u>	<u>Total</u>	<u>RL</u>	<u>MDC</u>	<u>Unit</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
			<u>Uncert.</u>	<u>Uncert.</u>						
Combined Radium 226 + 228	0.0479	U	(2σ+/-) 0.293	(2σ+/-) 0.293	5.00	0.482	pCi/L		10/30/23 10:31	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-11-F-20230927-01

Lab Sample ID: 240-192599-6

Date Collected: 09/27/23 14:19

Matrix: Water

Date Received: 09/30/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	400		100	57	ug/L		10/02/23 14:00	10/05/23 00:51	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		10/02/23 14:00	10/03/23 16:26	1
Arsenic	ND		5.0	0.75	ug/L		10/02/23 14:00	10/03/23 16:26	1
Barium	160000		200	89	ug/L		10/02/23 14:00	10/04/23 12:39	40
Beryllium	ND		1.0	0.62	ug/L		10/02/23 14:00	10/03/23 16:26	1
Cadmium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 16:26	1
Calcium	2600000		1000	250	ug/L		10/02/23 14:00	10/03/23 16:26	1
Chromium	3.7	J	5.0	1.2	ug/L		10/02/23 14:00	10/03/23 16:26	1
Cobalt	1.2		1.0	0.19	ug/L		10/02/23 14:00	10/03/23 16:26	1
Lead	0.91	J	1.0	0.45	ug/L		10/02/23 14:00	10/03/23 16:26	1
Lithium	350		320	66	ug/L		10/02/23 14:00	10/04/23 12:39	40
Magnesium	770000		1000	61	ug/L		10/02/23 14:00	10/03/23 16:26	1
Molybdenum	2.1	J	5.0	1.1	ug/L		10/02/23 14:00	10/03/23 16:26	1
Potassium	25000		1000	220	ug/L		10/02/23 14:00	10/03/23 16:26	1
Selenium	1.1	J	5.0	0.89	ug/L		10/02/23 14:00	10/03/23 16:26	1
Sodium	11000000		40000	13000	ug/L		10/02/23 14:00	10/04/23 12:39	40
Thallium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 16:26	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		10/02/23 14:00	10/03/23 18:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	32		5.0	2.6	mg/L			10/04/23 19:29	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	32		5.0	2.6	mg/L			10/04/23 19:29	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/04/23 19:29	1
Chloride (EPA 300.0)	33000		1000	130	mg/L			10/05/23 19:33	100
Fluoride (EPA 300.0)	ND		5.0	2.4	mg/L			10/05/23 19:13	100
Sulfate (EPA 300.0)	72	J	100	35	mg/L			10/05/23 19:13	100
Total Dissolved Solids (SM 2540C)	38000		1000	780	mg/L			10/02/23 12:00	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	42.4		2.30	4.45	1.00	0.518	pCi/L	10/04/23 11:23	10/27/23 10:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	189	X	30 - 110					10/04/23 11:23	10/27/23 10:38	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	192		5.32	18.5	1.00	0.862	pCi/L	10/04/23 11:31	10/26/23 11:21	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-11-F-20230927-01

Lab Sample ID: 240-192599-6

Date Collected: 09/27/23 14:19

Matrix: Water

Date Received: 09/30/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	189	X	30 - 110	10/04/23 11:31	10/26/23 11:21	1
Y Carrier	89.0		30 - 110	10/04/23 11:31	10/26/23 11:21	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	234		5.80	19.0	5.00	0.862	pCi/L		10/30/23 10:31	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-02-F-20230927-01

Lab Sample ID: 240-192599-7

Date Collected: 09/27/23 15:04

Matrix: Water

Date Received: 09/30/23 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		10/02/23 14:00	10/05/23 00:56	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		10/02/23 14:00	10/03/23 16:29	1
Arsenic	4.3	J	5.0	0.75	ug/L		10/02/23 14:00	10/03/23 16:29	1
Barium	130		5.0	2.2	ug/L		10/02/23 14:00	10/03/23 16:29	1
Beryllium	ND		1.0	0.62	ug/L		10/02/23 14:00	10/03/23 16:29	1
Cadmium	0.32	J	1.0	0.20	ug/L		10/02/23 14:00	10/03/23 16:29	1
Calcium	130000		1000	250	ug/L		10/02/23 14:00	10/03/23 16:29	1
Chromium	5.7		5.0	1.2	ug/L		10/02/23 14:00	10/03/23 16:29	1
Cobalt	3.2		1.0	0.19	ug/L		10/02/23 14:00	10/03/23 16:29	1
Lead	4.8		1.0	0.45	ug/L		10/02/23 14:00	10/03/23 16:29	1
Lithium	4.1	J	8.0	1.7	ug/L		10/02/23 14:00	10/04/23 12:41	1
Magnesium	36000		1000	61	ug/L		10/02/23 14:00	10/03/23 16:29	1
Molybdenum	ND		5.0	1.1	ug/L		10/02/23 14:00	10/03/23 16:29	1
Potassium	3100		1000	220	ug/L		10/02/23 14:00	10/03/23 16:29	1
Selenium	ND		5.0	0.89	ug/L		10/02/23 14:00	10/03/23 16:29	1
Sodium	71000		1000	330	ug/L		10/02/23 14:00	10/03/23 16:29	1
Thallium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 16:29	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		10/02/23 14:00	10/03/23 18:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	250		5.0	2.6	mg/L			10/04/23 19:34	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	250		5.0	2.6	mg/L			10/04/23 19:34	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/04/23 19:34	1
Chloride (EPA 300.0)	63		2.0	0.26	mg/L			10/09/23 00:29	2
Fluoride (EPA 300.0)	0.23		0.10	0.048	mg/L			10/09/23 00:29	2
Sulfate (EPA 300.0)	310		2.0	0.70	mg/L			10/09/23 00:29	2
Total Dissolved Solids (SM 2540C)	690		40	31	mg/L			10/02/23 12:00	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.194	U	0.407	0.407	1.00	0.730	pCi/L	10/04/23 11:23	10/27/23 10:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	65.8		30 - 110					10/04/23 11:23	10/27/23 10:38	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	1.70	G	1.04	1.06	1.00	1.53	pCi/L	10/04/23 11:31	10/26/23 11:21	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-02-F-20230927-01

Lab Sample ID: 240-192599-7

Date Collected: 09/27/23 15:04

Matrix: Water

Date Received: 09/30/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	65.8		30 - 110	10/04/23 11:31	10/26/23 11:21	1
Y Carrier	81.5		30 - 110	10/04/23 11:31	10/26/23 11:21	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	1.90		1.12	1.14	5.00	1.53	pCi/L		10/30/23 10:31	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: DUP-005-F-20230927-01

Lab Sample ID: 240-192599-8

Date Collected: 09/27/23 00:00

Matrix: Water

Date Received: 09/30/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1300		100	57	ug/L		10/02/23 14:00	10/05/23 01:00	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		10/02/23 14:00	10/03/23 16:31	1
Arsenic	4.1	J	5.0	0.75	ug/L		10/02/23 14:00	10/03/23 16:31	1
Barium	91		5.0	2.2	ug/L		10/02/23 14:00	10/03/23 16:31	1
Beryllium	ND		1.0	0.62	ug/L		10/02/23 14:00	10/03/23 16:31	1
Cadmium	0.36	J	1.0	0.20	ug/L		10/02/23 14:00	10/03/23 16:31	1
Calcium	140000		1000	250	ug/L		10/02/23 14:00	10/03/23 16:31	1
Chromium	5.5		5.0	1.2	ug/L		10/02/23 14:00	10/03/23 16:31	1
Cobalt	3.2		1.0	0.19	ug/L		10/02/23 14:00	10/03/23 16:31	1
Lead	4.9		1.0	0.45	ug/L		10/02/23 14:00	10/03/23 16:31	1
Lithium	4.7	J	8.0	1.7	ug/L		10/02/23 14:00	10/04/23 12:43	1
Magnesium	39000		1000	61	ug/L		10/02/23 14:00	10/03/23 16:31	1
Molybdenum	ND		5.0	1.1	ug/L		10/02/23 14:00	10/03/23 16:31	1
Potassium	3200		1000	220	ug/L		10/02/23 14:00	10/03/23 16:31	1
Selenium	ND		5.0	0.89	ug/L		10/02/23 14:00	10/03/23 16:31	1
Sodium	71000		1000	330	ug/L		10/02/23 14:00	10/03/23 16:31	1
Thallium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 16:31	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		10/02/23 14:00	10/03/23 18:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	260		5.0	2.6	mg/L			10/04/23 19:42	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	260		5.0	2.6	mg/L			10/04/23 19:42	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/04/23 19:42	1
Chloride (EPA 300.0)	62		1.0	0.13	mg/L			10/08/23 15:45	1
Fluoride (EPA 300.0)	0.22		0.050	0.024	mg/L			10/08/23 15:45	1
Sulfate (EPA 300.0)	310		5.0	1.7	mg/L			10/08/23 16:05	5
Total Dissolved Solids (SM 2540C)	800		10	7.8	mg/L			10/02/23 12:00	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.414	U	0.454	0.455	1.00	0.733	pCi/L	10/04/23 11:23	10/27/23 10:38	1
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Ba Carrier</i>	67.2		30 - 110					10/04/23 11:23	10/27/23 10:38	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	1.56	G	0.866	0.878	1.00	1.19	pCi/L	10/04/23 11:31	10/26/23 11:19	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: DUP-005-F-20230927-01

Lab Sample ID: 240-192599-8

Date Collected: 09/27/23 00:00

Matrix: Water

Date Received: 09/30/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	67.2		30 - 110	10/04/23 11:31	10/26/23 11:19	1
Y Carrier	84.1		30 - 110	10/04/23 11:31	10/26/23 11:19	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	1.98		0.978	0.989	5.00	1.19	pCi/L		10/30/23 10:31	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: EB-001-F-20230927-01

Lab Sample ID: 240-192599-9

Date Collected: 09/27/23 15:40

Matrix: Water

Date Received: 09/30/23 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		10/02/23 14:00	10/05/23 01:05	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		10/02/23 14:00	10/03/23 16:34	1
Arsenic	ND		5.0	0.75	ug/L		10/02/23 14:00	10/03/23 16:34	1
Barium	6.9		5.0	2.2	ug/L		10/02/23 14:00	10/03/23 16:34	1
Beryllium	ND		1.0	0.62	ug/L		10/02/23 14:00	10/03/23 16:34	1
Cadmium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 16:34	1
Calcium	ND		1000	250	ug/L		10/02/23 14:00	10/03/23 16:34	1
Chromium	ND		5.0	1.2	ug/L		10/02/23 14:00	10/03/23 16:34	1
Cobalt	ND		1.0	0.19	ug/L		10/02/23 14:00	10/03/23 16:34	1
Lead	ND		1.0	0.45	ug/L		10/02/23 14:00	10/03/23 16:34	1
Lithium	2.6 J		8.0	1.7	ug/L		10/02/23 14:00	10/04/23 12:51	1
Magnesium	ND		1000	61	ug/L		10/02/23 14:00	10/03/23 16:34	1
Molybdenum	ND		5.0	1.1	ug/L		10/02/23 14:00	10/03/23 16:34	1
Potassium	ND		1000	220	ug/L		10/02/23 14:00	10/03/23 16:34	1
Selenium	ND		5.0	0.89	ug/L		10/02/23 14:00	10/03/23 16:34	1
Sodium	1000		1000	330	ug/L		10/02/23 14:00	10/03/23 16:34	1
Thallium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 16:34	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		10/02/23 14:00	10/03/23 18:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/04/23 19:47	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/04/23 19:47	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/04/23 19:47	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			10/08/23 13:04	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			10/08/23 13:04	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			10/08/23 13:04	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			10/02/23 12:00	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	-0.0375	U	0.151	0.151	1.00	0.316	pCi/L	10/04/23 11:23	10/27/23 10:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.8		30 - 110					10/04/23 11:23	10/27/23 10:38	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.565	U	0.389	0.392	1.00	0.582	pCi/L	10/04/23 11:31	10/26/23 11:19	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: EB-001-F-20230927-01

Lab Sample ID: 240-192599-9

Date Collected: 09/27/23 15:40

Matrix: Water

Date Received: 09/30/23 08:00

<u>Carrier</u>	<u>%Yield</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Ba Carrier	88.8		30 - 110	10/04/23 11:31	10/26/23 11:19	1
Y Carrier	74.4		30 - 110	10/04/23 11:31	10/26/23 11:19	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

<u>Analyte</u>	<u>Result</u>	<u>Qualifier</u>	<u>Count</u>	<u>Total</u>	<u>RL</u>	<u>MDC</u>	<u>Unit</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
			<u>Uncert.</u>	<u>Uncert.</u>						
			<u>(2σ+/-)</u>	<u>(2σ+/-)</u>						
Combined Radium 226 + 228	0.528	U	0.417	0.420	5.00	0.582	pCi/L		10/30/23 10:31	1



Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: MW-1-F-20230928-01

Lab Sample ID: 240-192599-10

Date Collected: 09/28/23 09:46

Matrix: Water

Date Received: 09/30/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	62	J	100	57	ug/L		10/02/23 14:00	10/04/23 23:34	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.60	J	2.0	0.57	ug/L		10/02/23 14:00	10/03/23 15:46	1
Arsenic	ND		5.0	0.75	ug/L		10/02/23 14:00	10/03/23 15:46	1
Barium	130		5.0	2.2	ug/L		10/02/23 14:00	10/03/23 15:46	1
Beryllium	ND		1.0	0.62	ug/L		10/02/23 14:00	10/03/23 15:46	1
Cadmium	0.24	J	1.0	0.20	ug/L		10/02/23 14:00	10/03/23 15:46	1
Calcium	130000		1000	250	ug/L		10/02/23 14:00	10/03/23 15:46	1
Chromium	ND		5.0	1.2	ug/L		10/02/23 14:00	10/03/23 15:46	1
Cobalt	1.1		1.0	0.19	ug/L		10/02/23 14:00	10/03/23 15:46	1
Lead	0.83	J	1.0	0.45	ug/L		10/02/23 14:00	10/03/23 15:46	1
Lithium	6.0	J ^^	8.0	1.7	ug/L		10/02/23 14:00	10/03/23 15:46	1
Magnesium	17000		1000	61	ug/L		10/02/23 14:00	10/03/23 15:46	1
Molybdenum	1.1	J	5.0	1.1	ug/L		10/02/23 14:00	10/03/23 15:46	1
Potassium	1700		1000	220	ug/L		10/02/23 14:00	10/03/23 15:46	1
Selenium	ND		5.0	0.89	ug/L		10/02/23 14:00	10/03/23 15:46	1
Sodium	20000		1000	330	ug/L		10/02/23 14:00	10/03/23 15:46	1
Thallium	0.71	J	1.0	0.20	ug/L		10/02/23 14:00	10/03/23 15:46	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		10/02/23 14:00	10/03/23 17:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			10/04/23 19:50	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			10/04/23 19:50	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/04/23 19:50	1
Chloride (EPA 300.0)	39		1.0	0.13	mg/L			10/09/23 15:17	1
Fluoride (EPA 300.0)	0.078		0.050	0.024	mg/L			10/09/23 15:17	1
Sulfate (EPA 300.0)	130		1.0	0.35	mg/L			10/09/23 15:17	1
Total Dissolved Solids (SM 2540C)	480		10	7.8	mg/L			10/04/23 09:20	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	0.181	U	0.164	0.164	1.00	0.245	pCi/L	10/04/23 11:23	10/27/23 10:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.9		30 - 110					10/04/23 11:23	10/27/23 10:37	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	0.176	U	0.353	0.354	1.00	0.612	pCi/L	10/04/23 11:31	10/26/23 11:19	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: MW-1-F-20230928-01

Lab Sample ID: 240-192599-10

Date Collected: 09/28/23 09:46

Matrix: Water

Date Received: 09/30/23 08:00

<u>Carrier</u>	<u>%Yield</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Ba Carrier	81.9		30 - 110	10/04/23 11:31	10/26/23 11:19	1
Y Carrier	84.5		30 - 110	10/04/23 11:31	10/26/23 11:19	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

<u>Analyte</u>	<u>Result</u>	<u>Qualifier</u>	<u>Count Uncert. (2σ+/-)</u>	<u>Total Uncert. (2σ+/-)</u>	<u>RL</u>	<u>MDC</u>	<u>Unit</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Combined Radium 226 + 228	0.357	U	0.389	0.390	5.00	0.612	pCi/L		10/30/23 10:31	1



Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-21-F-20230928-01

Lab Sample ID: 240-192599-11

Date Collected: 09/28/23 10:58

Matrix: Water

Date Received: 09/30/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	390		100	57	ug/L		10/02/23 14:00	10/05/23 01:09	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		10/02/23 14:00	10/03/23 16:41	1
Arsenic	5.0		5.0	0.75	ug/L		10/02/23 14:00	10/03/23 16:41	1
Barium	180		5.0	2.2	ug/L		10/02/23 14:00	10/03/23 16:41	1
Beryllium	ND		1.0	0.62	ug/L		10/02/23 14:00	10/03/23 16:41	1
Cadmium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 16:41	1
Calcium	140000		1000	250	ug/L		10/02/23 14:00	10/03/23 16:41	1
Chromium	4.2	J	5.0	1.2	ug/L		10/02/23 14:00	10/03/23 16:41	1
Cobalt	1.6		1.0	0.19	ug/L		10/02/23 14:00	10/03/23 16:41	1
Lead	2.9		1.0	0.45	ug/L		10/02/23 14:00	10/03/23 16:41	1
Lithium	6.2	J	8.0	1.7	ug/L		10/02/23 14:00	10/04/23 12:53	1
Magnesium	16000		1000	61	ug/L		10/02/23 14:00	10/03/23 16:41	1
Molybdenum	ND		5.0	1.1	ug/L		10/02/23 14:00	10/03/23 16:41	1
Potassium	2600		1000	220	ug/L		10/02/23 14:00	10/03/23 16:41	1
Selenium	ND		5.0	0.89	ug/L		10/02/23 14:00	10/03/23 16:41	1
Sodium	32000		1000	330	ug/L		10/02/23 14:00	10/03/23 16:41	1
Thallium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 16:41	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		10/02/23 14:00	10/03/23 18:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			10/04/23 19:56	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			10/04/23 19:56	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/04/23 19:56	1
Chloride (EPA 300.0)	74		1.0	0.13	mg/L			10/09/23 17:27	1
Fluoride (EPA 300.0)	0.052		0.050	0.024	mg/L			10/09/23 17:27	1
Sulfate (EPA 300.0)	130		1.0	0.35	mg/L			10/09/23 17:27	1
Total Dissolved Solids (SM 2540C)	530		10	7.8	mg/L			10/04/23 09:28	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	1.14		0.605	0.614	1.00	0.730	pCi/L	10/04/23 11:23	10/27/23 10:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	52.6		30 - 110					10/04/23 11:23	10/27/23 10:37	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.0899	U G	0.915	0.915	1.00	1.71	pCi/L	10/04/23 11:31	10/26/23 11:20	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-21-F-20230928-01

Lab Sample ID: 240-192599-11

Date Collected: 09/28/23 10:58

Matrix: Water

Date Received: 09/30/23 08:00

<u>Carrier</u>	<u>%Yield</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Ba Carrier	52.6		30 - 110	10/04/23 11:31	10/26/23 11:20	1
Y Carrier	85.6		30 - 110	10/04/23 11:31	10/26/23 11:20	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

<u>Analyte</u>	<u>Result</u>	<u>Qualifier</u>	<u>Count Uncert. (2σ+/-)</u>	<u>Total Uncert. (2σ+/-)</u>	<u>RL</u>	<u>MDC</u>	<u>Unit</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Combined Radium 226 + 228	1.23	U	1.10	1.10	5.00	1.71	pCi/L		10/30/23 10:31	1



Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-22-F-20230928-01

Lab Sample ID: 240-192599-12

Date Collected: 09/28/23 12:07

Matrix: Water

Date Received: 09/30/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	280		100	57	ug/L		10/02/23 14:00	10/05/23 01:14	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		10/02/23 14:00	10/03/23 16:44	1
Arsenic	4.0	J	5.0	0.75	ug/L		10/02/23 14:00	10/03/23 16:44	1
Barium	190		5.0	2.2	ug/L		10/02/23 14:00	10/03/23 16:44	1
Beryllium	ND		1.0	0.62	ug/L		10/02/23 14:00	10/03/23 16:44	1
Cadmium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 16:44	1
Calcium	210000		1000	250	ug/L		10/02/23 14:00	10/03/23 16:44	1
Chromium	3.3	J	5.0	1.2	ug/L		10/02/23 14:00	10/03/23 16:44	1
Cobalt	2.2		1.0	0.19	ug/L		10/02/23 14:00	10/03/23 16:44	1
Lead	2.5		1.0	0.45	ug/L		10/02/23 14:00	10/03/23 16:44	1
Lithium	6.6	J	8.0	1.7	ug/L		10/02/23 14:00	10/04/23 12:56	1
Magnesium	26000		1000	61	ug/L		10/02/23 14:00	10/03/23 16:44	1
Molybdenum	ND		5.0	1.1	ug/L		10/02/23 14:00	10/03/23 16:44	1
Potassium	3900		1000	220	ug/L		10/02/23 14:00	10/03/23 16:44	1
Selenium	ND		5.0	0.89	ug/L		10/02/23 14:00	10/03/23 16:44	1
Sodium	26000		1000	330	ug/L		10/02/23 14:00	10/03/23 16:44	1
Thallium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 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		10/02/23 14:00	10/03/23 18:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			10/04/23 20:02	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			10/04/23 20:02	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/04/23 20:02	1
Chloride (EPA 300.0)	35		1.0	0.13	mg/L			10/09/23 18:54	1
Fluoride (EPA 300.0)	0.061		0.050	0.024	mg/L			10/09/23 18:54	1
Sulfate (EPA 300.0)	240		5.0	1.7	mg/L			10/09/23 19:15	5
Total Dissolved Solids (SM 2540C)	630		10	7.8	mg/L			10/04/23 09:28	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	0.648		0.318	0.323	1.00	0.395	pCi/L	10/04/23 11:23	10/27/23 10:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.1		30 - 110					10/04/23 11:23	10/27/23 10:37	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	0.749		0.452	0.457	1.00	0.650	pCi/L	10/04/23 11:31	10/26/23 11:20	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-22-F-20230928-01

Lab Sample ID: 240-192599-12

Date Collected: 09/28/23 12:07

Matrix: Water

Date Received: 09/30/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	86.1		30 - 110	10/04/23 11:31	10/26/23 11:20	1
Y Carrier	88.6		30 - 110	10/04/23 11:31	10/26/23 11:20	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
Combined Radium 226 + 228	1.40		(2σ+/-) 0.553	(2σ+/-) 0.560	5.00	0.650	pCi/L		10/30/23 10:31	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-23-F-20230928-01

Lab Sample ID: 240-192599-13

Date Collected: 09/28/23 13:02

Matrix: Water

Date Received: 09/30/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	240		100	57	ug/L		10/02/23 14:00	10/05/23 01:18	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		10/02/23 14:00	10/03/23 16:46	1
Arsenic	1.2	J	5.0	0.75	ug/L		10/02/23 14:00	10/03/23 16:46	1
Barium	120		5.0	2.2	ug/L		10/02/23 14:00	10/03/23 16:46	1
Beryllium	ND		1.0	0.62	ug/L		10/02/23 14:00	10/03/23 16:46	1
Cadmium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 16:46	1
Calcium	120000		1000	250	ug/L		10/02/23 14:00	10/03/23 16:46	1
Chromium	ND		5.0	1.2	ug/L		10/02/23 14:00	10/03/23 16:46	1
Cobalt	0.87	J	1.0	0.19	ug/L		10/02/23 14:00	10/03/23 16:46	1
Lead	ND		1.0	0.45	ug/L		10/02/23 14:00	10/03/23 16:46	1
Lithium	3.2	J	8.0	1.7	ug/L		10/02/23 14:00	10/04/23 12:58	1
Magnesium	15000		1000	61	ug/L		10/02/23 14:00	10/03/23 16:46	1
Molybdenum	ND		5.0	1.1	ug/L		10/02/23 14:00	10/03/23 16:46	1
Potassium	1800		1000	220	ug/L		10/02/23 14:00	10/03/23 16:46	1
Selenium	ND		5.0	0.89	ug/L		10/02/23 14:00	10/03/23 16:46	1
Sodium	19000		1000	330	ug/L		10/02/23 14:00	10/03/23 16:46	1
Thallium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 16:46	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		10/02/23 14:00	10/03/23 18:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230		5.0	2.6	mg/L			10/04/23 20:13	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230		5.0	2.6	mg/L			10/04/23 20:13	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/04/23 20:13	1
Chloride (EPA 300.0)	42		1.0	0.13	mg/L			10/09/23 21:25	1
Fluoride (EPA 300.0)	0.096		0.050	0.024	mg/L			10/09/23 21:25	1
Sulfate (EPA 300.0)	140		1.0	0.35	mg/L			10/09/23 21:25	1
Total Dissolved Solids (SM 2540C)	520		10	7.8	mg/L			10/04/23 09:20	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.441		0.260	0.263	1.00	0.358	pCi/L	10/04/23 11:23	10/27/23 10:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.5		30 - 110					10/04/23 11:23	10/27/23 10:37	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.801		0.400	0.407	1.00	0.544	pCi/L	10/04/23 11:31	10/26/23 11:20	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-23-F-20230928-01

Lab Sample ID: 240-192599-13

Date Collected: 09/28/23 13:02

Matrix: Water

Date Received: 09/30/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	79.5		30 - 110	10/04/23 11:31	10/26/23 11:20	1
Y Carrier	85.2		30 - 110	10/04/23 11:31	10/26/23 11:20	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	1.24		0.477	0.485	5.00	0.544	pCi/L		10/30/23 10:31	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-08-F-20230928-01

Lab Sample ID: 240-192599-14

Date Collected: 09/28/23 14:05

Matrix: Water

Date Received: 09/30/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	100		100	57	ug/L		10/02/23 14:00	10/05/23 01:22	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		10/02/23 14:00	10/03/23 16:49	1
Arsenic	1.0	J	5.0	0.75	ug/L		10/02/23 14:00	10/03/23 16:49	1
Barium	110		5.0	2.2	ug/L		10/02/23 14:00	10/03/23 16:49	1
Beryllium	ND		1.0	0.62	ug/L		10/02/23 14:00	10/03/23 16:49	1
Cadmium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 16:49	1
Calcium	90000		1000	250	ug/L		10/02/23 14:00	10/03/23 16:49	1
Chromium	ND		5.0	1.2	ug/L		10/02/23 14:00	10/03/23 16:49	1
Cobalt	1.4		1.0	0.19	ug/L		10/02/23 14:00	10/03/23 16:49	1
Lead	ND		1.0	0.45	ug/L		10/02/23 14:00	10/03/23 16:49	1
Lithium	2.1	J	8.0	1.7	ug/L		10/02/23 14:00	10/04/23 13:01	1
Magnesium	13000		1000	61	ug/L		10/02/23 14:00	10/03/23 16:49	1
Molybdenum	ND		5.0	1.1	ug/L		10/02/23 14:00	10/03/23 16:49	1
Potassium	1400		1000	220	ug/L		10/02/23 14:00	10/03/23 16:49	1
Selenium	ND		5.0	0.89	ug/L		10/02/23 14:00	10/03/23 16:49	1
Sodium	13000		1000	330	ug/L		10/02/23 14:00	10/03/23 16:49	1
Thallium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 16:49	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		10/02/23 14:00	10/03/23 18:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	190		5.0	2.6	mg/L			10/04/23 20:19	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	190		5.0	2.6	mg/L			10/04/23 20:19	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/04/23 20:19	1
Chloride (EPA 300.0)	23		1.0	0.13	mg/L			10/09/23 20:42	1
Fluoride (EPA 300.0)	0.090		0.050	0.024	mg/L			10/09/23 20:42	1
Sulfate (EPA 300.0)	78		1.0	0.35	mg/L			10/09/23 20:42	1
Total Dissolved Solids (SM 2540C)	350		10	7.8	mg/L			10/04/23 09:20	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	0.203	U	0.216	0.217	1.00	0.348	pCi/L	10/04/23 11:23	10/27/23 10:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.0		30 - 110					10/04/23 11:23	10/27/23 10:37	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	0.268	U	0.313	0.314	1.00	0.515	pCi/L	10/04/23 11:31	10/26/23 11:20	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-08-F-20230928-01

Lab Sample ID: 240-192599-14

Date Collected: 09/28/23 14:05

Matrix: Water

Date Received: 09/30/23 08:00

<u>Carrier</u>	<u>%Yield</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Ba Carrier	89.0		30 - 110	10/04/23 11:31	10/26/23 11:20	1
Y Carrier	89.3		30 - 110	10/04/23 11:31	10/26/23 11:20	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

<u>Analyte</u>	<u>Result</u>	<u>Qualifier</u>	<u>Count</u>	<u>Total</u>	<u>RL</u>	<u>MDC</u>	<u>Unit</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
			<u>Uncert.</u>	<u>Uncert.</u>						
			<u>(2σ+/-)</u>	<u>(2σ+/-)</u>						
Combined Radium 226 + 228	0.471	U	0.380	0.382	5.00	0.515	pCi/L		10/30/23 10:31	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: EB-001-F-20230928-01

Lab Sample ID: 240-192599-15

Date Collected: 09/28/23 14:45

Matrix: Water

Date Received: 09/30/23 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		10/02/23 14:00	10/05/23 08:27	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		10/02/23 14:00	10/03/23 16:51	1
Arsenic	ND		5.0	0.75	ug/L		10/02/23 14:00	10/03/23 16:51	1
Barium	ND		5.0	2.2	ug/L		10/02/23 14:00	10/03/23 16:51	1
Beryllium	ND		1.0	0.62	ug/L		10/02/23 14:00	10/03/23 16:51	1
Cadmium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 16:51	1
Calcium	ND		1000	250	ug/L		10/02/23 14:00	10/03/23 16:51	1
Chromium	ND		5.0	1.2	ug/L		10/02/23 14:00	10/03/23 16:51	1
Cobalt	ND		1.0	0.19	ug/L		10/02/23 14:00	10/03/23 16:51	1
Lead	ND		1.0	0.45	ug/L		10/02/23 14:00	10/03/23 16:51	1
Lithium	ND		8.0	1.7	ug/L		10/02/23 14:00	10/04/23 13:03	1
Magnesium	ND		1000	61	ug/L		10/02/23 14:00	10/03/23 16:51	1
Molybdenum	ND		5.0	1.1	ug/L		10/02/23 14:00	10/03/23 16:51	1
Potassium	ND		1000	220	ug/L		10/02/23 14:00	10/03/23 16:51	1
Selenium	ND		5.0	0.89	ug/L		10/02/23 14:00	10/03/23 16:51	1
Sodium	470	J	1000	330	ug/L		10/02/23 14:00	10/03/23 16:51	1
Thallium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 16:51	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		10/02/23 14:00	10/03/23 18:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/04/23 20:24	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/04/23 20:24	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/04/23 20:24	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			10/09/23 21:04	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			10/09/23 21:04	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			10/09/23 21:04	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			10/04/23 09:28	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	0.0344	U	0.128	0.128	1.00	0.244	pCi/L	10/04/23 11:23	10/27/23 10:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.4		30 - 110					10/04/23 11:23	10/27/23 10:36	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	0.403	U	0.301	0.303	1.00	0.452	pCi/L	10/04/23 11:31	10/26/23 11:20	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: EB-001-F-20230928-01

Lab Sample ID: 240-192599-15

Date Collected: 09/28/23 14:45

Matrix: Water

Date Received: 09/30/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	92.4		30 - 110	10/04/23 11:31	10/26/23 11:20	1
Y Carrier	83.7		30 - 110	10/04/23 11:31	10/26/23 11:20	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.437	U	0.327	0.329	5.00	0.452	pCi/L		10/30/23 10:31	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)
240-192599-1	BAC-10-F-20230926-01	85.8
240-192599-2	BAC-07-F-20230927-01	90.7
240-192599-3	BAC-06-F-20230927-01	92.4
240-192599-4	BAC-19-F-20230927-01	83.1
240-192599-5	BAC-18-F-20230927-01	86.6
240-192599-6	BAC-11-F-20230927-01	189 X
240-192599-7	BAC-02-F-20230927-01	65.8
240-192599-8	DUP-005-F-20230927-01	67.2
240-192599-9	EB-001-F-20230927-01	88.8
240-192599-10	MW-1-F-20230928-01	81.9
240-192599-10 MS	MW-1-F-20230928-01	81.9
240-192599-10 MSD	MW-1-F-20230928-01	84.4
240-192599-11	BAC-21-F-20230928-01	52.6
240-192599-12	BAC-22-F-20230928-01	86.1
240-192599-13	BAC-23-F-20230928-01	79.5
240-192599-14	BAC-08-F-20230928-01	89.0
240-192599-15	EB-001-F-20230928-01	92.4
LCS 160-630672/2-A	Lab Control Sample	98.3
MB 160-630672/1-A	Method Blank	99.3

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-192599-1	BAC-10-F-20230926-01	85.8	87.9
240-192599-2	BAC-07-F-20230927-01	90.7	85.6
240-192599-3	BAC-06-F-20230927-01	92.4	85.6
240-192599-4	BAC-19-F-20230927-01	83.1	84.5
240-192599-5	BAC-18-F-20230927-01	86.6	86.0
240-192599-6	BAC-11-F-20230927-01	189 X	89.0
240-192599-7	BAC-02-F-20230927-01	65.8	81.5
240-192599-8	DUP-005-F-20230927-01	67.2	84.1
240-192599-9	EB-001-F-20230927-01	88.8	74.4
240-192599-10	MW-1-F-20230928-01	81.9	84.5
240-192599-10 MS	MW-1-F-20230928-01	81.9	83.0
240-192599-10 MSD	MW-1-F-20230928-01	84.4	86.4
240-192599-11	BAC-21-F-20230928-01	52.6	85.6
240-192599-12	BAC-22-F-20230928-01	86.1	88.6
240-192599-13	BAC-23-F-20230928-01	79.5	85.2
240-192599-14	BAC-08-F-20230928-01	89.0	89.3
240-192599-15	EB-001-F-20230928-01	92.4	83.7
LCS 160-630677/2-A	Lab Control Sample	98.3	84.5
MB 160-630677/1-A	Method Blank	99.3	77.4

Tracer/Carrier Legend

Ba = Ba Carrier

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Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC

Project/Site: Federal CCR Wells

Y = Y Carrier

Job ID: 240-192599-1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-589305/1-A
Matrix: Water
Analysis Batch: 589763

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 589305

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		10/02/23 14:00	10/04/23 23:25	1

Lab Sample ID: LCS 240-589305/2-A
Matrix: Water
Analysis Batch: 589763

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 589305

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	995		ug/L		100	80 - 120

Lab Sample ID: 240-192599-10 MS
Matrix: Water
Analysis Batch: 589763

Client Sample ID: MW-1-F-20230928-01
Prep Type: Total Recoverable
Prep Batch: 589305

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	62	J	1000	1030		ug/L		96	75 - 125

Lab Sample ID: 240-192599-10 MSD
Matrix: Water
Analysis Batch: 589763

Client Sample ID: MW-1-F-20230928-01
Prep Type: Total Recoverable
Prep Batch: 589305

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Boron	62	J	1000	1050		ug/L		98	75 - 125	2	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-589305/1-A
Matrix: Water
Analysis Batch: 589577

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 589305

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		10/02/23 14:00	10/03/23 15:41	1
Arsenic	ND		5.0	0.75	ug/L		10/02/23 14:00	10/03/23 15:41	1
Barium	ND		5.0	2.2	ug/L		10/02/23 14:00	10/03/23 15:41	1
Beryllium	ND		1.0	0.62	ug/L		10/02/23 14:00	10/03/23 15:41	1
Cadmium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 15:41	1
Calcium	ND		1000	250	ug/L		10/02/23 14:00	10/03/23 15:41	1
Chromium	ND		5.0	1.2	ug/L		10/02/23 14:00	10/03/23 15:41	1
Cobalt	ND		1.0	0.19	ug/L		10/02/23 14:00	10/03/23 15:41	1
Lead	ND		1.0	0.45	ug/L		10/02/23 14:00	10/03/23 15:41	1
Lithium	ND	^+	8.0	1.7	ug/L		10/02/23 14:00	10/03/23 15:41	1
Magnesium	ND		1000	61	ug/L		10/02/23 14:00	10/03/23 15:41	1
Molybdenum	ND		5.0	1.1	ug/L		10/02/23 14:00	10/03/23 15:41	1
Potassium	ND		1000	220	ug/L		10/02/23 14:00	10/03/23 15:41	1
Selenium	ND		5.0	0.89	ug/L		10/02/23 14:00	10/03/23 15:41	1
Sodium	ND		1000	330	ug/L		10/02/23 14:00	10/03/23 15:41	1
Thallium	ND		1.0	0.20	ug/L		10/02/23 14:00	10/03/23 15:41	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

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

Lab Sample ID: LCS 240-589305/3-A
Matrix: Water
Analysis Batch: 589577

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 589305

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	106		ug/L		106	80 - 120
Arsenic	1000	929		ug/L		93	80 - 120
Barium	1000	922		ug/L		92	80 - 120
Beryllium	500	512		ug/L		102	80 - 120
Cadmium	500	505		ug/L		101	80 - 120
Calcium	25000	24200		ug/L		97	80 - 120
Chromium	500	499		ug/L		100	80 - 120
Cobalt	500	468		ug/L		94	80 - 120
Lead	500	499		ug/L		100	80 - 120
Lithium	500	522	^+	ug/L		104	80 - 120
Magnesium	25000	25100		ug/L		101	80 - 120
Molybdenum	500	479		ug/L		96	80 - 120
Potassium	25000	24400		ug/L		98	80 - 120
Selenium	1000	929		ug/L		93	80 - 120
Sodium	25000	25000		ug/L		100	80 - 120
Thallium	1000	1000		ug/L		100	80 - 120

Lab Sample ID: 240-192599-10 MS
Matrix: Water
Analysis Batch: 589577

Client Sample ID: MW-1-F-20230928-01
Prep Type: Total Recoverable
Prep Batch: 589305

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.60	J	100	109		ug/L		108	80 - 120
Arsenic	ND		1000	942		ug/L		94	80 - 120
Barium	130		1000	1040		ug/L		92	80 - 120
Beryllium	ND		500	516		ug/L		103	80 - 120
Cadmium	0.24	J	500	499		ug/L		100	80 - 120
Calcium	130000		25000	153000	4	ug/L		77	80 - 120
Chromium	ND		500	495		ug/L		99	80 - 120
Cobalt	1.1		500	464		ug/L		93	80 - 120
Lead	0.83	J	500	493		ug/L		98	80 - 120
Lithium	6.0	J ^+	500	523	^+	ug/L		103	80 - 120
Magnesium	17000		25000	39800		ug/L		92	80 - 120
Molybdenum	1.1	J	500	486		ug/L		97	80 - 120
Potassium	1700		25000	26000		ug/L		97	80 - 120
Selenium	ND		1000	925		ug/L		93	80 - 120
Sodium	20000		25000	43400		ug/L		95	80 - 120
Thallium	0.71	J	1000	995		ug/L		99	80 - 120

Lab Sample ID: 240-192599-10 MSD
Matrix: Water
Analysis Batch: 589577

Client Sample ID: MW-1-F-20230928-01
Prep Type: Total Recoverable
Prep Batch: 589305

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Antimony	0.60	J	100	110		ug/L		109	80 - 120	1	20
Arsenic	ND		1000	954		ug/L		95	80 - 120	1	20
Barium	130		1000	1050		ug/L		92	80 - 120	1	20
Beryllium	ND		500	518		ug/L		104	80 - 120	0	20
Cadmium	0.24	J	500	509		ug/L		102	80 - 120	2	20

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

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

Lab Sample ID: 240-192599-10 MSD
 Matrix: Water
 Analysis Batch: 589577

Client Sample ID: MW-1-F-20230928-01
 Prep Type: Total Recoverable
 Prep Batch: 589305

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	130000		25000	157000	4	ug/L		93	80 - 120	3	20
Chromium	ND		500	502		ug/L		100	80 - 120	1	20
Cobalt	1.1		500	470		ug/L		94	80 - 120	1	20
Lead	0.83	J	500	501		ug/L		100	80 - 120	2	20
Lithium	6.0	J ^+	500	526	^+	ug/L		104	80 - 120	1	20
Magnesium	17000		25000	40500		ug/L		95	80 - 120	2	20
Molybdenum	1.1	J	500	495		ug/L		99	80 - 120	2	20
Potassium	1700		25000	26300		ug/L		98	80 - 120	1	20
Selenium	ND		1000	940		ug/L		94	80 - 120	2	20
Sodium	20000		25000	43500		ug/L		95	80 - 120	0	20
Thallium	0.71	J	1000	1010		ug/L		100	80 - 120	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-589306/1-A
 Matrix: Water
 Analysis Batch: 589519

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 589306

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		10/02/23 14:00	10/03/23 17:55	1

Lab Sample ID: LCS 240-589306/2-A
 Matrix: Water
 Analysis Batch: 589519

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 589306

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.20		ug/L		84	80 - 120

Lab Sample ID: 240-192599-10 MS
 Matrix: Water
 Analysis Batch: 589519

Client Sample ID: MW-1-F-20230928-01
 Prep Type: Total/NA
 Prep Batch: 589306

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

Lab Sample ID: 240-192599-10 MSD
 Matrix: Water
 Analysis Batch: 589519

Client Sample ID: MW-1-F-20230928-01
 Prep Type: Total/NA
 Prep Batch: 589306

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	4	20

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-589723/30
 Matrix: Water
 Analysis Batch: 589723

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			10/04/23 17:20	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Method: 2320B-1997 - Alkalinity, Total (Continued)

Lab Sample ID: MB 240-589723/30
Matrix: Water
Analysis Batch: 589723

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			10/04/23 17:20	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/04/23 17:20	1

Lab Sample ID: MB 240-589723/4
Matrix: Water
Analysis Batch: 589723

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			10/04/23 15:23	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/04/23 15:23	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/04/23 15:23	1

Lab Sample ID: MB 240-589723/57
Matrix: Water
Analysis Batch: 589723

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			10/04/23 19:00	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/04/23 19:00	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/04/23 19:00	1

Lab Sample ID: LCS 240-589723/29
Matrix: Water
Analysis Batch: 589723

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	80.4		mg/L		100	86 - 123

Lab Sample ID: LCS 240-589723/56
Matrix: Water
Analysis Batch: 589723

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	80.9		mg/L		100	86 - 123

Lab Sample ID: 240-192599-2 DU
Matrix: Water
Analysis Batch: 589723

Client Sample ID: BAC-07-F-20230927-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	130		124		mg/L		0.6	20
Bicarbonate Alkalinity as CaCO3	130		124		mg/L		0.6	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Lab Sample ID: 240-192599-12 DU
Matrix: Water
Analysis Batch: 589723

Client Sample ID: BAC-22-F-20230928-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	220		227		mg/L		1	20

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Method: 2320B-1997 - Alkalinity, Total (Continued)

Lab Sample ID: 240-192599-12 DU
 Matrix: Water
 Analysis Batch: 589723

Client Sample ID: BAC-22-F-20230928-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	220		227		mg/L		1	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-589799/3
 Matrix: Water
 Analysis Batch: 589799

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			10/06/23 09:53	1
Fluoride	ND		0.050	0.024	mg/L			10/06/23 09:53	1
Sulfate	ND		1.0	0.35	mg/L			10/06/23 09:53	1

Lab Sample ID: LCS 240-589799/4
 Matrix: Water
 Analysis Batch: 589799

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	48.7		mg/L		97	90 - 110
Fluoride	2.50	2.49		mg/L		99	90 - 110
Sulfate	50.0	50.0		mg/L		100	90 - 110

Lab Sample ID: MB 240-589804/3
 Matrix: Water
 Analysis Batch: 589804

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			10/05/23 13:11	1
Fluoride	ND		0.050	0.024	mg/L			10/05/23 13:11	1
Sulfate	ND		1.0	0.35	mg/L			10/05/23 13:11	1

Lab Sample ID: LCS 240-589804/4
 Matrix: Water
 Analysis Batch: 589804

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	2.55		mg/L		102	90 - 110
Sulfate	50.0	52.8		mg/L		106	90 - 110

Lab Sample ID: 240-192599-2 MS
 Matrix: Water
 Analysis Batch: 589804

Client Sample ID: BAC-07-F-20230927-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25		50.0	76.7		mg/L		103	80 - 120
Fluoride	0.078		2.50	2.80		mg/L		109	80 - 120

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-192599-2 MSD
Matrix: Water
Analysis Batch: 589804

Client Sample ID: BAC-07-F-20230927-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	25		50.0	77.6		mg/L		105	80 - 120	1	15
Fluoride	0.078		2.50	2.84		mg/L		111	80 - 120	2	15

Lab Sample ID: MB 240-589830/3
Matrix: Water
Analysis Batch: 589830

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			10/08/23 10:43	1
Fluoride	ND		0.050	0.024	mg/L			10/08/23 10:43	1
Sulfate	ND		1.0	0.35	mg/L			10/08/23 10:43	1

Lab Sample ID: LCS 240-589830/4
Matrix: Water
Analysis Batch: 589830

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	50.8		mg/L		102	90 - 110
Fluoride	2.50	2.64		mg/L		105	90 - 110
Sulfate	50.0	53.1		mg/L		106	90 - 110

Lab Sample ID: MB 240-590109/3
Matrix: Water
Analysis Batch: 590109

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			10/09/23 14:33	1
Fluoride	ND		0.050	0.024	mg/L			10/09/23 14:33	1
Sulfate	ND		1.0	0.35	mg/L			10/09/23 14:33	1

Lab Sample ID: LCS 240-590109/4
Matrix: Water
Analysis Batch: 590109

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	50.3		mg/L		101	90 - 110
Fluoride	2.50	2.64		mg/L		106	90 - 110
Sulfate	50.0	52.0		mg/L		104	90 - 110

Lab Sample ID: 240-192599-10 MS
Matrix: Water
Analysis Batch: 590109

Client Sample ID: MW-1-F-20230928-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	39		50.0	88.6		mg/L		100	80 - 120
Fluoride	0.078		2.50	2.73		mg/L		106	80 - 120
Sulfate	130		50.0	174		mg/L		93	80 - 120

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-192599-10 MSD
Matrix: Water
Analysis Batch: 590109

Client Sample ID: MW-1-F-20230928-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	39		50.0	89.7		mg/L		102	80 - 120	1	15
Fluoride	0.078		2.50	2.82		mg/L		110	80 - 120	3	15
Sulfate	130		50.0	175		mg/L		95	80 - 120	1	15

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

Lab Sample ID: MB 240-589235/1
Matrix: Water
Analysis Batch: 589235

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			10/02/23 08:29	1

Lab Sample ID: LCS 240-589235/2
Matrix: Water
Analysis Batch: 589235

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	564	535		mg/L		95	80 - 120

Lab Sample ID: MB 240-589326/1
Matrix: Water
Analysis Batch: 589326

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			10/02/23 12:00	1

Lab Sample ID: LCS 240-589326/2
Matrix: Water
Analysis Batch: 589326

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	564	543		mg/L		96	80 - 120

Lab Sample ID: 240-192599-2 DU
Matrix: Water
Analysis Batch: 589326

Client Sample ID: BAC-07-F-20230927-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	410		420		mg/L		2	20

Lab Sample ID: 240-192599-9 DU
Matrix: Water
Analysis Batch: 589326

Client Sample ID: EB-001-F-20230927-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	ND		ND		mg/L		NC	20

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

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

Lab Sample ID: MB 240-589602/1
 Matrix: Water
 Analysis Batch: 589602

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			10/04/23 09:20	1

Lab Sample ID: LCS 240-589602/2
 Matrix: Water
 Analysis Batch: 589602

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	564	533		mg/L		95	80 - 120

Lab Sample ID: MB 240-589606/1
 Matrix: Water
 Analysis Batch: 589606

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			10/04/23 09:28	1

Lab Sample ID: LCS 240-589606/2
 Matrix: Water
 Analysis Batch: 589606

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	564	536		mg/L		95	80 - 120

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-630672/1-A
 Matrix: Water
 Analysis Batch: 633700

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 630672

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1727	U	0.169	0.169	1.00	0.260	pCi/L	10/04/23 11:23	10/26/23 21:22	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.3		30 - 110					10/04/23 11:23	10/26/23 21:22	1

Lab Sample ID: LCS 160-630672/2-A
 Matrix: Water
 Analysis Batch: 633700

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 630672

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	11.3	9.502		1.22	1.00	0.321	pCi/L	84	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	98.3		30 - 110						

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: 240-192599-10 MS
Matrix: Water
Analysis Batch: 633905

Client Sample ID: MW-1-F-20230928-01
Prep Type: Total/NA
Prep Batch: 630672

Analyte	Sample	Sample	Spike	MS	MS	Total	RL	MDC	Unit	%Rec	%Rec	Limits
	Result	Qual		Result	Qual							
Radium-226	0.181	U	11.4	11.21		1.38	1.00	0.256	pCi/L	97		60 - 140
MS MS												
Carrier	%Yield	Qualifier	Limits									
Ba Carrier	81.9		30 - 110									

Lab Sample ID: 240-192599-10 MSD
Matrix: Water
Analysis Batch: 633905

Client Sample ID: MW-1-F-20230928-01
Prep Type: Total/NA
Prep Batch: 630672

Analyte	Sample	Sample	Spike	MSD	MSD	Total	RL	MDC	Unit	%Rec	%Rec	RER	Limit	
	Result	Qual		Result	Qual									Uncert. (2σ+/-)
Radium-226	0.181	U	11.4	9.917		1.24	1.00	0.223	pCi/L	85		60 - 140	0.50	1
MSD MSD														
Carrier	%Yield	Qualifier	Limits											
Ba Carrier	84.4		30 - 110											

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-630677/1-A
Matrix: Water
Analysis Batch: 633700

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 630677

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-228	0.7694		0.361	0.368	1.00	0.479	pCi/L	10/04/23 11:31	10/26/23 11:20	1
MB MB										
Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac				
Ba Carrier	99.3		30 - 110	10/04/23 11:31	10/26/23 11:20	1				
Y Carrier	77.4		30 - 110	10/04/23 11:31	10/26/23 11:20	1				

Lab Sample ID: LCS 160-630677/2-A
Matrix: Water
Analysis Batch: 633700

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 630677

Analyte	Spike	LCS	LCS	Total	RL	MDC	Unit	%Rec	%Rec	Limits
		Result	Qual							
Radium-228	7.77	9.525		1.26	1.00	0.489	pCi/L	123		75 - 125
LCS LCS										
Carrier	%Yield	Qualifier	Limits							
Ba Carrier	98.3		30 - 110							
Y Carrier	84.5		30 - 110							

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

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

Lab Sample ID: 240-192599-10 MS

Matrix: Water

Analysis Batch: 633701

Client Sample ID: MW-1-F-20230928-01

Prep Type: Total/NA

Prep Batch: 630677

Analyte	Sample	Sample	Spike	MS	MS	Total	RL	MDC	Unit	%Rec	%Rec	Limits
	Result	Qual		Result	Qual							
Radium-228	0.176	U	7.84	7.065		1.09	1.00	0.582	pCi/L	88		60 - 140
MS MS												
Carrier	%Yield	Qualifier	Limits									
Ba Carrier	81.9		30 - 110									
Y Carrier	83.0		30 - 110									

Lab Sample ID: 240-192599-10 MSD

Matrix: Water

Analysis Batch: 633701

Client Sample ID: MW-1-F-20230928-01

Prep Type: Total/NA

Prep Batch: 630677

Analyte	Sample	Sample	Spike	MSD	MSD	Total	RL	MDC	Unit	%Rec	%Rec	RER	Limit	
	Result	Qual		Result	Qual									Uncert.
Radium-228	0.176	U	7.83	5.880		0.933	1.00	0.426	pCi/L	73		60 - 140	0.59	1
MSD MSD														
Carrier	%Yield	Qualifier	Limits											
Ba Carrier	84.4		30 - 110											
Y Carrier	86.4		30 - 110											

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Metals

Prep Batch: 589305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192599-1	BAC-10-F-20230926-01	Total Recoverable	Water	3005A	
240-192599-2	BAC-07-F-20230927-01	Total Recoverable	Water	3005A	
240-192599-3	BAC-06-F-20230927-01	Total Recoverable	Water	3005A	
240-192599-4	BAC-19-F-20230927-01	Total Recoverable	Water	3005A	
240-192599-5	BAC-18-F-20230927-01	Total Recoverable	Water	3005A	
240-192599-6	BAC-11-F-20230927-01	Total Recoverable	Water	3005A	
240-192599-7	BAC-02-F-20230927-01	Total Recoverable	Water	3005A	
240-192599-8	DUP-005-F-20230927-01	Total Recoverable	Water	3005A	
240-192599-9	EB-001-F-20230927-01	Total Recoverable	Water	3005A	
240-192599-10	MW-1-F-20230928-01	Total Recoverable	Water	3005A	
240-192599-11	BAC-21-F-20230928-01	Total Recoverable	Water	3005A	
240-192599-12	BAC-22-F-20230928-01	Total Recoverable	Water	3005A	
240-192599-13	BAC-23-F-20230928-01	Total Recoverable	Water	3005A	
240-192599-14	BAC-08-F-20230928-01	Total Recoverable	Water	3005A	
240-192599-15	EB-001-F-20230928-01	Total Recoverable	Water	3005A	
MB 240-589305/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-589305/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-589305/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-192599-10 MS	MW-1-F-20230928-01	Total Recoverable	Water	3005A	
240-192599-10 MS	MW-1-F-20230928-01	Total Recoverable	Water	3005A	
240-192599-10 MSD	MW-1-F-20230928-01	Total Recoverable	Water	3005A	
240-192599-10 MSD	MW-1-F-20230928-01	Total Recoverable	Water	3005A	

Prep Batch: 589306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192599-1	BAC-10-F-20230926-01	Total/NA	Water	7470A	
240-192599-2	BAC-07-F-20230927-01	Total/NA	Water	7470A	
240-192599-3	BAC-06-F-20230927-01	Total/NA	Water	7470A	
240-192599-4	BAC-19-F-20230927-01	Total/NA	Water	7470A	
240-192599-5	BAC-18-F-20230927-01	Total/NA	Water	7470A	
240-192599-6	BAC-11-F-20230927-01	Total/NA	Water	7470A	
240-192599-7	BAC-02-F-20230927-01	Total/NA	Water	7470A	
240-192599-8	DUP-005-F-20230927-01	Total/NA	Water	7470A	
240-192599-9	EB-001-F-20230927-01	Total/NA	Water	7470A	
240-192599-10	MW-1-F-20230928-01	Total/NA	Water	7470A	
240-192599-11	BAC-21-F-20230928-01	Total/NA	Water	7470A	
240-192599-12	BAC-22-F-20230928-01	Total/NA	Water	7470A	
240-192599-13	BAC-23-F-20230928-01	Total/NA	Water	7470A	
240-192599-14	BAC-08-F-20230928-01	Total/NA	Water	7470A	
240-192599-15	EB-001-F-20230928-01	Total/NA	Water	7470A	
MB 240-589306/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-589306/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-192599-10 MS	MW-1-F-20230928-01	Total/NA	Water	7470A	
240-192599-10 MSD	MW-1-F-20230928-01	Total/NA	Water	7470A	

Analysis Batch: 589519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192599-1	BAC-10-F-20230926-01	Total/NA	Water	7470A	589306
240-192599-2	BAC-07-F-20230927-01	Total/NA	Water	7470A	589306
240-192599-3	BAC-06-F-20230927-01	Total/NA	Water	7470A	589306
240-192599-4	BAC-19-F-20230927-01	Total/NA	Water	7470A	589306

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Metals (Continued)

Analysis Batch: 589519 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192599-5	BAC-18-F-20230927-01	Total/NA	Water	7470A	589306
240-192599-6	BAC-11-F-20230927-01	Total/NA	Water	7470A	589306
240-192599-7	BAC-02-F-20230927-01	Total/NA	Water	7470A	589306
240-192599-8	DUP-005-F-20230927-01	Total/NA	Water	7470A	589306
240-192599-9	EB-001-F-20230927-01	Total/NA	Water	7470A	589306
240-192599-10	MW-1-F-20230928-01	Total/NA	Water	7470A	589306
240-192599-11	BAC-21-F-20230928-01	Total/NA	Water	7470A	589306
240-192599-12	BAC-22-F-20230928-01	Total/NA	Water	7470A	589306
240-192599-13	BAC-23-F-20230928-01	Total/NA	Water	7470A	589306
240-192599-14	BAC-08-F-20230928-01	Total/NA	Water	7470A	589306
240-192599-15	EB-001-F-20230928-01	Total/NA	Water	7470A	589306
MB 240-589306/1-A	Method Blank	Total/NA	Water	7470A	589306
LCS 240-589306/2-A	Lab Control Sample	Total/NA	Water	7470A	589306
240-192599-10 MS	MW-1-F-20230928-01	Total/NA	Water	7470A	589306
240-192599-10 MSD	MW-1-F-20230928-01	Total/NA	Water	7470A	589306

Analysis Batch: 589577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192599-1	BAC-10-F-20230926-01	Total Recoverable	Water	6020B	589305
240-192599-2	BAC-07-F-20230927-01	Total Recoverable	Water	6020B	589305
240-192599-3	BAC-06-F-20230927-01	Total Recoverable	Water	6020B	589305
240-192599-4	BAC-19-F-20230927-01	Total Recoverable	Water	6020B	589305
240-192599-5	BAC-18-F-20230927-01	Total Recoverable	Water	6020B	589305
240-192599-6	BAC-11-F-20230927-01	Total Recoverable	Water	6020B	589305
240-192599-7	BAC-02-F-20230927-01	Total Recoverable	Water	6020B	589305
240-192599-8	DUP-005-F-20230927-01	Total Recoverable	Water	6020B	589305
240-192599-9	EB-001-F-20230927-01	Total Recoverable	Water	6020B	589305
240-192599-10	MW-1-F-20230928-01	Total Recoverable	Water	6020B	589305
240-192599-11	BAC-21-F-20230928-01	Total Recoverable	Water	6020B	589305
240-192599-12	BAC-22-F-20230928-01	Total Recoverable	Water	6020B	589305
240-192599-13	BAC-23-F-20230928-01	Total Recoverable	Water	6020B	589305
240-192599-14	BAC-08-F-20230928-01	Total Recoverable	Water	6020B	589305
240-192599-15	EB-001-F-20230928-01	Total Recoverable	Water	6020B	589305
MB 240-589305/1-A	Method Blank	Total Recoverable	Water	6020B	589305
LCS 240-589305/3-A	Lab Control Sample	Total Recoverable	Water	6020B	589305
240-192599-10 MS	MW-1-F-20230928-01	Total Recoverable	Water	6020B	589305
240-192599-10 MSD	MW-1-F-20230928-01	Total Recoverable	Water	6020B	589305

Analysis Batch: 589682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192599-2	BAC-07-F-20230927-01	Total Recoverable	Water	6020B	589305
240-192599-4	BAC-19-F-20230927-01	Total Recoverable	Water	6020B	589305
240-192599-5	BAC-18-F-20230927-01	Total Recoverable	Water	6020B	589305
240-192599-6	BAC-11-F-20230927-01	Total Recoverable	Water	6020B	589305
240-192599-7	BAC-02-F-20230927-01	Total Recoverable	Water	6020B	589305
240-192599-8	DUP-005-F-20230927-01	Total Recoverable	Water	6020B	589305
240-192599-9	EB-001-F-20230927-01	Total Recoverable	Water	6020B	589305
240-192599-11	BAC-21-F-20230928-01	Total Recoverable	Water	6020B	589305
240-192599-12	BAC-22-F-20230928-01	Total Recoverable	Water	6020B	589305
240-192599-13	BAC-23-F-20230928-01	Total Recoverable	Water	6020B	589305
240-192599-14	BAC-08-F-20230928-01	Total Recoverable	Water	6020B	589305

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Metals (Continued)

Analysis Batch: 589682 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192599-15	EB-001-F-20230928-01	Total Recoverable	Water	6020B	589305

Analysis Batch: 589763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192599-1	BAC-10-F-20230926-01	Total Recoverable	Water	6010D	589305
240-192599-2	BAC-07-F-20230927-01	Total Recoverable	Water	6010D	589305
240-192599-3	BAC-06-F-20230927-01	Total Recoverable	Water	6010D	589305
240-192599-4	BAC-19-F-20230927-01	Total Recoverable	Water	6010D	589305
240-192599-5	BAC-18-F-20230927-01	Total Recoverable	Water	6010D	589305
240-192599-6	BAC-11-F-20230927-01	Total Recoverable	Water	6010D	589305
240-192599-7	BAC-02-F-20230927-01	Total Recoverable	Water	6010D	589305
240-192599-8	DUP-005-F-20230927-01	Total Recoverable	Water	6010D	589305
240-192599-9	EB-001-F-20230927-01	Total Recoverable	Water	6010D	589305
240-192599-10	MW-1-F-20230928-01	Total Recoverable	Water	6010D	589305
240-192599-11	BAC-21-F-20230928-01	Total Recoverable	Water	6010D	589305
240-192599-12	BAC-22-F-20230928-01	Total Recoverable	Water	6010D	589305
240-192599-13	BAC-23-F-20230928-01	Total Recoverable	Water	6010D	589305
240-192599-14	BAC-08-F-20230928-01	Total Recoverable	Water	6010D	589305
240-192599-15	EB-001-F-20230928-01	Total Recoverable	Water	6010D	589305
MB 240-589305/1-A	Method Blank	Total Recoverable	Water	6010D	589305
LCS 240-589305/2-A	Lab Control Sample	Total Recoverable	Water	6010D	589305
240-192599-10 MS	MW-1-F-20230928-01	Total Recoverable	Water	6010D	589305
240-192599-10 MSD	MW-1-F-20230928-01	Total Recoverable	Water	6010D	589305

General Chemistry

Analysis Batch: 589235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192599-1	BAC-10-F-20230926-01	Total/NA	Water	SM 2540C	
MB 240-589235/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-589235/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 589326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192599-2	BAC-07-F-20230927-01	Total/NA	Water	SM 2540C	
240-192599-3	BAC-06-F-20230927-01	Total/NA	Water	SM 2540C	
240-192599-4	BAC-19-F-20230927-01	Total/NA	Water	SM 2540C	
240-192599-5	BAC-18-F-20230927-01	Total/NA	Water	SM 2540C	
240-192599-6	BAC-11-F-20230927-01	Total/NA	Water	SM 2540C	
240-192599-7	BAC-02-F-20230927-01	Total/NA	Water	SM 2540C	
240-192599-8	DUP-005-F-20230927-01	Total/NA	Water	SM 2540C	
240-192599-9	EB-001-F-20230927-01	Total/NA	Water	SM 2540C	
MB 240-589326/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-589326/2	Lab Control Sample	Total/NA	Water	SM 2540C	
240-192599-2 DU	BAC-07-F-20230927-01	Total/NA	Water	SM 2540C	
240-192599-9 DU	EB-001-F-20230927-01	Total/NA	Water	SM 2540C	

Analysis Batch: 589602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192599-10	MW-1-F-20230928-01	Total/NA	Water	SM 2540C	
240-192599-13	BAC-23-F-20230928-01	Total/NA	Water	SM 2540C	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

General Chemistry (Continued)

Analysis Batch: 589602 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192599-14	BAC-08-F-20230928-01	Total/NA	Water	SM 2540C	
MB 240-589602/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-589602/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 589606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192599-11	BAC-21-F-20230928-01	Total/NA	Water	SM 2540C	
240-192599-12	BAC-22-F-20230928-01	Total/NA	Water	SM 2540C	
240-192599-15	EB-001-F-20230928-01	Total/NA	Water	SM 2540C	
MB 240-589606/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-589606/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 589723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192599-1	BAC-10-F-20230926-01	Total/NA	Water	2320B-1997	
240-192599-2	BAC-07-F-20230927-01	Total/NA	Water	2320B-1997	
240-192599-3	BAC-06-F-20230927-01	Total/NA	Water	2320B-1997	
240-192599-4	BAC-19-F-20230927-01	Total/NA	Water	2320B-1997	
240-192599-5	BAC-18-F-20230927-01	Total/NA	Water	2320B-1997	
240-192599-6	BAC-11-F-20230927-01	Total/NA	Water	2320B-1997	
240-192599-7	BAC-02-F-20230927-01	Total/NA	Water	2320B-1997	
240-192599-8	DUP-005-F-20230927-01	Total/NA	Water	2320B-1997	
240-192599-9	EB-001-F-20230927-01	Total/NA	Water	2320B-1997	
240-192599-10	MW-1-F-20230928-01	Total/NA	Water	2320B-1997	
240-192599-11	BAC-21-F-20230928-01	Total/NA	Water	2320B-1997	
240-192599-12	BAC-22-F-20230928-01	Total/NA	Water	2320B-1997	
240-192599-13	BAC-23-F-20230928-01	Total/NA	Water	2320B-1997	
240-192599-14	BAC-08-F-20230928-01	Total/NA	Water	2320B-1997	
240-192599-15	EB-001-F-20230928-01	Total/NA	Water	2320B-1997	
MB 240-589723/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-589723/4	Method Blank	Total/NA	Water	2320B-1997	
MB 240-589723/57	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-589723/29	Lab Control Sample	Total/NA	Water	2320B-1997	
LCS 240-589723/56	Lab Control Sample	Total/NA	Water	2320B-1997	
240-192599-2 DU	BAC-07-F-20230927-01	Total/NA	Water	2320B-1997	
240-192599-12 DU	BAC-22-F-20230928-01	Total/NA	Water	2320B-1997	

Analysis Batch: 589799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192599-1	BAC-10-F-20230926-01	Total/NA	Water	300.0	
MB 240-589799/3	Method Blank	Total/NA	Water	300.0	
LCS 240-589799/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 589804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192599-2	BAC-07-F-20230927-01	Total/NA	Water	300.0	
240-192599-6	BAC-11-F-20230927-01	Total/NA	Water	300.0	
240-192599-6	BAC-11-F-20230927-01	Total/NA	Water	300.0	
MB 240-589804/3	Method Blank	Total/NA	Water	300.0	
LCS 240-589804/4	Lab Control Sample	Total/NA	Water	300.0	
240-192599-2 MS	BAC-07-F-20230927-01	Total/NA	Water	300.0	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-192599-1

General Chemistry (Continued)

Analysis Batch: 589804 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192599-2 MSD	BAC-07-F-20230927-01	Total/NA	Water	300.0	

Analysis Batch: 589830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192599-3	BAC-06-F-20230927-01	Total/NA	Water	300.0	
240-192599-3	BAC-06-F-20230927-01	Total/NA	Water	300.0	
240-192599-4	BAC-19-F-20230927-01	Total/NA	Water	300.0	
240-192599-4	BAC-19-F-20230927-01	Total/NA	Water	300.0	
240-192599-5	BAC-18-F-20230927-01	Total/NA	Water	300.0	
240-192599-7	BAC-02-F-20230927-01	Total/NA	Water	300.0	
240-192599-8	DUP-005-F-20230927-01	Total/NA	Water	300.0	
240-192599-8	DUP-005-F-20230927-01	Total/NA	Water	300.0	
240-192599-9	EB-001-F-20230927-01	Total/NA	Water	300.0	
MB 240-589830/3	Method Blank	Total/NA	Water	300.0	
LCS 240-589830/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 590109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192599-10	MW-1-F-20230928-01	Total/NA	Water	300.0	
240-192599-11	BAC-21-F-20230928-01	Total/NA	Water	300.0	
240-192599-12	BAC-22-F-20230928-01	Total/NA	Water	300.0	
240-192599-12	BAC-22-F-20230928-01	Total/NA	Water	300.0	
240-192599-13	BAC-23-F-20230928-01	Total/NA	Water	300.0	
240-192599-14	BAC-08-F-20230928-01	Total/NA	Water	300.0	
240-192599-15	EB-001-F-20230928-01	Total/NA	Water	300.0	
MB 240-590109/3	Method Blank	Total/NA	Water	300.0	
LCS 240-590109/4	Lab Control Sample	Total/NA	Water	300.0	
240-192599-10 MS	MW-1-F-20230928-01	Total/NA	Water	300.0	
240-192599-10 MSD	MW-1-F-20230928-01	Total/NA	Water	300.0	

Rad

Prep Batch: 630672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192599-1	BAC-10-F-20230926-01	Total/NA	Water	PrecSep-21	
240-192599-2	BAC-07-F-20230927-01	Total/NA	Water	PrecSep-21	
240-192599-3	BAC-06-F-20230927-01	Total/NA	Water	PrecSep-21	
240-192599-4	BAC-19-F-20230927-01	Total/NA	Water	PrecSep-21	
240-192599-5	BAC-18-F-20230927-01	Total/NA	Water	PrecSep-21	
240-192599-6	BAC-11-F-20230927-01	Total/NA	Water	PrecSep-21	
240-192599-7	BAC-02-F-20230927-01	Total/NA	Water	PrecSep-21	
240-192599-8	DUP-005-F-20230927-01	Total/NA	Water	PrecSep-21	
240-192599-9	EB-001-F-20230927-01	Total/NA	Water	PrecSep-21	
240-192599-10	MW-1-F-20230928-01	Total/NA	Water	PrecSep-21	
240-192599-11	BAC-21-F-20230928-01	Total/NA	Water	PrecSep-21	
240-192599-12	BAC-22-F-20230928-01	Total/NA	Water	PrecSep-21	
240-192599-13	BAC-23-F-20230928-01	Total/NA	Water	PrecSep-21	
240-192599-14	BAC-08-F-20230928-01	Total/NA	Water	PrecSep-21	
240-192599-15	EB-001-F-20230928-01	Total/NA	Water	PrecSep-21	
MB 160-630672/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-630672/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Rad (Continued)

Prep Batch: 630672 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192599-10 MS	MW-1-F-20230928-01	Total/NA	Water	PrecSep-21	
240-192599-10 MSD	MW-1-F-20230928-01	Total/NA	Water	PrecSep-21	

Prep Batch: 630677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192599-1	BAC-10-F-20230926-01	Total/NA	Water	PrecSep_0	
240-192599-2	BAC-07-F-20230927-01	Total/NA	Water	PrecSep_0	
240-192599-3	BAC-06-F-20230927-01	Total/NA	Water	PrecSep_0	
240-192599-4	BAC-19-F-20230927-01	Total/NA	Water	PrecSep_0	
240-192599-5	BAC-18-F-20230927-01	Total/NA	Water	PrecSep_0	
240-192599-6	BAC-11-F-20230927-01	Total/NA	Water	PrecSep_0	
240-192599-7	BAC-02-F-20230927-01	Total/NA	Water	PrecSep_0	
240-192599-8	DUP-005-F-20230927-01	Total/NA	Water	PrecSep_0	
240-192599-9	EB-001-F-20230927-01	Total/NA	Water	PrecSep_0	
240-192599-10	MW-1-F-20230928-01	Total/NA	Water	PrecSep_0	
240-192599-11	BAC-21-F-20230928-01	Total/NA	Water	PrecSep_0	
240-192599-12	BAC-22-F-20230928-01	Total/NA	Water	PrecSep_0	
240-192599-13	BAC-23-F-20230928-01	Total/NA	Water	PrecSep_0	
240-192599-14	BAC-08-F-20230928-01	Total/NA	Water	PrecSep_0	
240-192599-15	EB-001-F-20230928-01	Total/NA	Water	PrecSep_0	
MB 160-630677/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-630677/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
240-192599-10 MS	MW-1-F-20230928-01	Total/NA	Water	PrecSep_0	
240-192599-10 MSD	MW-1-F-20230928-01	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-10-F-20230926-01

Lab Sample ID: 240-192599-1

Date Collected: 09/26/23 14:38

Matrix: Water

Date Received: 09/30/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6010D		1	589763	RKT	EET CLE	10/05/23 00:21
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6020B		1	589577	DSH	EET CLE	10/03/23 16:14
Total/NA	Prep	7470A			589306	BN	EET CLE	10/02/23 14:00
Total/NA	Analysis	7470A		1	589519	GK	EET CLE	10/03/23 18:18
Total/NA	Analysis	2320B-1997		1	589723	JMR	EET CLE	10/04/23 18:50
Total/NA	Analysis	300.0		1	589799	JWW	EET CLE	10/06/23 16:23
Total/NA	Analysis	SM 2540C		1	589235	QUY8	EET CLE	10/02/23 08:29
Total/NA	Prep	PrecSep-21			630672	KAC	EET SL	10/04/23 11:23
Total/NA	Analysis	9315		1	633885	FLC	EET SL	10/27/23 07:37
Total/NA	Prep	PrecSep_0			630677	KAC	EET SL	10/04/23 11:31
Total/NA	Analysis	9320		1	633701	FLC	EET SL	10/26/23 11:20
Total/NA	Analysis	Ra226_Ra228		1	634309	SCB	EET SL	10/30/23 10:31

Client Sample ID: BAC-07-F-20230927-01

Lab Sample ID: 240-192599-2

Date Collected: 09/27/23 10:09

Matrix: Water

Date Received: 09/30/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6010D		1	589763	RKT	EET CLE	10/05/23 00:25
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6020B		1	589577	DSH	EET CLE	10/03/23 16:16
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6020B		1	589682	DSH	EET CLE	10/04/23 12:31
Total/NA	Prep	7470A			589306	BN	EET CLE	10/02/23 14:00
Total/NA	Analysis	7470A		1	589519	GK	EET CLE	10/03/23 18:20
Total/NA	Analysis	2320B-1997		1	589723	JMR	EET CLE	10/04/23 19:04
Total/NA	Analysis	300.0		1	589804	JWW	EET CLE	10/05/23 19:54
Total/NA	Analysis	SM 2540C		1	589326	QUY8	EET CLE	10/02/23 12:00
Total/NA	Prep	PrecSep-21			630672	KAC	EET SL	10/04/23 11:23
Total/NA	Analysis	9315		1	633885	FLC	EET SL	10/27/23 07:38
Total/NA	Prep	PrecSep_0			630677	KAC	EET SL	10/04/23 11:31
Total/NA	Analysis	9320		1	633701	FLC	EET SL	10/26/23 11:20
Total/NA	Analysis	Ra226_Ra228		1	634309	SCB	EET SL	10/30/23 10:31

Client Sample ID: BAC-06-F-20230927-01

Lab Sample ID: 240-192599-3

Date Collected: 09/27/23 11:07

Matrix: Water

Date Received: 09/30/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6010D		1	589763	RKT	EET CLE	10/05/23 00:30

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-06-F-20230927-01

Lab Sample ID: 240-192599-3

Date Collected: 09/27/23 11:07

Matrix: Water

Date Received: 09/30/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6020B		1	589577	DSH	EET CLE	10/03/23 16:19
Total/NA	Prep	7470A			589306	BN	EET CLE	10/02/23 14:00
Total/NA	Analysis	7470A		1	589519	GK	EET CLE	10/03/23 18:22
Total/NA	Analysis	2320B-1997		1	589723	JMR	EET CLE	10/04/23 19:14
Total/NA	Analysis	300.0		1	589830	JWW	EET CLE	10/08/23 15:05
Total/NA	Analysis	300.0		5	589830	JWW	EET CLE	10/08/23 15:25
Total/NA	Analysis	SM 2540C		1	589326	QUY8	EET CLE	10/02/23 12:00
Total/NA	Prep	PrecSep-21			630672	KAC	EET SL	10/04/23 11:23
Total/NA	Analysis	9315		1	633885	FLC	EET SL	10/27/23 07:38
Total/NA	Prep	PrecSep_0			630677	KAC	EET SL	10/04/23 11:31
Total/NA	Analysis	9320		1	633701	FLC	EET SL	10/26/23 11:20
Total/NA	Analysis	Ra226_Ra228		1	634309	SCB	EET SL	10/30/23 10:31

Client Sample ID: BAC-19-F-20230927-01

Lab Sample ID: 240-192599-4

Date Collected: 09/27/23 12:27

Matrix: Water

Date Received: 09/30/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6010D		1	589763	RKT	EET CLE	10/05/23 00:42
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6020B		1	589577	DSH	EET CLE	10/03/23 16:21
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6020B		1	589682	DSH	EET CLE	10/04/23 12:34
Total/NA	Prep	7470A			589306	BN	EET CLE	10/02/23 14:00
Total/NA	Analysis	7470A		1	589519	GK	EET CLE	10/03/23 18:24
Total/NA	Analysis	2320B-1997		1	589723	JMR	EET CLE	10/04/23 19:19
Total/NA	Analysis	300.0		1	589830	JWW	EET CLE	10/08/23 21:48
Total/NA	Analysis	300.0		10	589830	JWW	EET CLE	10/08/23 22:48
Total/NA	Analysis	SM 2540C		1	589326	QUY8	EET CLE	10/02/23 12:00
Total/NA	Prep	PrecSep-21			630672	KAC	EET SL	10/04/23 11:23
Total/NA	Analysis	9315		1	633905	FLC	EET SL	10/27/23 10:38
Total/NA	Prep	PrecSep_0			630677	KAC	EET SL	10/04/23 11:31
Total/NA	Analysis	9320		1	633701	FLC	EET SL	10/26/23 11:20
Total/NA	Analysis	Ra226_Ra228		1	634309	SCB	EET SL	10/30/23 10:31

Client Sample ID: BAC-18-F-20230927-01

Lab Sample ID: 240-192599-5

Date Collected: 09/27/23 13:05

Matrix: Water

Date Received: 09/30/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6010D		1	589763	RKT	EET CLE	10/05/23 00:47

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-18-F-20230927-01

Lab Sample ID: 240-192599-5

Date Collected: 09/27/23 13:05

Matrix: Water

Date Received: 09/30/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6020B		1	589577	DSH	EET CLE	10/03/23 16:24
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6020B		1	589682	DSH	EET CLE	10/04/23 12:36
Total/NA	Prep	7470A			589306	BN	EET CLE	10/02/23 14:00
Total/NA	Analysis	7470A		1	589519	GK	EET CLE	10/03/23 18:26
Total/NA	Analysis	2320B-1997		1	589723	JMR	EET CLE	10/04/23 19:25
Total/NA	Analysis	300.0		1	589830	JWW	EET CLE	10/08/23 13:44
Total/NA	Analysis	SM 2540C		1	589326	QUY8	EET CLE	10/02/23 12:00
Total/NA	Prep	PrecSep-21			630672	KAC	EET SL	10/04/23 11:23
Total/NA	Analysis	9315		1	633905	FLC	EET SL	10/27/23 10:38
Total/NA	Prep	PrecSep_0			630677	KAC	EET SL	10/04/23 11:31
Total/NA	Analysis	9320		1	633701	FLC	EET SL	10/26/23 11:20
Total/NA	Analysis	Ra226_Ra228		1	634309	SCB	EET SL	10/30/23 10:31

Client Sample ID: BAC-11-F-20230927-01

Lab Sample ID: 240-192599-6

Date Collected: 09/27/23 14:19

Matrix: Water

Date Received: 09/30/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6010D		1	589763	RKT	EET CLE	10/05/23 00:51
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6020B		1	589577	DSH	EET CLE	10/03/23 16:26
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6020B		40	589682	DSH	EET CLE	10/04/23 12:39
Total/NA	Prep	7470A			589306	BN	EET CLE	10/02/23 14:00
Total/NA	Analysis	7470A		1	589519	GK	EET CLE	10/03/23 18:28
Total/NA	Analysis	2320B-1997		1	589723	JMR	EET CLE	10/04/23 19:29
Total/NA	Analysis	300.0		100	589804	JWW	EET CLE	10/05/23 19:13
Total/NA	Analysis	300.0		1000	589804	JWW	EET CLE	10/05/23 19:33
Total/NA	Analysis	SM 2540C		1	589326	QUY8	EET CLE	10/02/23 12:00
Total/NA	Prep	PrecSep-21			630672	KAC	EET SL	10/04/23 11:23
Total/NA	Analysis	9315		1	633905	FLC	EET SL	10/27/23 10:38
Total/NA	Prep	PrecSep_0			630677	KAC	EET SL	10/04/23 11:31
Total/NA	Analysis	9320		1	633701	FLC	EET SL	10/26/23 11:21
Total/NA	Analysis	Ra226_Ra228		1	634309	SCB	EET SL	10/30/23 10:31

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-02-F-20230927-01

Lab Sample ID: 240-192599-7

Date Collected: 09/27/23 15:04

Matrix: Water

Date Received: 09/30/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6010D		1	589763	RKT	EET CLE	10/05/23 00:56
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6020B		1	589577	DSH	EET CLE	10/03/23 16:29
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6020B		1	589682	DSH	EET CLE	10/04/23 12:41
Total/NA	Prep	7470A			589306	BN	EET CLE	10/02/23 14:00
Total/NA	Analysis	7470A		1	589519	GK	EET CLE	10/03/23 18:30
Total/NA	Analysis	2320B-1997		1	589723	JMR	EET CLE	10/04/23 19:34
Total/NA	Analysis	300.0		2	589830	JWW	EET CLE	10/09/23 00:29
Total/NA	Analysis	SM 2540C		1	589326	QUY8	EET CLE	10/02/23 12:00
Total/NA	Prep	PrecSep-21			630672	KAC	EET SL	10/04/23 11:23
Total/NA	Analysis	9315		1	633905	FLC	EET SL	10/27/23 10:38
Total/NA	Prep	PrecSep_0			630677	KAC	EET SL	10/04/23 11:31
Total/NA	Analysis	9320		1	633701	FLC	EET SL	10/26/23 11:21
Total/NA	Analysis	Ra226_Ra228		1	634309	SCB	EET SL	10/30/23 10:31

Client Sample ID: DUP-005-F-20230927-01

Lab Sample ID: 240-192599-8

Date Collected: 09/27/23 00:00

Matrix: Water

Date Received: 09/30/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6010D		1	589763	RKT	EET CLE	10/05/23 01:00
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6020B		1	589577	DSH	EET CLE	10/03/23 16:31
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6020B		1	589682	DSH	EET CLE	10/04/23 12:43
Total/NA	Prep	7470A			589306	BN	EET CLE	10/02/23 14:00
Total/NA	Analysis	7470A		1	589519	GK	EET CLE	10/03/23 18:32
Total/NA	Analysis	2320B-1997		1	589723	JMR	EET CLE	10/04/23 19:42
Total/NA	Analysis	300.0		1	589830	JWW	EET CLE	10/08/23 15:45
Total/NA	Analysis	300.0		5	589830	JWW	EET CLE	10/08/23 16:05
Total/NA	Analysis	SM 2540C		1	589326	QUY8	EET CLE	10/02/23 12:00
Total/NA	Prep	PrecSep-21			630672	KAC	EET SL	10/04/23 11:23
Total/NA	Analysis	9315		1	633905	FLC	EET SL	10/27/23 10:38
Total/NA	Prep	PrecSep_0			630677	KAC	EET SL	10/04/23 11:31
Total/NA	Analysis	9320		1	633701	FLC	EET SL	10/26/23 11:19
Total/NA	Analysis	Ra226_Ra228		1	634309	SCB	EET SL	10/30/23 10:31

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: EB-001-F-20230927-01

Lab Sample ID: 240-192599-9

Date Collected: 09/27/23 15:40

Matrix: Water

Date Received: 09/30/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6010D		1	589763	RKT	EET CLE	10/05/23 01:05
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6020B		1	589577	DSH	EET CLE	10/03/23 16:34
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6020B		1	589682	DSH	EET CLE	10/04/23 12:51
Total/NA	Prep	7470A			589306	BN	EET CLE	10/02/23 14:00
Total/NA	Analysis	7470A		1	589519	GK	EET CLE	10/03/23 18:34
Total/NA	Analysis	2320B-1997		1	589723	JMR	EET CLE	10/04/23 19:47
Total/NA	Analysis	300.0		1	589830	JWW	EET CLE	10/08/23 13:04
Total/NA	Analysis	SM 2540C		1	589326	QUY8	EET CLE	10/02/23 12:00
Total/NA	Prep	PrecSep-21			630672	KAC	EET SL	10/04/23 11:23
Total/NA	Analysis	9315		1	633905	FLC	EET SL	10/27/23 10:38
Total/NA	Prep	PrecSep_0			630677	KAC	EET SL	10/04/23 11:31
Total/NA	Analysis	9320		1	633701	FLC	EET SL	10/26/23 11:19
Total/NA	Analysis	Ra226_Ra228		1	634309	SCB	EET SL	10/30/23 10:31

Client Sample ID: MW-1-F-20230928-01

Lab Sample ID: 240-192599-10

Date Collected: 09/28/23 09:46

Matrix: Water

Date Received: 09/30/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6010D		1	589763	RKT	EET CLE	10/04/23 23:34
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6020B		1	589577	DSH	EET CLE	10/03/23 15:46
Total/NA	Prep	7470A			589306	BN	EET CLE	10/02/23 14:00
Total/NA	Analysis	7470A		1	589519	GK	EET CLE	10/03/23 17:59
Total/NA	Analysis	2320B-1997		1	589723	JMR	EET CLE	10/04/23 19:50
Total/NA	Analysis	300.0		1	590109	JWW	EET CLE	10/09/23 15:17
Total/NA	Analysis	SM 2540C		1	589602	MS	EET CLE	10/04/23 09:20
Total/NA	Prep	PrecSep-21			630672	KAC	EET SL	10/04/23 11:23
Total/NA	Analysis	9315		1	633905	FLC	EET SL	10/27/23 10:37
Total/NA	Prep	PrecSep_0			630677	KAC	EET SL	10/04/23 11:31
Total/NA	Analysis	9320		1	633701	FLC	EET SL	10/26/23 11:19
Total/NA	Analysis	Ra226_Ra228		1	634309	SCB	EET SL	10/30/23 10:31

Client Sample ID: BAC-21-F-20230928-01

Lab Sample ID: 240-192599-11

Date Collected: 09/28/23 10:58

Matrix: Water

Date Received: 09/30/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6010D		1	589763	RKT	EET CLE	10/05/23 01:09

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-21-F-20230928-01

Lab Sample ID: 240-192599-11

Date Collected: 09/28/23 10:58

Matrix: Water

Date Received: 09/30/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6020B		1	589577	DSH	EET CLE	10/03/23 16:41
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6020B		1	589682	DSH	EET CLE	10/04/23 12:53
Total/NA	Prep	7470A			589306	BN	EET CLE	10/02/23 14:00
Total/NA	Analysis	7470A		1	589519	GK	EET CLE	10/03/23 18:40
Total/NA	Analysis	2320B-1997		1	589723	JMR	EET CLE	10/04/23 19:56
Total/NA	Analysis	300.0		1	590109	JWW	EET CLE	10/09/23 17:27
Total/NA	Analysis	SM 2540C		1	589606	MS	EET CLE	10/04/23 09:28
Total/NA	Prep	PrecSep-21			630672	KAC	EET SL	10/04/23 11:23
Total/NA	Analysis	9315		1	633905	FLC	EET SL	10/27/23 10:37
Total/NA	Prep	PrecSep_0			630677	KAC	EET SL	10/04/23 11:31
Total/NA	Analysis	9320		1	633701	FLC	EET SL	10/26/23 11:20
Total/NA	Analysis	Ra226_Ra228		1	634309	SCB	EET SL	10/30/23 10:31

Client Sample ID: BAC-22-F-20230928-01

Lab Sample ID: 240-192599-12

Date Collected: 09/28/23 12:07

Matrix: Water

Date Received: 09/30/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6010D		1	589763	RKT	EET CLE	10/05/23 01:14
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6020B		1	589577	DSH	EET CLE	10/03/23 16:44
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6020B		1	589682	DSH	EET CLE	10/04/23 12:56
Total/NA	Prep	7470A			589306	BN	EET CLE	10/02/23 14:00
Total/NA	Analysis	7470A		1	589519	GK	EET CLE	10/03/23 18:42
Total/NA	Analysis	2320B-1997		1	589723	JMR	EET CLE	10/04/23 20:02
Total/NA	Analysis	300.0		1	590109	JWW	EET CLE	10/09/23 18:54
Total/NA	Analysis	300.0		5	590109	JWW	EET CLE	10/09/23 19:15
Total/NA	Analysis	SM 2540C		1	589606	MS	EET CLE	10/04/23 09:28
Total/NA	Prep	PrecSep-21			630672	KAC	EET SL	10/04/23 11:23
Total/NA	Analysis	9315		1	633905	FLC	EET SL	10/27/23 10:37
Total/NA	Prep	PrecSep_0			630677	KAC	EET SL	10/04/23 11:31
Total/NA	Analysis	9320		1	633541	FLC	EET SL	10/26/23 11:20
Total/NA	Analysis	Ra226_Ra228		1	634309	SCB	EET SL	10/30/23 10:31

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: BAC-23-F-20230928-01

Lab Sample ID: 240-192599-13

Date Collected: 09/28/23 13:02

Matrix: Water

Date Received: 09/30/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6010D		1	589763	RKT	EET CLE	10/05/23 01:18
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6020B		1	589577	DSH	EET CLE	10/03/23 16:46
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6020B		1	589682	DSH	EET CLE	10/04/23 12:58
Total/NA	Prep	7470A			589306	BN	EET CLE	10/02/23 14:00
Total/NA	Analysis	7470A		1	589519	GK	EET CLE	10/03/23 18:44
Total/NA	Analysis	2320B-1997		1	589723	JMR	EET CLE	10/04/23 20:13
Total/NA	Analysis	300.0		1	590109	JWW	EET CLE	10/09/23 21:25
Total/NA	Analysis	SM 2540C		1	589602	MS	EET CLE	10/04/23 09:20
Total/NA	Prep	PrecSep-21			630672	KAC	EET SL	10/04/23 11:23
Total/NA	Analysis	9315		1	633905	FLC	EET SL	10/27/23 10:37
Total/NA	Prep	PrecSep_0			630677	KAC	EET SL	10/04/23 11:31
Total/NA	Analysis	9320		1	633541	FLC	EET SL	10/26/23 11:20
Total/NA	Analysis	Ra226_Ra228		1	634309	SCB	EET SL	10/30/23 10:31

Client Sample ID: BAC-08-F-20230928-01

Lab Sample ID: 240-192599-14

Date Collected: 09/28/23 14:05

Matrix: Water

Date Received: 09/30/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6010D		1	589763	RKT	EET CLE	10/05/23 01:22
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6020B		1	589577	DSH	EET CLE	10/03/23 16:49
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6020B		1	589682	DSH	EET CLE	10/04/23 13:01
Total/NA	Prep	7470A			589306	BN	EET CLE	10/02/23 14:00
Total/NA	Analysis	7470A		1	589519	GK	EET CLE	10/03/23 18:46
Total/NA	Analysis	2320B-1997		1	589723	JMR	EET CLE	10/04/23 20:19
Total/NA	Analysis	300.0		1	590109	JWW	EET CLE	10/09/23 20:42
Total/NA	Analysis	SM 2540C		1	589602	MS	EET CLE	10/04/23 09:20
Total/NA	Prep	PrecSep-21			630672	KAC	EET SL	10/04/23 11:23
Total/NA	Analysis	9315		1	633905	FLC	EET SL	10/27/23 10:37
Total/NA	Prep	PrecSep_0			630677	KAC	EET SL	10/04/23 11:31
Total/NA	Analysis	9320		1	633541	FLC	EET SL	10/26/23 11:20
Total/NA	Analysis	Ra226_Ra228		1	634309	SCB	EET SL	10/30/23 10:31

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

Client Sample ID: EB-001-F-20230928-01

Lab Sample ID: 240-192599-15

Date Collected: 09/28/23 14:45

Matrix: Water

Date Received: 09/30/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6010D		1	589763	RKT	EET CLE	10/05/23 08:27
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6020B		1	589577	DSH	EET CLE	10/03/23 16:51
Total Recoverable	Prep	3005A			589305	BN	EET CLE	10/02/23 14:00
Total Recoverable	Analysis	6020B		1	589682	DSH	EET CLE	10/04/23 13:03
Total/NA	Prep	7470A			589306	BN	EET CLE	10/02/23 14:00
Total/NA	Analysis	7470A		1	589519	GK	EET CLE	10/03/23 18:48
Total/NA	Analysis	2320B-1997		1	589723	JMR	EET CLE	10/04/23 20:24
Total/NA	Analysis	300.0		1	590109	JWW	EET CLE	10/09/23 21:04
Total/NA	Analysis	SM 2540C		1	589606	MS	EET CLE	10/04/23 09:28
Total/NA	Prep	PrecSep-21			630672	KAC	EET SL	10/04/23 11:23
Total/NA	Analysis	9315		1	633885	FLC	EET SL	10/27/23 10:36
Total/NA	Prep	PrecSep_0			630677	KAC	EET SL	10/04/23 11:31
Total/NA	Analysis	9320		1	633541	FLC	EET SL	10/26/23 11:20
Total/NA	Analysis	Ra226_Ra228		1	634309	SCB	EET SL	10/30/23 10:31

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
 Project/Site: Federal CCR Wells

Job ID: 240-192599-1

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
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
Virginia	NELAP	460175	09-14-24
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-24
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-24
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-24
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-24
Massachusetts	State	M-MO054	06-30-24
MI - RadChem Recognition	State	9005	06-30-24
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-24
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland

Accreditation/Certification Summary


Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-192599-1

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	07-31-24
North Dakota	State	R-207	06-30-24
Oklahoma	NELAP	9997	08-31-24
Oregon	NELAP	4157	09-01-24
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-24
Texas	NELAP	T104704193	07-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO000542021-14	07-31-24
Virginia	NELAP	10310	06-15-25
Washington	State	C592	08-30-24
West Virginia DEP	State	381	10-31-23

Client Information		Sample: <u>Bobby Castle</u>		Lab PM: <u>Cisneros, Roxanne</u>		COC No: <u>240-111832-39818.1</u>	
Client Contact: <u>Taylor Huffman</u>		Phone: <u>746-373-4368</u>		E-Mail: <u>roxanne.cisneros@et.eurofins.com</u>		Page: <u>Page 1 of 2</u>	
Company: <u>Lightstone Generation Gavin Power LLC</u>		Address: <u>7397 OH-7</u>		City: <u>Cheshire</u>		State of Origin: <u>OH</u>	
State, Zip: <u>OH, 45620</u>		Phone: <u>740-925-3171(Tel)</u>		Compliance Project: <u>Δ Yes Δ No</u>		Analysis Requested	
Email: <u>taylor.huffman@lightstonegen.com</u>		PO #: <u>2935505</u>		Project #: <u>24019633</u>		Preservation Codes:	
Project Name: <u>Gavin CCR</u>		WO #: <u>2935505</u>		Site: <u>Scalvin</u>		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 Other: 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 - Trisma Z - other (specify)	
Due Date Requested:		TAT Requested (days):		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)	
Sample Date		Sample Time		Sample Type (C=Comp, G=Grab)		Matrix (W=water, S=solid, O=wastoid, J=tissue, A=Air)	
Sample Identification		Sample Date		Sample Time		Matrix	
<u>BAC-10-F-20230926-01</u>		<u>9-26-23</u>		<u>1438</u>		<u>Water</u>	
<u>BAC-07-F-20230927-01</u>		<u>9-27-23</u>		<u>1009</u>		<u>Water</u>	
<u>BAC-06-F-20230927-01</u>		<u>9-27-23</u>		<u>1107</u>		<u>Water</u>	
<u>SAC-19-F-20230927-01</u>		<u>9-27-23</u>		<u>1227</u>		<u>Water</u>	
<u>BAC-18-F-20230927-01</u>		<u>9-27-23</u>		<u>1305</u>		<u>Water</u>	
<u>BAC-11-F-20230927-01</u>		<u>9-27-23</u>		<u>1419</u>		<u>Water</u>	
<u>BAC-02-F-20230927-01</u>		<u>9-27-23</u>		<u>1504</u>		<u>Water</u>	
<u>DUP-005-F-20230927-01</u>		<u>9-27-23</u>		<u>—</u>		<u>Water</u>	
<u>EB-001-F-20230927-01</u>		<u>9-27-23</u>		<u>1540</u>		<u>Water</u>	
<u>MW-1-F-20230928-01</u>		<u>9-28-23</u>		<u>0946</u>		<u>Water</u>	
<u>MW-1-F-20230928-MS-01</u>		<u>9-28-23</u>		<u>0946</u>		<u>Water</u>	
Possible Hazard Identification		Poison B <input type="checkbox"/>		Unknown <input type="checkbox"/>		Radiological <input type="checkbox"/>	
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Other (specify)		Deliverable Requested I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by: <u>[Signature]</u>		Date: <u>9-29-23</u>		Time: <u>0845</u>		Company: <u>KENAL</u>	
Relinquished by: <u>[Signature]</u>		Date: <u>9-29-23</u>		Time: <u>1700</u>		Company: <u>ETZ</u>	
Relinquished by: <u>[Signature]</u>		Date: <u>9-30-23</u>		Time: <u>800</u>		Company: <u>FETNL</u>	
Custody Seals Intact: <u>Δ Yes Δ No</u>		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Total Number of Containers: <u>1</u> Special Instructions/Note: 	



Client Information		Sample: <i>Bobby Cate</i>		Lab PM: Cisneros, Roxanne	Carmer Tracking No(s): 240-111832-39818.1
Client Contact: Taylor Huffman		Phone: 740-373-4308		E-Mail: roxanne.cisneros@et.eurofins.com	State of Origin:
Company: Lightstone Generation Gavin Power LLC		Address: 7397 OH-7		COC No: 240-111832-39818.1	
City: Cheshire		State, Zip: OH, 45620		Page: <i>Page 1 of 8</i>	
Phone: 740-925-3171(Tel)		PO #: 2935505		Job #: <i>Ryzaft</i>	
Email: taylor.huffman@lightstonegen.com		WC #: 24019633			
Project Name: Gavin CCR		Project #: 24019633			
Site: <i>Grain</i>		SSOW#:			
Due Date Requested:		TAT Requested (days):		Analysis Requested	
Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		Sample Date		Field Filtered Sample (Yes or No)	
Sample Date		Sample Time		Perform MS/MSD (Yes or No)	
Sample Time		Sample Type (C=Comp, G=grab)		6010B, 6020, 7470A	
Sample Type		Preservation Code:		2540C, Calc'd - TDS	
Matrix (w=water, s=solid, o=soil, a=air)		Sample Date		9315, Ra226, 9320, Ra228, Ra228Ra228, GPC	
Sample Date		Sample Time		2320B - (MOD) Alkalinity	
Sample Time		Sample Type		Total Number of Containers	
Sample Type		Preservation Code		Special Instructions/Note:	
Matrix		Sample Date			
Sample Date		Sample Time			
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Sample Type		Preservation Code			
Matrix		Sample Date			
Sample Date		Sample Time			
Sample Time		Sample Type			

Login # : 192599

Eurofins – Cleveland Sample Receipt Form/Narrative
Barberton Facility

Client Light Stone Site Name _____ Cooler unpacked by: Nancy Boyer
Cooler Received on 9-30-23 Opened on 9-30-23
FedEx: 1st Grd Exp 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 # 22 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity leach 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# HC312501
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: _____

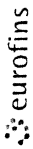


Temperature readings:

Client Sample ID	Lab ID	Container Type	Container		Preservative	
			pH	Temp	Added (mls)	Lot #
BAC-10-F-20230926-01	240-192599-D-1	Plastic 500ml - with Nitric Acid	<2			
BAC-10-F-20230926-01	240-192599-E-1	Plastic 1 liter - Nitric Acid	<2			
BAC-10-F-20230926-01	240-192599-F-1	Plastic 1 liter - Nitric Acid	<2			
BAC-07-F-20230927-01	240-192599-D-2	Plastic 500ml - with Nitric Acid	<2			
BAC-07-F-20230927-01	240-192599-E-2	Plastic 1 liter - Nitric Acid	<2			
BAC-07-F-20230927-01	240-192599-F-2	Plastic 1 liter - Nitric Acid	<2			
BAC-06-F-20230927-01	240-192599-D-3	Plastic 500ml - with Nitric Acid	<2			
BAC-06-F-20230927-01	240-192599-E-3	Plastic 1 liter - Nitric Acid	<2			
BAC-06-F-20230927-01	240-192599-F-3	Plastic 1 liter - Nitric Acid	<2			
BAC-19-F-20230927-01	240-192599-D-4	Plastic 500ml - with Nitric Acid	<2			
BAC-19-F-20230927-01	240-192599-E-4	Plastic 1 liter - Nitric Acid	<2			
BAC-19-F-20230927-01	240-192599-F-4	Plastic 1 liter - Nitric Acid	<2			
BAC-18-F-20230927-01	240-192599-D-5	Plastic 500ml - with Nitric Acid	<2			
BAC-18-F-20230927-01	240-192599-E-5	Plastic 1 liter - Nitric Acid	<2			
BAC-18-F-20230927-01	240-192599-F-5	Plastic 1 liter - Nitric Acid	<2			
BAC-11-F-20230927-01	240-192599-D-6	Plastic 500ml - with Nitric Acid	<2			
BAC-11-F-20230927-01	240-192599-E-6	Plastic 1 liter - Nitric Acid	<2			
BAC-11-F-20230927-01	240-192599-F-6	Plastic 1 liter - Nitric Acid	<2			
BAC-02-F-20230927-01	240-192599-D-7	Plastic 500ml - with Nitric Acid	<2			
BAC-02-F-20230927-01	240-192599-E-7	Plastic 1 liter - Nitric Acid	<2			
BAC-02-F-20230927-01	240-192599-F-7	Plastic 1 liter - Nitric Acid	<2			
DUP-005-F-20230927-01	240-192599-D-8	Plastic 500ml - with Nitric Acid	<2			
DUP-005-F-20230927-01	240-192599-E-8	Plastic 1 liter - Nitric Acid	<2			
DUP-005-F-20230927-01	240-192599-F-8	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-20230927-01	240-192599-D-9	Plastic 500ml - with Nitric Acid	<2			
EB-001-F-20230927-01	240-192599-E-9	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-20230927-01	240-192599-F-9	Plastic 1 liter - Nitric Acid	<2			
MW-1-F-20230928-01	240-192599-J-10	Plastic 500ml - with Nitric Acid	<2			
MW-1-F-20230928-01	240-192599-K-10	Plastic 500ml - with Nitric Acid	<2			
MW-1-F-20230928-01	240-192599-L-10	Plastic 500ml - with Nitric Acid	<2			
MW-1-F-20230928-01	240-192599-M-10	Plastic 1 liter - Nitric Acid	<2			
MW-1-F-20230928-01	240-192599-N-10	Plastic 1 liter - Nitric Acid	<2			
MW-1-F-20230928-01	240-192599-O-10	Plastic 1 liter - Nitric Acid	<2			
MW-1-F-20230928-01	240-192599-P-10	Plastic 1 liter - Nitric Acid	<2			
MW-1-F-20230928-01	240-192599-Q-10	Plastic 1 liter - Nitric Acid	<2			

Chain of Custody Record

Columbus
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Environment Test

Client Information		Lab PM: Cisneros, Roxanne		COC No: 240-111832-39818.1	
Client Contact: Taylor Huffman		E-Mail: roxanne.cisneros@et.eurofinsus.com		Page: 1 of 2	
Company: Lightstone Generation Gavn Power LLC		Address: 7397 OH-7		Job #: Pg 1 of 2	
City: Cheshire		State: OH, Zip: 45620		Carrier Tracking No(s):	
Phone: 740-925-3171(Tel)		Project #: 24019633		Slate of Origin:	
Email: taylor.huffman@lightstonegen.com		SSOW#: 5414		Analysis Requested:	
Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		TAT Requested (days):		Total Number of Containers: <input checked="" type="checkbox"/>	
PO #: 2935505		Sample Date		Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/>	
WO #: 740-925-3171(Tel)		Sample Time		Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/>	
Project Name: Gavin CCR		Sample Type (C=Comp, G=grab)		2320B - (MOD) Alkalinity	
Site: 5414		Preservation Code:		300.0_28D - Chloride, Fluoride & Sulfate	
Sample Identification		Matrix (W=water, S=soil, O=water, BT=issue, A=air)		9315 Ra226, 9320 Ra228, Ra226Ra228_GFPc	
BAC-10-F-20230927-01	9-26-23 1438	5	Water	D	N
BAC-07-F-20230927-01	9-27-23 1009	5	Water	N	N
BAC-06-F-20230927-01	9-27-23 1107	5	Water	N	N
SAC-19-F-20230927-01	9-27-23 1227	5	Water	N	N
BAC-18-F-20230927-01	9-27-23 1305	5	Water	N	N
BAC-11-F-20230927-01	9-27-23 1419	5	Water	N	N
BAC-02-F-20230927-01	9-27-23 1504	5	Water	N	N
DUP-005-F-20230927-01	9-27-23	5	Water	N	N
EB-001-F-20230927-01	9-27-23 1540	5	Water	N	N
MW-1-F-20230928-01	9-28-23 0946	6	Water	N	N
MW-1-F-20230928-AS-01	9-28-23 0946	6	Water	N	N
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested I, II, III, IV, Other (specify)					
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Special Instructions/QC Requirements:					
Relinquished by: <i>[Signature]</i>		Date: 9-29-23/0845		Company: KEMAL	
Relinquished by: <i>[Signature]</i>		Date: 9-29-23 1200		Company: KEMAL	
Relinquished by: <i>[Signature]</i>		Date: 9-30-23 800		Company: E79	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:	



Client Information		Lab PM		Carrier Tracking Net(s)		COC No		
Client Contact: Taylor Huffman		Cisneros, Roxanne		E-Mail: roxanne.cisneros@et.eurofins.com		240-111832-39818.1		
Company: Lightstone Generation Gavin Power LLC		PWSID		State of Origin		Page: Pg 2 of 2		
Address: 7397 OH-7		Due Date Requested:		Analysis Requested		Job #:		
City: Cheshire		TAT Requested (days):		Perform MS/MSD (Yes or No)		Preservation Codes:		
State, Zip: OH, 45620		Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		6010B, 6020, 7470A		A - HCL M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)		
Phone: 740-925-3171(Tel)		FO #: 2935505		2540C, Calcd - TDS		Other:		
Email: taylor.huffman@lightstonegen.com		WO #:		300.0_28D - Chloride, Fluoride & Sulfate		Total Number of Containers		
Project Name: Gavin CCR		Project #: 24019633		9315, Ra226, 9320, Ra228, Ra228Ra228_GFP		Special Instructions/Note:		
Site: Gavin		SSOW#:		2320B - (MOD) Alkalinity				
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Seawater, Urine, etc.)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Analysis Requested	Special Instructions/Note
MW-1-F-20230928-MSD-01	9-28-23	0946	6	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
BAG-21-F-20230928-c1	9-28-23	1058	6	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
BAG-22-F-20230928-01	9-28-23	1207	6	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
BAG-23-F-20230928-01	9-28-23	1302	6	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
BAG-08-F-20230928-01	9-28-23	1405	6	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
EB-001-F-20230928-c1	9-28-23	1445	6	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
				Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
				Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
				Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
				Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
				Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological
Deliverable Requested I, II, III, IV, Other (specify)

Empty Kit Relinquished by: _____ Date: _____
Relinquished by: *Bobby Caste* Date/Time: 9-29-23 1200 Company: EDA
Relinquished by: *Roxanne Cisneros* Date/Time: 9-29-23 1200 Company: EDA
Relinquished by: *Jimmy Page* Date/Time: 9-30-23 800 Company: EETNC

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

192599

Eurofins - Cleveland Sample Receipt Form/Narrative
Barberton Facility

Login # : _____

Client Light Stone

Site Name _____

Cooler unpacked by:
Nancy Boyd

Cooler Received on 9-30-23

Opened on 9-30-23

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 # 22 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

- 2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity leach Yes No NA
 - 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 NA
 - Were tamper/custody seals intact and uncompromised? Yes No NA

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

- 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# HC312501
- 14. Were VOAs on the COC? Yes No NA
- 15. Were air bubbles >6 mm in any VOA vials? Yes No NA ● ← Larger than this.
- 16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No NA
- 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: _____

Eurofins - Canton 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 #: 22	1.2	1.1	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: 22	2.1	2.0	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: 22	14.5	14.4	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: 22	0.2	0.1	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: 22	0.9	0.8	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: 22	3.8	3.7	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: 22	21.4	21.3	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	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



Temperature readings:

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-10-F-20230926-01	240-192599-D-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-10-F-20230926-01	240-192599-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-10-F-20230926-01	240-192599-F-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-20230927-01	240-192599-D-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-07-F-20230927-01	240-192599-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-20230927-01	240-192599-F-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-20230927-01	240-192599-D-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-06-F-20230927-01	240-192599-E-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-20230927-01	240-192599-F-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-19-F-20230927-01	240-192599-D-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-19-F-20230927-01	240-192599-E-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-19-F-20230927-01	240-192599-F-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-18-F-20230927-01	240-192599-D-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-18-F-20230927-01	240-192599-E-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-18-F-20230927-01	240-192599-F-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-11-F-20230927-01	240-192599-D-6	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-11-F-20230927-01	240-192599-E-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-11-F-20230927-01	240-192599-F-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-02-F-20230927-01	240-192599-D-7	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-02-F-20230927-01	240-192599-E-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-02-F-20230927-01	240-192599-F-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-005-F-20230927-01	240-192599-D-8	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-005-F-20230927-01	240-192599-E-8	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-005-F-20230927-01	240-192599-F-8	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230927-01	240-192599-D-9	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230927-01	240-192599-E-9	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230927-01	240-192599-F-9	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
MW-1-F-20230928-01	240-192599-J-10	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
MW-1-F-20230928-01	240-192599-K-10	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
MW-1-F-20230928-01	240-192599-L-10	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
MW-1-F-20230928-01	240-192599-M-10	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
MW-1-F-20230928-01	240-192599-N-10	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
MW-1-F-20230928-01	240-192599-O-10	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
MW-1-F-20230928-01	240-192599-P-10	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
MW-1-F-20230928-01	240-192599-Q-10	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

Chain of Custody Record

Columbus
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Environment Test

Client Information		Lab PM		Carrier Tracking No(s)		COC No	
Client Contact: Taylor Huffman		Cisneros, Roxanne		240-111832-39818.1		240-111832-39818.1	
Company: Lightstone Generation Gavin Power LLC		E-Mail: roxanne.cisneros@et.eurofinsus.com		State of Origin		Page: Page 1 of 2	
Address: 7397 OH-7		PWSID		Job #: Pg 1 of 2		Job #:	
City: Cheshire		TAT Requested (days):		Analysis Requested		Preservation Codes:	
State, Zip: OH, 45620		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		300.0.28D - Chloride, Fluoride & Sulfate		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 Other:	
Phone: 740-925-3171(Tel)		PO # 2935505		9315_Ra226, 9320_Ra228, Ra228Ra228_GFP		M - Hexane N - None O - AsNaO2 P - Na2OAS R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)	
Email: taylor.huffman@lightstonegen.com		WO #		2540C_Calcd - TDS		Total Number of containers	
Project Name: Gavin CCR		Project # 24019633		6010B_6020_7470A		Special Instructions/Note:	
Site: Salin		SSOW#		Field Filtered Sample (Yes or No)		Barcode: 240-192599 Chain of Custody	
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastebld, BT=tissue, A=air)	Perform MS/MSD (Yes or No)	Field Filtered Sample (Yes or No)	Special Instructions/Note
BAC-10-F-20230926-01	9-26-23	1438	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
BAC-07-F-20230927-01	9-27-23	1009	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
BAC-06-F-20230927-01	9-27-23	1107	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
SAC-19-F-20230927-01	9-27-23	1227	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
BAC-18-F-20230927-01	9-27-23	1305	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
BAC-11-F-20230927-01	9-27-23	1419	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
BAC-02-F-20230927-01	9-27-23	1504	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DUP-005-F-20230927-01	9-27-23		G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
EB-001-F-20230927-01	9-27-23	1546	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
MW-1-F-20230928-01	9-28-23	0946	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
MW-1-F-20230928-AS-01	9-28-23	0946	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological
 Deliverable Requested I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
 Special Instructions/QC Requirements:

Relinquished by:	Date:	Time:	Method of Shipment:
<i>[Signature]</i>	9-29-23	0845	Company: KENDAL
<i>[Signature]</i>	9-29-23	1700	Company: E77
<i>[Signature]</i>			Company: E77

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



Client Information		Lab PM Cisneros, Roxanne	Carrier Tracking No(s)	COC No 240-111832-39818.1									
Client Contact: Taylor Huffman		E-Mail: roxanne.cisneros@et.eurolins.com	State of Origin	Page: Page 1 of 8									
Company: Lightstone Generation Gavin Power LLC		PWSID	Job #:	Job #: Pg 2 of 2									
Address: 7397 OH-7		Due Date Requested:											
City Cheshire		TAT Requested (days):											
State, Zip: OH, 45620		Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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=water, 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, Ra228Ra228, GFCP	300.0, 28D - Chloride, Fluoride & Sulfate	2220B - (MOD) Alkalinity	Total Number of Containers	Special Instructions/Note:
MW-1-F-20230928-MSD-01	9-28-23	0946	G	Water	X	X							
BAC-21-F-20230928-c1	9-28-23	1058	G	Water									
BAC-22-F-20230928-c1	9-28-23	1207	G	Water									
BAC-23-F-20230928-c1	9-28-23	1302	G	Water									
BAC-08-F-20230928-c1	9-28-23	1465	G	Water									
EB-001-F-20230928-c1	9-28-23	1445	G	Water									
				Water									
				Water									
				Water									
				Water									
				Water									

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological
 Deliverable Requested I, II, III, IV, Other (specify)

Empty Kit Relinquished by: _____ **Date:** _____

Relinquished by: *Robby Casto* **Date/Time:** 9-29-23 / 0845 **Company:** KENNER Company

Relinquished by: *Taylor Huffman* **Date/Time:** 9-29-23 / 1200 **Company:** ETR Company

Relinquished by: *Taylor Huffman* **Date/Time:** 9-30-23 / 800 **Company:** EETNC Company

Custody Seals Intact: Yes No **Custody Seal No.:** _____

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Special Instructions/QC Requirements:

Received by: _____ **Date/Time:** 9-29-23 8:18 **Company:** ETR

Received by: _____ **Date/Time:** 9-30-23 800 **Company:** EETNC

Received by: _____ **Date/Time:** _____ **Company:** _____

Cooler Temperature(s) °C and Other Remarks:



192599

Eurofins - Cleveland Sample Receipt Form/Narrative Login # : _____

Barberton Facility

Client Light Stone Site Name _____ Cooler unpacked by: _____

Cooler Received on 9-30-23 Opened on 9-30-23

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 # 22 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

- 2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity leach 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# HC312501
- 14. Were VOAs on the COC? Yes No
- 15. Were air bubbles >6 mm in any VOA vials? Yes No NA **← Larger than this.**
- 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: _____



Temperature readings:

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-10-F-20230926-01	240-192599-D-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-10-F-20230926-01	240-192599-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-10-F-20230926-01	240-192599-F-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-20230927-01	240-192599-D-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-07-F-20230927-01	240-192599-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-20230927-01	240-192599-F-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-20230927-01	240-192599-D-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-06-F-20230927-01	240-192599-E-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-20230927-01	240-192599-F-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-19-F-20230927-01	240-192599-D-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-19-F-20230927-01	240-192599-E-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-19-F-20230927-01	240-192599-F-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-18-F-20230927-01	240-192599-D-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-18-F-20230927-01	240-192599-E-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-18-F-20230927-01	240-192599-F-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-11-F-20230927-01	240-192599-D-6	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-11-F-20230927-01	240-192599-E-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-11-F-20230927-01	240-192599-F-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-02-F-20230927-01	240-192599-D-7	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-02-F-20230927-01	240-192599-E-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-02-F-20230927-01	240-192599-F-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-005-F-20230927-01	240-192599-D-8	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-005-F-20230927-01	240-192599-E-8	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-005-F-20230927-01	240-192599-F-8	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230927-01	240-192599-D-9	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230927-01	240-192599-E-9	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230927-01	240-192599-F-9	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
MW-1-F-20230928-01	240-192599-J-10	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
MW-1-F-20230928-01	240-192599-K-10	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
MW-1-F-20230928-01	240-192599-L-10	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
MW-1-F-20230928-01	240-192599-M-10	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
MW-1-F-20230928-01	240-192599-N-10	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
MW-1-F-20230928-01	240-192599-O-10	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
MW-1-F-20230928-01	240-192599-P-10	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
MW-1-F-20230928-01	240-192599-Q-10	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

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<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
MW-1-F-20230928-01	240-192599-R-10	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-21-F-20230928-01	240-192599-D-11	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-21-F-20230928-01	240-192599-E-11	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-21-F-20230928-01	240-192599-F-11	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-22-F-20230928-01	240-192599-D-12	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-22-F-20230928-01	240-192599-E-12	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-22-F-20230928-01	240-192599-F-12	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-23-F-20230928-01	240-192599-D-13	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-23-F-20230928-01	240-192599-E-13	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-23-F-20230928-01	240-192599-F-13	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-08-F-20230928-01	240-192599-D-14	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-08-F-20230928-01	240-192599-E-14	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-08-F-20230928-01	240-192599-F-14	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230928-01	240-192599-D-15	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230928-01	240-192599-E-15	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230928-01	240-192599-F-15	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

Chain of Custody Record



Client Information (Sub Contract Lab)
 Client Contact: Shipping/Receiving
 Company: TestAmerica Laboratories, Inc.
 Address: 13715 Rider Trail North, Earth City, MO 63045
 Phone: 314-298-8566 (Tel) 314-298-8757 (Fax)
 Email: [Redacted]
 Project Name: Federal GWM Wells
 Site: [Redacted]

Sampler: Lab PM: Cisneros, Roxanne
 E-Mail: roxanne.cisneros@et.eurofins.com
 State of Origin: Ohio

Analysis Requested

Sample ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Sewage, Wastewater, B1+ Tissue, A+B)	Preservation Code:	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra226/PreSep_0 Radium-226 (GFCP)	9315_Ra226/PreSep_21 Radium-226 (GFCP)	Ra226Ra228_GFCP/ Combined Radium-226 and Radium-228	Total Number of Containers	Special Instructions/Note:
BAC-10-F-20230926-01 (240-192599-1)	9/26/23	14:38 Eastern	Water	Water		X	X	X	X		2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-07-F-20230927-01 (240-192599-2)	9/27/23	10:09 Eastern	Water	Water		X	X	X	X		2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-06-F-20230927-01 (240-192599-3)	9/27/23	11:07 Eastern	Water	Water		X	X	X	X		2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-19-F-20230927-01 (240-192599-4)	9/27/23	12:27 Eastern	Water	Water		X	X	X	X		2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-18-F-20230927-01 (240-192599-5)	9/27/23	13:05 Eastern	Water	Water		X	X	X	X		2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-11-F-20230927-01 (240-192599-6)	9/27/23	14:19 Eastern	Water	Water		X	X	X	X		2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-02-F-20230927-01 (240-192599-7)	9/27/23	15:04 Eastern	Water	Water		X	X	X	X		2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
DUP-005-F-20230927-01 (240-192599-8)	9/27/23	Eastern	Water	Water		X	X	X	X		2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
EB-001-F-20230927-01 (240-192599-9)	9/27/23	15:40 Eastern	Water	Water		X	X	X	X		2	Recount of TAR after 21 day ingrowth if > action limit; save planchet

Due Date Requested: 10/16/2023
TAT Requested (days): [Redacted]
PO #: [Redacted]
WO #: [Redacted]
Project #: 24019633
SSOW#: [Redacted]

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
 Other: [Redacted]

Other: [Redacted]

Special Instructions/Note: [Redacted]

Analysis Requested: [Redacted]

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
 Special Instructions/QC Requirements: [Redacted]

Relinquished by: [Signature]
Relinquished by: [Signature]
Relinquished by: [Signature]
Relinquished by: [Signature]

Received by: [Signature]
Received by: [Signature]
Received by: [Signature]

Date/Time: 10/23 9:30
Date/Time: 10/23 9:30
Date/Time: 10/23 9:30

Company: BEAC
Company: BEAC
Company: BEAC

Method of Shipment: [Redacted]

Primary Deliverable Rank: 2
Deliverable Requested: I, III, IV, Other (specify)

Custody Seal No.: [Redacted]
 Δ Yes Δ No



Eurofins Cleveland
 180 S. Van Buren Avenue
 Barberton, OH 44203
 Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record



Environment: Testine

Client Information (Sub Contract Lab)		Lab PM:	Camer Tracking No(s):	COC No:						
Shipping/Receiving		Cisneros, Roxanne		240-174541.2						
Company		E-Mail:	State of Origin:	Page:						
TestAmerica Laboratories, Inc.		roxanne.cisneros@et.eurofinsus.com	Ohio	Page 2 of 2						
Address:		Accreditations Required (See note):								
13715 Rider Trail North,		Job #:								
City:		Preservation Codes:								
Earth City		A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 R - Na2SO3 F - MeOH S - H2SO4 G - Amchlor T - TSP Dodecahydrate H - Ascorbic Acid U - Acetone I - Ice V - MCAA J - DI Water W - pH 4.5 K - EDTA L - EDA Z - other (specify)								
State, Zip:		Other:								
MO, 63045										
Phone:		Special Instructions/Note:								
314-298-8566(Tel) 314-298-8757(Fax)										
Email:										
Project Name:										
Federal GWM Wells										
Site:										
24019633										
SSOW#:										
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	MATRIX (Water, Solid, On-wash, B1=Thru, A=Ally)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PreSep_0 Radium-228 (GFC)	9315_Ra228/PreSep_21 Radium-228 (GFC)	Ra228Ra228_GFC/ Combined Radium-228 and	Total Number of Containers
MW-1-F-20230928-01 (240-192599-10)	9/28/23	09:46 Eastern	Water	Water	X	X	X	X	X	6
MW-1-F-20230928-01 (240-192599-10MS)	9/28/23	09:46 Eastern	MS	Water	X	X	X	X	X	1
MW-1-F-20230928-01 (240-192599-10MSD)	9/28/23	09:46 Eastern	MSD	Water	X	X	X	X	X	1
BAC-21-F-20230928-01 (240-192599-11)	9/28/23	10:58 Eastern	Water	Water	X	X	X	X	X	2
BAC-22-F-20230928-01 (240-192599-12)	9/28/23	12:07 Eastern	Water	Water	X	X	X	X	X	2
BAC-23-F-20230928-01 (240-192599-13)	9/28/23	13:02 Eastern	Water	Water	X	X	X	X	X	2
BAC-08-F-20230928-01 (240-192599-14)	9/28/23	14:05 Eastern	Water	Water	X	X	X	X	X	2
EB-001-F-20230928-01 (240-192599-15)	9/28/23	14:45 Eastern	Water	Water	X	X	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/test/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
 Deliverable Requested: I, II, III, IV, Other (specify) _____
 Primary Deliverable Rank: 2

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
 Special Instructions/QC Requirements:

Empty Kit Relinquished by: _____ Date: _____ Method of Shipment: _____
 Relinquished by: *Rochelle H. Cooper* Date/Time: *10/23/23 9:30* Company: *EBTAC*
 Relinquished by: *Fedex* Date/Time: *10/23/2023 08:30* Company: _____
 Relinquished by: _____ Date/Time: _____ Company: _____

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



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-192599-1

Login Number: 192599

List Number: 2

Creator: Pinette, Meadow L

List Source: Eurofins St. Louis

List Creation: 10/03/23 12:29 PM

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



 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7

Cheshire, Ohio 45620

Generated 11/7/2023 10:16:53 AM

JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-192754-1

Eurofins Cleveland

Job Notes

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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
11/7/2023 10:16:53 AM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-192754-1

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
E	Result exceeded calibration range.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
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.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Job ID: 240-192754-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-192754-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample 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 10/4/2023 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 0.1°C, 0.7°C, 0.7°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

Method 300.0_28D: Reanalysis of the following sample(s) was performed outside of the analytical holding time due to failure of quality control parameters in the initial analysis. BAC-12-F-20230929-01 (240-192754-2)

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 160-630991: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-14-F-20230929-01 (240-192754-1), BAC-12-F-20230929-01 (240-192754-2), MW-6-F-20230929-01 (240-192754-3), FIELD BLANK-001-F-20230929-01 (240-192754-4), BAC-16-F-20231002-01 (240-192754-5), DUP-006-F-20231002-01 (240-192754-6), BAC-17-F-20231002-01 (240-192754-7), BAC-01-F-20231002-01 (240-192754-8), BAC-09-F-20231002-01 (240-192754-9), BAC-03-F-2023100-01 (240-192754-10), FIELD BLANK-001-F-20231002-01 (240-192754-11), (LCS 160-630991/2-A), (MB 160-630991/1-A)

Method 9320_Ra228: Radium-228 batch 630993: The detection goal was not met for the following sample(s). Sample was prepped at a reduced volume due to the presence of matrix interferences: BAC-09-F-20231002-01 (240-192754-9). Analytical results are reported with the detection limit achieved.

Method 9320_Ra228: Radium-228 batch 630993: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-14-F-20230929-01 (240-192754-1), BAC-12-F-20230929-01 (240-192754-2), MW-6-F-20230929-01 (240-192754-3), FIELD BLANK-001-F-20230929-01 (240-192754-4), BAC-16-F-20231002-01 (240-192754-5), DUP-006-F-20231002-01 (240-192754-6), BAC-17-F-20231002-01 (240-192754-7), BAC-01-F-20231002-01 (240-192754-8), BAC-09-F-20231002-01 (240-192754-9), BAC-03-F-2023100-01 (240-192754-10), FIELD BLANK-001-F-20231002-01 (240-192754-11), (LCS 160-630993/2-A), (MB 160-630993/1-A)

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: 240-192754-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
SM 2540C	Solids, Total Dissolved (TDS)	SM	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: 240-192754-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-192754-1	BAC-14-F-20230929-01	Water	09/29/23 12:51	10/04/23 08:00
240-192754-2	BAC-12-F-20230929-01	Water	09/29/23 13:44	10/04/23 08:00
240-192754-3	MW-6-F-20230929-01	Water	09/29/23 14:37	10/04/23 08:00
240-192754-4	FIELD BLANK-001-F-20230929-01	Water	09/29/23 14:50	10/04/23 08:00
240-192754-5	BAC-16-F-20231002-01	Water	10/02/23 10:51	10/04/23 08:00
240-192754-6	DUP-006-F-20231002-01	Water	10/02/23 00:00	10/04/23 08:00
240-192754-7	BAC-17-F-20231002-01	Water	10/02/23 11:54	10/04/23 08:00
240-192754-8	BAC-01-F-20231002-01	Water	10/02/23 13:13	10/04/23 08:00
240-192754-9	BAC-09-F-20231002-01	Water	10/02/23 13:51	10/04/23 08:00
240-192754-10	BAC-03-F-2023100-01	Water	10/02/23 14:46	10/04/23 08:00
240-192754-11	FIELD BLANK-001-F-20231002-01	Water	10/02/23 15:00	10/04/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: BAC-14-F-20230929-01

Lab Sample ID: 240-192754-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2800		100	57	ug/L	1		6010D	Total Recoverable
Antimony	0.85	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	99		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.21	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Calcium	77000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	1.9		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.91	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	8.1		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	24000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	1.1		1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	83		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	83		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	33		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.065		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	220		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	470		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-12-F-20230929-01

Lab Sample ID: 240-192754-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1900		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	5.1		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	100		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.23	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Calcium	82000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	2.4	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	7.6		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	3.8		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	12		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	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: 240-192754-1

Client Sample ID: BAC-12-F-20230929-01 (Continued)

Lab Sample ID: 240-192754-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	2800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	32000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.28	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	83		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	83		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	65		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.067		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	220	E	1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	500		10	7.8	mg/L	1		SM 2540C	Total/NA
Sulfate - RA	220	H	5.0	1.7	mg/L	5		300.0	Total/NA

Client Sample ID: MW-6-F-20230929-01

Lab Sample ID: 240-192754-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	73	J	100	57	ug/L	1		6010D	Total Recoverable
Barium	120		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	110000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	0.44	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	6.3	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	14000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	14000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	28		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.093		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	120		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	430		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: FIELD BLANK-001-F-20230929-01

Lab Sample ID: 240-192754-4

No Detections.

Client Sample ID: BAC-16-F-20231002-01

Lab Sample ID: 240-192754-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1500		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	1.1	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	43		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	97000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	1.4		1.0	0.19	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: 240-192754-1

Client Sample ID: BAC-16-F-20231002-01 (Continued)

Lab Sample ID: 240-192754-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.67	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	7.0	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	28		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.062		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	470		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-006-F-20231002-01

Lab Sample ID: 240-192754-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1500		100	57	ug/L	1		6010D	Total Recoverable
Barium	45		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	100000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	1.2		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.69	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.6	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	23000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	28		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.061		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	480		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-17-F-20231002-01

Lab Sample ID: 240-192754-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	4000		100	57	ug/L	1		6010D	Total Recoverable
Barium	32		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.28	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Calcium	45000		1000	250	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: 240-192754-1

Client Sample ID: BAC-17-F-20231002-01 (Continued)

Lab Sample ID: 240-192754-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	44		1.0	0.19	ug/L	1		6020B	Total
									Recoverable
Lead	0.85	J	1.0	0.45	ug/L	1		6020B	Total
									Recoverable
Lithium	5.8	J	8.0	1.7	ug/L	1		6020B	Total
									Recoverable
Magnesium	28000		1000	61	ug/L	1		6020B	Total
									Recoverable
Potassium	950	J	1000	220	ug/L	1		6020B	Total
									Recoverable
Sodium	22000		1000	330	ug/L	1		6020B	Total
									Recoverable
Total Alkalinity	39		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	39		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	21		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.056		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	240		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	400		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-01-F-20231002-01

Lab Sample ID: 240-192754-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	130		100	57	ug/L	1		6010D	Total
									Recoverable
Arsenic	0.83	J	5.0	0.75	ug/L	1		6020B	Total
									Recoverable
Barium	59		5.0	2.2	ug/L	1		6020B	Total
									Recoverable
Calcium	96000		1000	250	ug/L	1		6020B	Total
									Recoverable
Cobalt	0.37	J	1.0	0.19	ug/L	1		6020B	Total
									Recoverable
Lead	0.72	J	1.0	0.45	ug/L	1		6020B	Total
									Recoverable
Lithium	4.5	J	8.0	1.7	ug/L	1		6020B	Total
									Recoverable
Magnesium	12000		1000	61	ug/L	1		6020B	Total
									Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total
									Recoverable
Sodium	12000		1000	330	ug/L	1		6020B	Total
									Recoverable
Total Alkalinity	210		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	210		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	26		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	89		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	350		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-09-F-20231002-01

Lab Sample ID: 240-192754-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	250		100	57	ug/L	1		6010D	Total
									Recoverable
Arsenic	1.6	J	5.0	0.75	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: 240-192754-1

Client Sample ID: BAC-09-F-20231002-01 (Continued)

Lab Sample ID: 240-192754-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	2600		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	260000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	6.3		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.9		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	2.4		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	60		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	63000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	68		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	4900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	1200000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	170		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	170		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	1600		20	2.6	mg/L	20		300.0	Total/NA
Fluoride	1.6		0.10	0.048	mg/L	2		300.0	Total/NA
Sulfate	74		2.0	0.70	mg/L	2		300.0	Total/NA
Total Dissolved Solids	2900	H	50	39	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-03-F-2023100-01

Lab Sample ID: 240-192754-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2100		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	0.81	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	43		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	85000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	0.63	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	2.7		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	7.9	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	17000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	33000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	81		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	81		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	55		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.064		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	200		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	440		10	7.8	mg/L	1		SM 2540C	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: 240-192754-1

Client Sample ID: FIELD BLANK-001-F-20231002-01

Lab Sample ID: 240-192754-11

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: BAC-14-F-20230929-01

Lab Sample ID: 240-192754-1

Date Collected: 09/29/23 12:51

Matrix: Water

Date Received: 10/04/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2800		100	57	ug/L		10/05/23 14:00	10/09/23 16:06	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.85	J	2.0	0.57	ug/L		10/05/23 14:00	10/06/23 13:39	1
Arsenic	2.5	J	5.0	0.75	ug/L		10/05/23 14:00	10/06/23 13:39	1
Barium	99		5.0	2.2	ug/L		10/05/23 14:00	10/06/23 13:39	1
Beryllium	ND		1.0	0.62	ug/L		10/05/23 14:00	10/06/23 13:39	1
Cadmium	0.21	J	1.0	0.20	ug/L		10/05/23 14:00	10/06/23 13:39	1
Calcium	77000		1000	250	ug/L		10/05/23 14:00	10/06/23 13:39	1
Chromium	ND		5.0	1.2	ug/L		10/05/23 14:00	10/06/23 13:39	1
Cobalt	1.9		1.0	0.19	ug/L		10/05/23 14:00	10/06/23 13:39	1
Lead	0.91	J	1.0	0.45	ug/L		10/05/23 14:00	10/06/23 13:39	1
Lithium	8.1		8.0	1.7	ug/L		10/05/23 14:00	10/06/23 13:39	1
Magnesium	22000		1000	61	ug/L		10/05/23 14:00	10/06/23 13:39	1
Molybdenum	ND		5.0	1.1	ug/L		10/05/23 14:00	10/06/23 13:39	1
Potassium	1600		1000	220	ug/L		10/05/23 14:00	10/06/23 13:39	1
Selenium	ND		5.0	0.89	ug/L		10/05/23 14:00	10/06/23 13:39	1
Sodium	24000		1000	330	ug/L		10/05/23 14:00	10/06/23 13:39	1
Thallium	1.1		1.0	0.20	ug/L		10/05/23 14:00	10/06/23 13:39	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		10/05/23 14:00	10/06/23 11:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	83		5.0	2.6	mg/L			10/06/23 01:34	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	83		5.0	2.6	mg/L			10/06/23 01:34	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/06/23 01:34	1
Chloride (EPA 300.0)	33		1.0	0.13	mg/L			10/11/23 05:12	1
Fluoride (EPA 300.0)	0.065		0.050	0.024	mg/L			10/11/23 05:12	1
Sulfate (EPA 300.0)	220		5.0	1.7	mg/L			10/27/23 23:20	5
Total Dissolved Solids (SM 2540C)	470		10	7.8	mg/L			10/05/23 08:09	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	0.246		0.125	0.127	1.00	0.152	pCi/L	10/06/23 07:49	10/30/23 12:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		30 - 110					10/06/23 07:49	10/30/23 12:10	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	0.836		0.427	0.434	1.00	0.596	pCi/L	10/06/23 07:53	10/26/23 16:33	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: BAC-14-F-20230929-01

Lab Sample ID: 240-192754-1

Date Collected: 09/29/23 12:51

Matrix: Water

Date Received: 10/04/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		30 - 110	10/06/23 07:53	10/26/23 16:33	1
Y Carrier	81.9		30 - 110	10/06/23 07:53	10/26/23 16:33	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	1.08		0.445	0.452	5.00	0.596	pCi/L		11/01/23 16:30	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: BAC-12-F-20230929-01

Lab Sample ID: 240-192754-2

Date Collected: 09/29/23 13:44

Matrix: Water

Date Received: 10/04/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1900		100	57	ug/L		10/05/23 14:00	10/09/23 16:27	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		10/05/23 14:00	10/06/23 13:41	1
Arsenic	5.1		5.0	0.75	ug/L		10/05/23 14:00	10/06/23 13:41	1
Barium	100		5.0	2.2	ug/L		10/05/23 14:00	10/06/23 13:41	1
Beryllium	ND		1.0	0.62	ug/L		10/05/23 14:00	10/06/23 13:41	1
Cadmium	0.23	J	1.0	0.20	ug/L		10/05/23 14:00	10/06/23 13:41	1
Calcium	82000		1000	250	ug/L		10/05/23 14:00	10/06/23 13:41	1
Chromium	2.4	J	5.0	1.2	ug/L		10/05/23 14:00	10/06/23 13:41	1
Cobalt	7.6		1.0	0.19	ug/L		10/05/23 14:00	10/06/23 13:41	1
Lead	3.8		1.0	0.45	ug/L		10/05/23 14:00	10/06/23 13:41	1
Lithium	12		8.0	1.7	ug/L		10/05/23 14:00	10/06/23 13:41	1
Magnesium	20000		1000	61	ug/L		10/05/23 14:00	10/06/23 13:41	1
Molybdenum	ND		5.0	1.1	ug/L		10/05/23 14:00	10/06/23 13:41	1
Potassium	2800		1000	220	ug/L		10/05/23 14:00	10/06/23 13:41	1
Selenium	ND		5.0	0.89	ug/L		10/05/23 14:00	10/06/23 13:41	1
Sodium	32000		1000	330	ug/L		10/05/23 14:00	10/06/23 13:41	1
Thallium	0.28	J	1.0	0.20	ug/L		10/05/23 14:00	10/06/23 13:41	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		10/05/23 14:00	10/06/23 11:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	83		5.0	2.6	mg/L			10/06/23 01:39	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	83		5.0	2.6	mg/L			10/06/23 01:39	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/06/23 01:39	1
Chloride (EPA 300.0)	65		1.0	0.13	mg/L			10/11/23 05:32	1
Fluoride (EPA 300.0)	0.067		0.050	0.024	mg/L			10/11/23 05:32	1
Sulfate (EPA 300.0)	220	E	1.0	0.35	mg/L			10/11/23 05:32	1
Total Dissolved Solids (SM 2540C)	500		10	7.8	mg/L			10/05/23 08:09	1

General Chemistry - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate (EPA 300.0)	220	H	5.0	1.7	mg/L			10/30/23 20:48	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	0.266		0.151	0.153	1.00	0.196	pCi/L	10/06/23 07:49	10/30/23 12:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		30 - 110					10/06/23 07:49	10/30/23 12:10	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: BAC-12-F-20230929-01

Lab Sample ID: 240-192754-2

Date Collected: 09/29/23 13:44

Matrix: Water

Date Received: 10/04/23 08:00

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.655	U	0.547	0.551	1.00	0.854	pCi/L	10/06/23 07:53	10/26/23 16:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		30 - 110					10/06/23 07:53	10/26/23 16:33	1
Y Carrier	71.0		30 - 110					10/06/23 07:53	10/26/23 16:33	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	0.921		0.567	0.572	5.00	0.854	pCi/L		11/01/23 16:30	1



Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: MW-6-F-20230929-01

Lab Sample ID: 240-192754-3

Date Collected: 09/29/23 14:37

Matrix: Water

Date Received: 10/04/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	73	J	100	57	ug/L		10/05/23 14:00	10/09/23 16:32	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		10/05/23 14:00	10/06/23 13:44	1
Arsenic	ND		5.0	0.75	ug/L		10/05/23 14:00	10/06/23 13:44	1
Barium	120		5.0	2.2	ug/L		10/05/23 14:00	10/06/23 13:44	1
Beryllium	ND		1.0	0.62	ug/L		10/05/23 14:00	10/06/23 13:44	1
Cadmium	ND		1.0	0.20	ug/L		10/05/23 14:00	10/06/23 13:44	1
Calcium	110000		1000	250	ug/L		10/05/23 14:00	10/06/23 13:44	1
Chromium	ND		5.0	1.2	ug/L		10/05/23 14:00	10/06/23 13:44	1
Cobalt	0.44	J	1.0	0.19	ug/L		10/05/23 14:00	10/06/23 13:44	1
Lead	ND		1.0	0.45	ug/L		10/05/23 14:00	10/06/23 13:44	1
Lithium	6.3	J	8.0	1.7	ug/L		10/05/23 14:00	10/06/23 13:44	1
Magnesium	14000		1000	61	ug/L		10/05/23 14:00	10/06/23 13:44	1
Molybdenum	ND		5.0	1.1	ug/L		10/05/23 14:00	10/06/23 13:44	1
Potassium	1600		1000	220	ug/L		10/05/23 14:00	10/06/23 13:44	1
Selenium	ND		5.0	0.89	ug/L		10/05/23 14:00	10/06/23 13:44	1
Sodium	14000		1000	330	ug/L		10/05/23 14:00	10/06/23 13:44	1
Thallium	ND		1.0	0.20	ug/L		10/05/23 14:00	10/06/23 13:44	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		10/05/23 14:00	10/06/23 11:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230		5.0	2.6	mg/L			10/06/23 01:43	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230		5.0	2.6	mg/L			10/06/23 01:43	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/06/23 01:43	1
Chloride (EPA 300.0)	28		1.0	0.13	mg/L			10/11/23 05:52	1
Fluoride (EPA 300.0)	0.093		0.050	0.024	mg/L			10/11/23 05:52	1
Sulfate (EPA 300.0)	120		1.0	0.35	mg/L			10/11/23 05:52	1
Total Dissolved Solids (SM 2540C)	430		10	7.8	mg/L			10/05/23 08:09	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0871	U	0.0901	0.0905	1.00	0.143	pCi/L	10/06/23 07:49	10/30/23 12:10	1
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Ba Carrier</i>	95.8		30 - 110					10/06/23 07:49	10/30/23 12:10	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.289	U	0.280	0.282	1.00	0.446	pCi/L	10/06/23 07:53	10/26/23 16:34	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: MW-6-F-20230929-01

Lab Sample ID: 240-192754-3

Date Collected: 09/29/23 14:37

Matrix: Water

Date Received: 10/04/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	95.8		30 - 110	10/06/23 07:53	10/26/23 16:34	1
Y Carrier	83.0		30 - 110	10/06/23 07:53	10/26/23 16:34	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.376	U	0.294	0.296	5.00	0.446	pCi/L		11/01/23 16:30	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: FIELD BLANK-001-F-20230929-01

Lab Sample ID: 240-192754-4

Date Collected: 09/29/23 14:50

Matrix: Water

Date Received: 10/04/23 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		10/05/23 14:00	10/09/23 16:44	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		10/05/23 14:00	10/06/23 13:56	1
Arsenic	ND		5.0	0.75	ug/L		10/05/23 14:00	10/06/23 13:56	1
Barium	ND		5.0	2.2	ug/L		10/05/23 14:00	10/06/23 13:56	1
Beryllium	ND		1.0	0.62	ug/L		10/05/23 14:00	10/06/23 13:56	1
Cadmium	ND		1.0	0.20	ug/L		10/05/23 14:00	10/06/23 13:56	1
Calcium	ND		1000	250	ug/L		10/05/23 14:00	10/06/23 13:56	1
Chromium	ND		5.0	1.2	ug/L		10/05/23 14:00	10/06/23 13:56	1
Cobalt	ND		1.0	0.19	ug/L		10/05/23 14:00	10/06/23 13:56	1
Lead	ND		1.0	0.45	ug/L		10/05/23 14:00	10/06/23 13:56	1
Lithium	ND		8.0	1.7	ug/L		10/05/23 14:00	10/06/23 13:56	1
Magnesium	ND		1000	61	ug/L		10/05/23 14:00	10/06/23 13:56	1
Molybdenum	ND		5.0	1.1	ug/L		10/05/23 14:00	10/06/23 13:56	1
Potassium	ND		1000	220	ug/L		10/05/23 14:00	10/06/23 13:56	1
Selenium	ND		5.0	0.89	ug/L		10/05/23 14:00	10/06/23 13:56	1
Sodium	ND		1000	330	ug/L		10/05/23 14:00	10/06/23 13:56	1
Thallium	ND		1.0	0.20	ug/L		10/05/23 14:00	10/06/23 13:56	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		10/05/23 14:00	10/06/23 11:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/06/23 01:49	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/06/23 01:49	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/06/23 01:49	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			10/11/23 06:12	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			10/11/23 06:12	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			10/11/23 06:12	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			10/05/23 08:09	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	-0.0152	U	0.0681	0.0681	1.00	0.145	pCi/L	10/06/23 07:49	10/30/23 12:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.1		30 - 110					10/06/23 07:49	10/30/23 12:10	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.388	U	0.349	0.351	1.00	0.553	pCi/L	10/06/23 07:53	10/26/23 16:34	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: FIELD BLANK-001-F-20230929-01

Lab Sample ID: 240-192754-4

Date Collected: 09/29/23 14:50

Matrix: Water

Date Received: 10/04/23 08:00

<u>Carrier</u>	<u>%Yield</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Ba Carrier	95.1		30 - 110	10/06/23 07:53	10/26/23 16:34	1
Y Carrier	81.5		30 - 110	10/06/23 07:53	10/26/23 16:34	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

<u>Analyte</u>	<u>Result</u>	<u>Qualifier</u>	<u>Count Uncert. (2σ+/-)</u>	<u>Total Uncert. (2σ+/-)</u>	<u>RL</u>	<u>MDC</u>	<u>Unit</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Combined Radium 226 + 228	0.373	U	0.356	0.358	5.00	0.553	pCi/L		11/01/23 16:30	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: BAC-16-F-20231002-01

Lab Sample ID: 240-192754-5

Date Collected: 10/02/23 10:51

Matrix: Water

Date Received: 10/04/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1500		100	57	ug/L		10/05/23 14:00	10/09/23 16:49	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		10/05/23 14:00	10/06/23 13:46	1
Arsenic	1.1	J	5.0	0.75	ug/L		10/05/23 14:00	10/06/23 13:46	1
Barium	43		5.0	2.2	ug/L		10/05/23 14:00	10/06/23 13:46	1
Beryllium	ND		1.0	0.62	ug/L		10/05/23 14:00	10/06/23 13:46	1
Cadmium	ND		1.0	0.20	ug/L		10/05/23 14:00	10/06/23 13:46	1
Calcium	97000		1000	250	ug/L		10/05/23 14:00	10/06/23 13:46	1
Chromium	ND		5.0	1.2	ug/L		10/05/23 14:00	10/06/23 13:46	1
Cobalt	1.4		1.0	0.19	ug/L		10/05/23 14:00	10/06/23 13:46	1
Lead	0.67	J	1.0	0.45	ug/L		10/05/23 14:00	10/06/23 13:46	1
Lithium	7.0	J	8.0	1.7	ug/L		10/05/23 14:00	10/06/23 13:46	1
Magnesium	22000		1000	61	ug/L		10/05/23 14:00	10/06/23 13:46	1
Molybdenum	ND		5.0	1.1	ug/L		10/05/23 14:00	10/06/23 13:46	1
Potassium	1500		1000	220	ug/L		10/05/23 14:00	10/06/23 13:46	1
Selenium	ND		5.0	0.89	ug/L		10/05/23 14:00	10/06/23 13:46	1
Sodium	15000		1000	330	ug/L		10/05/23 14:00	10/06/23 13:46	1
Thallium	ND		1.0	0.20	ug/L		10/05/23 14:00	10/06/23 13:46	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		10/05/23 14:00	10/06/23 11:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	160		5.0	2.6	mg/L			10/06/23 00:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	160		5.0	2.6	mg/L			10/06/23 00:06	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/06/23 00:06	1
Chloride (EPA 300.0)	28		1.0	0.13	mg/L			10/11/23 07:13	1
Fluoride (EPA 300.0)	0.062		0.050	0.024	mg/L			10/11/23 07:13	1
Sulfate (EPA 300.0)	190		1.0	0.35	mg/L			10/11/23 07:13	1
Total Dissolved Solids (SM 2540C)	470		10	7.8	mg/L			10/05/23 08:09	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0636	U	0.0769	0.0772	1.00	0.126	pCi/L	10/06/23 07:49	10/30/23 12:09	1
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Ba Carrier</i>	95.6		30 - 110					10/06/23 07:49	10/30/23 12:09	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	1.60		0.454	0.477	1.00	0.485	pCi/L	10/06/23 07:53	10/26/23 16:34	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: BAC-16-F-20231002-01

Lab Sample ID: 240-192754-5

Date Collected: 10/02/23 10:51

Matrix: Water

Date Received: 10/04/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	95.6		30 - 110	10/06/23 07:53	10/26/23 16:34	1
Y Carrier	86.0		30 - 110	10/06/23 07:53	10/26/23 16:34	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	1.66		0.460	0.483	5.00	0.485	pCi/L		11/01/23 16:30	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: DUP-006-F-20231002-01

Lab Sample ID: 240-192754-6

Date Collected: 10/02/23 00:00

Matrix: Water

Date Received: 10/04/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1500		100	57	ug/L		10/05/23 14:00	10/09/23 16:53	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		10/05/23 14:00	10/06/23 13:54	1
Arsenic	ND		5.0	0.75	ug/L		10/05/23 14:00	10/06/23 13:54	1
Barium	45		5.0	2.2	ug/L		10/05/23 14:00	10/06/23 13:54	1
Beryllium	ND		1.0	0.62	ug/L		10/05/23 14:00	10/06/23 13:54	1
Cadmium	ND		1.0	0.20	ug/L		10/05/23 14:00	10/06/23 13:54	1
Calcium	100000		1000	250	ug/L		10/05/23 14:00	10/06/23 13:54	1
Chromium	ND		5.0	1.2	ug/L		10/05/23 14:00	10/06/23 13:54	1
Cobalt	1.2		1.0	0.19	ug/L		10/05/23 14:00	10/06/23 13:54	1
Lead	0.69	J	1.0	0.45	ug/L		10/05/23 14:00	10/06/23 13:54	1
Lithium	6.6	J	8.0	1.7	ug/L		10/05/23 14:00	10/06/23 13:54	1
Magnesium	23000		1000	61	ug/L		10/05/23 14:00	10/06/23 13:54	1
Molybdenum	ND		5.0	1.1	ug/L		10/05/23 14:00	10/06/23 13:54	1
Potassium	1600		1000	220	ug/L		10/05/23 14:00	10/06/23 13:54	1
Selenium	ND		5.0	0.89	ug/L		10/05/23 14:00	10/06/23 13:54	1
Sodium	16000		1000	330	ug/L		10/05/23 14:00	10/06/23 13:54	1
Thallium	ND		1.0	0.20	ug/L		10/05/23 14:00	10/06/23 13:54	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		10/05/23 14:00	10/06/23 11:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	160		5.0	2.6	mg/L			10/06/23 00:13	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	160		5.0	2.6	mg/L			10/06/23 00:13	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/06/23 00:13	1
Chloride (EPA 300.0)	28		1.0	0.13	mg/L			10/11/23 07:33	1
Fluoride (EPA 300.0)	0.061		0.050	0.024	mg/L			10/11/23 07:33	1
Sulfate (EPA 300.0)	190		1.0	0.35	mg/L			10/11/23 07:33	1
Total Dissolved Solids (SM 2540C)	480		10	7.8	mg/L			10/05/23 08:09	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0389	U	0.0999	0.100	1.00	0.181	pCi/L	10/06/23 07:49	10/30/23 12:09	1
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Ba Carrier</i>	<i>91.0</i>		<i>30 - 110</i>					<i>10/06/23 07:49</i>	<i>10/30/23 12:09</i>	<i>1</i>

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	3.45		0.652	0.725	1.00	0.587	pCi/L	10/06/23 07:53	10/26/23 16:34	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: DUP-006-F-20231002-01

Lab Sample ID: 240-192754-6

Date Collected: 10/02/23 00:00

Matrix: Water

Date Received: 10/04/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	91.0		30 - 110	10/06/23 07:53	10/26/23 16:34	1
Y Carrier	83.4		30 - 110	10/06/23 07:53	10/26/23 16:34	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	3.49		0.660	0.732	5.00	0.587	pCi/L		11/01/23 16:30	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: BAC-17-F-20231002-01

Lab Sample ID: 240-192754-7

Date Collected: 10/02/23 11:54

Matrix: Water

Date Received: 10/04/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	4000		100	57	ug/L		10/05/23 14:00	10/09/23 16:57	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		10/05/23 14:00	10/06/23 13:59	1
Arsenic	ND		5.0	0.75	ug/L		10/05/23 14:00	10/06/23 13:59	1
Barium	32		5.0	2.2	ug/L		10/05/23 14:00	10/06/23 13:59	1
Beryllium	ND		1.0	0.62	ug/L		10/05/23 14:00	10/06/23 13:59	1
Cadmium	0.28	J	1.0	0.20	ug/L		10/05/23 14:00	10/06/23 13:59	1
Calcium	45000		1000	250	ug/L		10/05/23 14:00	10/06/23 13:59	1
Chromium	ND		5.0	1.2	ug/L		10/05/23 14:00	10/06/23 13:59	1
Cobalt	44		1.0	0.19	ug/L		10/05/23 14:00	10/06/23 13:59	1
Lead	0.85	J	1.0	0.45	ug/L		10/05/23 14:00	10/06/23 13:59	1
Lithium	5.8	J	8.0	1.7	ug/L		10/05/23 14:00	10/06/23 13:59	1
Magnesium	28000		1000	61	ug/L		10/05/23 14:00	10/06/23 13:59	1
Molybdenum	ND		5.0	1.1	ug/L		10/05/23 14:00	10/06/23 13:59	1
Potassium	950	J	1000	220	ug/L		10/05/23 14:00	10/06/23 13:59	1
Selenium	ND		5.0	0.89	ug/L		10/05/23 14:00	10/06/23 13:59	1
Sodium	22000		1000	330	ug/L		10/05/23 14:00	10/06/23 13:59	1
Thallium	ND		1.0	0.20	ug/L		10/05/23 14:00	10/06/23 13:59	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		10/05/23 14:00	10/06/23 11:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	39		5.0	2.6	mg/L			10/06/23 00:26	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	39		5.0	2.6	mg/L			10/06/23 00:26	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/06/23 00:26	1
Chloride (EPA 300.0)	21		1.0	0.13	mg/L			10/11/23 07:53	1
Fluoride (EPA 300.0)	0.056		0.050	0.024	mg/L			10/11/23 07:53	1
Sulfate (EPA 300.0)	240		5.0	1.7	mg/L			10/27/23 13:58	5
Total Dissolved Solids (SM 2540C)	400		10	7.8	mg/L			10/05/23 08:09	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	0.0479	U	0.117	0.117	1.00	0.214	pCi/L	10/06/23 07:49	10/30/23 12:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.2		30 - 110					10/06/23 07:49	10/30/23 12:09	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	0.511	U	0.490	0.493	1.00	0.783	pCi/L	10/06/23 07:53	10/26/23 16:34	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: BAC-17-F-20231002-01

Lab Sample ID: 240-192754-7

Date Collected: 10/02/23 11:54

Matrix: Water

Date Received: 10/04/23 08:00

<u>Carrier</u>	<u>%Yield</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Ba Carrier	90.2		30 - 110	10/06/23 07:53	10/26/23 16:34	1
Y Carrier	81.5		30 - 110	10/06/23 07:53	10/26/23 16:34	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

<u>Analyte</u>	<u>Result</u>	<u>Qualifier</u>	<u>Count Uncert. (2σ+/-)</u>	<u>Total Uncert. (2σ+/-)</u>	<u>RL</u>	<u>MDC</u>	<u>Unit</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Combined Radium 226 + 228	0.559	U	0.504	0.507	5.00	0.783	pCi/L		11/01/23 16:30	1



Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: BAC-01-F-20231002-01

Lab Sample ID: 240-192754-8

Date Collected: 10/02/23 13:13

Matrix: Water

Date Received: 10/04/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	130		100	57	ug/L		10/05/23 14:00	10/09/23 17:01	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		10/05/23 14:00	10/06/23 14:01	1
Arsenic	0.83	J	5.0	0.75	ug/L		10/05/23 14:00	10/06/23 14:01	1
Barium	59		5.0	2.2	ug/L		10/05/23 14:00	10/06/23 14:01	1
Beryllium	ND		1.0	0.62	ug/L		10/05/23 14:00	10/06/23 14:01	1
Cadmium	ND		1.0	0.20	ug/L		10/05/23 14:00	10/06/23 14:01	1
Calcium	96000		1000	250	ug/L		10/05/23 14:00	10/06/23 14:01	1
Chromium	ND		5.0	1.2	ug/L		10/05/23 14:00	10/06/23 14:01	1
Cobalt	0.37	J	1.0	0.19	ug/L		10/05/23 14:00	10/06/23 14:01	1
Lead	0.72	J	1.0	0.45	ug/L		10/05/23 14:00	10/06/23 14:01	1
Lithium	4.5	J	8.0	1.7	ug/L		10/05/23 14:00	10/06/23 14:01	1
Magnesium	12000		1000	61	ug/L		10/05/23 14:00	10/06/23 14:01	1
Molybdenum	ND		5.0	1.1	ug/L		10/05/23 14:00	10/06/23 14:01	1
Potassium	1400		1000	220	ug/L		10/05/23 14:00	10/06/23 14:01	1
Selenium	ND		5.0	0.89	ug/L		10/05/23 14:00	10/06/23 14:01	1
Sodium	12000		1000	330	ug/L		10/05/23 14:00	10/06/23 14:01	1
Thallium	ND		1.0	0.20	ug/L		10/05/23 14:00	10/06/23 14:01	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		10/05/23 14:00	10/06/23 11:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	210		5.0	2.6	mg/L			10/06/23 00:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	210		5.0	2.6	mg/L			10/06/23 00:31	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/06/23 00:31	1
Chloride (EPA 300.0)	26		1.0	0.13	mg/L			10/11/23 08:13	1
Fluoride (EPA 300.0)	0.13		0.050	0.024	mg/L			10/11/23 08:13	1
Sulfate (EPA 300.0)	89		1.0	0.35	mg/L			10/11/23 08:13	1
Total Dissolved Solids (SM 2540C)	350		10	7.8	mg/L			10/05/23 08:09	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	-0.0330	U	0.0640	0.0640	1.00	0.151	pCi/L	10/06/23 07:49	10/30/23 12:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.9		30 - 110					10/06/23 07:49	10/30/23 12:09	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	1.19		0.474	0.487	1.00	0.624	pCi/L	10/06/23 07:53	10/26/23 16:35	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: BAC-01-F-20231002-01

Lab Sample ID: 240-192754-8

Date Collected: 10/02/23 13:13

Matrix: Water

Date Received: 10/04/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	91.9		30 - 110	10/06/23 07:53	10/26/23 16:35	1
Y Carrier	84.1		30 - 110	10/06/23 07:53	10/26/23 16:35	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	1.15		0.478	0.491	5.00	0.624	pCi/L		11/01/23 16:30	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: BAC-09-F-20231002-01

Lab Sample ID: 240-192754-9

Date Collected: 10/02/23 13:51

Matrix: Water

Date Received: 10/04/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	250		100	57	ug/L		10/05/23 14:00	10/09/23 17:06	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		10/05/23 14:00	10/06/23 14:04	1
Arsenic	1.6	J	5.0	0.75	ug/L		10/05/23 14:00	10/06/23 14:04	1
Barium	2600		5.0	2.2	ug/L		10/05/23 14:00	10/06/23 14:04	1
Beryllium	ND		1.0	0.62	ug/L		10/05/23 14:00	10/06/23 14:04	1
Cadmium	ND		1.0	0.20	ug/L		10/05/23 14:00	10/06/23 14:04	1
Calcium	260000		1000	250	ug/L		10/05/23 14:00	10/06/23 14:04	1
Chromium	6.3		5.0	1.2	ug/L		10/05/23 14:00	10/06/23 14:04	1
Cobalt	1.9		1.0	0.19	ug/L		10/05/23 14:00	10/06/23 14:04	1
Lead	2.4		1.0	0.45	ug/L		10/05/23 14:00	10/06/23 14:04	1
Lithium	60		8.0	1.7	ug/L		10/05/23 14:00	10/06/23 14:04	1
Magnesium	63000		1000	61	ug/L		10/05/23 14:00	10/06/23 14:04	1
Molybdenum	68		5.0	1.1	ug/L		10/05/23 14:00	10/06/23 14:04	1
Potassium	4900		1000	220	ug/L		10/05/23 14:00	10/06/23 14:04	1
Selenium	ND		5.0	0.89	ug/L		10/05/23 14:00	10/06/23 14:04	1
Sodium	1200000		1000	330	ug/L		10/05/23 14:00	10/06/23 14:04	1
Thallium	ND		1.0	0.20	ug/L		10/05/23 14:00	10/06/23 14:04	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		10/05/23 14:00	10/06/23 11:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	170		5.0	2.6	mg/L			10/06/23 00:36	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	170		5.0	2.6	mg/L			10/06/23 00:36	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/06/23 00:36	1
Chloride (EPA 300.0)	1600		20	2.6	mg/L			10/11/23 13:36	20
Fluoride (EPA 300.0)	1.6		0.10	0.048	mg/L			10/11/23 13:15	2
Sulfate (EPA 300.0)	74		2.0	0.70	mg/L			10/11/23 13:15	2
Total Dissolved Solids (SM 2540C)	2900	H	50	39	mg/L			10/12/23 10:37	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	2.46		0.621	0.660	1.00	0.546	pCi/L	10/06/23 07:49	10/30/23 14:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	49.1		30 - 110					10/06/23 07:49	10/30/23 14:46	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	4.68	G	1.63	1.68	1.00	1.91	pCi/L	10/06/23 07:53	10/26/23 16:35	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: BAC-09-F-20231002-01

Lab Sample ID: 240-192754-9

Date Collected: 10/02/23 13:51

Matrix: Water

Date Received: 10/04/23 08:00

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	49.1		30 - 110	10/06/23 07:53	10/26/23 16:35	1
Y Carrier	80.4		30 - 110	10/06/23 07:53	10/26/23 16:35	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
Combined Radium 226 + 228	7.14		(2σ+/-) 1.74	(2σ+/-) 1.80	5.00	1.91	pCi/L		11/01/23 16:30	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: BAC-03-F-2023100-01

Lab Sample ID: 240-192754-10

Date Collected: 10/02/23 14:46

Matrix: Water

Date Received: 10/04/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2100		100	57	ug/L		10/05/23 14:00	10/09/23 17:10	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		10/05/23 14:00	10/06/23 14:06	1
Arsenic	0.81	J	5.0	0.75	ug/L		10/05/23 14:00	10/06/23 14:06	1
Barium	43		5.0	2.2	ug/L		10/05/23 14:00	10/06/23 14:06	1
Beryllium	ND		1.0	0.62	ug/L		10/05/23 14:00	10/06/23 14:06	1
Cadmium	ND		1.0	0.20	ug/L		10/05/23 14:00	10/06/23 14:06	1
Calcium	85000		1000	250	ug/L		10/05/23 14:00	10/06/23 14:06	1
Chromium	ND		5.0	1.2	ug/L		10/05/23 14:00	10/06/23 14:06	1
Cobalt	0.63	J	1.0	0.19	ug/L		10/05/23 14:00	10/06/23 14:06	1
Lead	2.7		1.0	0.45	ug/L		10/05/23 14:00	10/06/23 14:06	1
Lithium	7.9	J	8.0	1.7	ug/L		10/05/23 14:00	10/06/23 14:06	1
Magnesium	17000		1000	61	ug/L		10/05/23 14:00	10/06/23 14:06	1
Molybdenum	ND		5.0	1.1	ug/L		10/05/23 14:00	10/06/23 14:06	1
Potassium	2000		1000	220	ug/L		10/05/23 14:00	10/06/23 14:06	1
Selenium	ND		5.0	0.89	ug/L		10/05/23 14:00	10/06/23 14:06	1
Sodium	33000		1000	330	ug/L		10/05/23 14:00	10/06/23 14:06	1
Thallium	ND		1.0	0.20	ug/L		10/05/23 14:00	10/06/23 14:06	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		10/05/23 14:00	10/06/23 11:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	81		5.0	2.6	mg/L			10/06/23 00:41	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	81		5.0	2.6	mg/L			10/06/23 00:41	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/06/23 00:41	1
Chloride (EPA 300.0)	55		1.0	0.13	mg/L			10/11/23 11:55	1
Fluoride (EPA 300.0)	0.064		0.050	0.024	mg/L			10/11/23 11:55	1
Sulfate (EPA 300.0)	200		1.0	0.35	mg/L			10/11/23 11:55	1
Total Dissolved Solids (SM 2540C)	440		10	7.8	mg/L			10/05/23 08:09	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	0.0328	U	0.109	0.109	1.00	0.206	pCi/L	10/06/23 07:49	10/30/23 14:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		30 - 110					10/06/23 07:49	10/30/23 14:46	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	0.686	U	0.513	0.517	1.00	0.787	pCi/L	10/06/23 07:53	10/26/23 16:36	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: BAC-03-F-2023100-01

Lab Sample ID: 240-192754-10

Date Collected: 10/02/23 14:46

Matrix: Water

Date Received: 10/04/23 08:00

<u>Carrier</u>	<u>%Yield</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Ba Carrier	94.1		30 - 110	10/06/23 07:53	10/26/23 16:36	1
Y Carrier	80.4		30 - 110	10/06/23 07:53	10/26/23 16:36	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

<u>Analyte</u>	<u>Result</u>	<u>Qualifier</u>	<u>Count Uncert. (2σ+/-)</u>	<u>Total Uncert. (2σ+/-)</u>	<u>RL</u>	<u>MDC</u>	<u>Unit</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Combined Radium 226 + 228	0.719	U	0.524	0.528	5.00	0.787	pCi/L		11/01/23 16:30	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: FIELD BLANK-001-F-20231002-01

Lab Sample ID: 240-192754-11

Date Collected: 10/02/23 15:00

Matrix: Water

Date Received: 10/04/23 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		10/05/23 14:00	10/09/23 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		10/05/23 14:00	10/06/23 14:09	1
Arsenic	ND		5.0	0.75	ug/L		10/05/23 14:00	10/06/23 14:09	1
Barium	ND		5.0	2.2	ug/L		10/05/23 14:00	10/06/23 14:09	1
Beryllium	ND		1.0	0.62	ug/L		10/05/23 14:00	10/06/23 14:09	1
Cadmium	ND		1.0	0.20	ug/L		10/05/23 14:00	10/06/23 14:09	1
Calcium	ND		1000	250	ug/L		10/05/23 14:00	10/06/23 14:09	1
Chromium	ND		5.0	1.2	ug/L		10/05/23 14:00	10/06/23 14:09	1
Cobalt	ND		1.0	0.19	ug/L		10/05/23 14:00	10/06/23 14:09	1
Lead	ND		1.0	0.45	ug/L		10/05/23 14:00	10/06/23 14:09	1
Lithium	ND		8.0	1.7	ug/L		10/05/23 14:00	10/06/23 14:09	1
Magnesium	ND		1000	61	ug/L		10/05/23 14:00	10/06/23 14:09	1
Molybdenum	ND		5.0	1.1	ug/L		10/05/23 14:00	10/06/23 14:09	1
Potassium	ND		1000	220	ug/L		10/05/23 14:00	10/06/23 14:09	1
Selenium	ND		5.0	0.89	ug/L		10/05/23 14:00	10/06/23 14:09	1
Sodium	ND		1000	330	ug/L		10/05/23 14:00	10/06/23 14:09	1
Thallium	ND		1.0	0.20	ug/L		10/05/23 14:00	10/06/23 14:09	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		10/05/23 14:00	10/06/23 11:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/06/23 00:46	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/06/23 00:46	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/06/23 00:46	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			10/11/23 11:15	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			10/11/23 11:15	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			10/11/23 11:15	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			10/05/23 08:09	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	0.0444	U	0.0882	0.0883	1.00	0.156	pCi/L	10/06/23 07:49	10/30/23 19:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.1		30 - 110					10/06/23 07:49	10/30/23 19:32	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	0.317	U	0.317	0.318	1.00	0.509	pCi/L	10/06/23 07:53	10/26/23 16:36	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: FIELD BLANK-001-F-20231002-01

Lab Sample ID: 240-192754-11

Date Collected: 10/02/23 15:00

Matrix: Water

Date Received: 10/04/23 08:00

<u>Carrier</u>	<u>%Yield</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Ba Carrier	97.1		30 - 110	10/06/23 07:53	10/26/23 16:36	1
Y Carrier	87.5		30 - 110	10/06/23 07:53	10/26/23 16:36	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

<u>Analyte</u>	<u>Result</u>	<u>Qualifier</u>	<u>Count Uncert. (2σ+/-)</u>	<u>Total Uncert. (2σ+/-)</u>	<u>RL</u>	<u>MDC</u>	<u>Unit</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Combined Radium 226 + 228	0.362	U	0.329	0.330	5.00	0.509	pCi/L		11/01/23 16:30	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (30-110)	
240-192754-1	BAC-14-F-20230929-01	88.0	
240-192754-2	BAC-12-F-20230929-01	94.1	
240-192754-3	MW-6-F-20230929-01	95.8	
240-192754-4	FIELD	95.1	
	BLANK-001-F-20230929-01		
240-192754-5	BAC-16-F-20231002-01	95.6	
240-192754-6	DUP-006-F-20231002-01	91.0	
240-192754-7	BAC-17-F-20231002-01	90.2	
240-192754-8	BAC-01-F-20231002-01	91.9	
240-192754-9	BAC-09-F-20231002-01	49.1	
240-192754-10	BAC-03-F-2023100-01	94.1	
240-192754-11	FIELD	97.1	
	BLANK-001-F-20231002-01		
LCS 160-630991/2-A	Lab Control Sample	98.8	
MB 160-630991/1-A	Method Blank	101	

Tracer/Carrier Legend
Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (30-110)	Y (30-110)
240-192754-1	BAC-14-F-20230929-01	88.0	81.9
240-192754-2	BAC-12-F-20230929-01	94.1	71.0
240-192754-3	MW-6-F-20230929-01	95.8	83.0
240-192754-4	FIELD	95.1	81.5
	BLANK-001-F-20230929-01		
240-192754-5	BAC-16-F-20231002-01	95.6	86.0
240-192754-6	DUP-006-F-20231002-01	91.0	83.4
240-192754-7	BAC-17-F-20231002-01	90.2	81.5
240-192754-8	BAC-01-F-20231002-01	91.9	84.1
240-192754-9	BAC-09-F-20231002-01	49.1	80.4
240-192754-10	BAC-03-F-2023100-01	94.1	80.4
240-192754-11	FIELD	97.1	87.5
	BLANK-001-F-20231002-01		
LCS 160-630993/2-A	Lab Control Sample	98.8	84.9
MB 160-630993/1-A	Method Blank	101	84.5

Tracer/Carrier Legend
Ba = Ba Carrier
Y = Y Carrier

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-589789/1-A
Matrix: Water
Analysis Batch: 590166

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 589789

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		10/05/23 14:00	10/09/23 15:54	1

Lab Sample ID: LCS 240-589789/2-A
Matrix: Water
Analysis Batch: 590166

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 589789

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1050		ug/L		105	80 - 120

Lab Sample ID: LCSD 240-589789/3-A
Matrix: Water
Analysis Batch: 590166

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 589789

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	1000	1050		ug/L		105	80 - 120	0	20

Lab Sample ID: 240-192754-1 MS
Matrix: Water
Analysis Batch: 590166

Client Sample ID: BAC-14-F-20230929-01
Prep Type: Total Recoverable
Prep Batch: 589789

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	2800		1000	3850		ug/L		107	75 - 125

Lab Sample ID: 240-192754-1 MSD
Matrix: Water
Analysis Batch: 590166

Client Sample ID: BAC-14-F-20230929-01
Prep Type: Total Recoverable
Prep Batch: 589789

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	2800		1000	3790		ug/L		101	75 - 125	2	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-589789/1-A
Matrix: Water
Analysis Batch: 589979

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 589789

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		10/05/23 14:00	10/06/23 13:16	1
Arsenic	ND		5.0	0.75	ug/L		10/05/23 14:00	10/06/23 13:16	1
Barium	ND		5.0	2.2	ug/L		10/05/23 14:00	10/06/23 13:16	1
Beryllium	ND		1.0	0.62	ug/L		10/05/23 14:00	10/06/23 13:16	1
Cadmium	ND		1.0	0.20	ug/L		10/05/23 14:00	10/06/23 13:16	1
Calcium	ND		1000	250	ug/L		10/05/23 14:00	10/06/23 13:16	1
Chromium	ND		5.0	1.2	ug/L		10/05/23 14:00	10/06/23 13:16	1
Cobalt	ND		1.0	0.19	ug/L		10/05/23 14:00	10/06/23 13:16	1
Lead	ND		1.0	0.45	ug/L		10/05/23 14:00	10/06/23 13:16	1
Lithium	ND		8.0	1.7	ug/L		10/05/23 14:00	10/06/23 13:16	1
Magnesium	ND		1000	61	ug/L		10/05/23 14:00	10/06/23 13:16	1
Molybdenum	ND		5.0	1.1	ug/L		10/05/23 14:00	10/06/23 13:16	1
Potassium	ND		1000	220	ug/L		10/05/23 14:00	10/06/23 13:16	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

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

Lab Sample ID: MB 240-589789/1-A
Matrix: Water
Analysis Batch: 589979

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 589789

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		5.0	0.89	ug/L		10/05/23 14:00	10/06/23 13:16	1
Sodium	ND		1000	330	ug/L		10/05/23 14:00	10/06/23 13:16	1
Thallium	ND		1.0	0.20	ug/L		10/05/23 14:00	10/06/23 13:16	1

Lab Sample ID: LCS 240-589789/4-A
Matrix: Water
Analysis Batch: 589979

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 589789

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	99.2		ug/L		99	80 - 120
Arsenic	1000	927		ug/L		93	80 - 120
Barium	1000	901		ug/L		90	80 - 120
Beryllium	500	459		ug/L		92	80 - 120
Cadmium	500	470		ug/L		94	80 - 120
Calcium	25000	23500		ug/L		94	80 - 120
Chromium	500	471		ug/L		94	80 - 120
Cobalt	500	461		ug/L		92	80 - 120
Lead	500	463		ug/L		93	80 - 120
Lithium	500	466		ug/L		93	80 - 120
Magnesium	25000	24600		ug/L		98	80 - 120
Molybdenum	500	465		ug/L		93	80 - 120
Potassium	25000	24100		ug/L		96	80 - 120
Selenium	1000	925		ug/L		93	80 - 120
Sodium	25000	24200		ug/L		97	80 - 120
Thallium	1000	954		ug/L		95	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-589803/1-A
Matrix: Water
Analysis Batch: 589960

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 589803

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		10/05/23 14:00	10/06/23 10:55	1

Lab Sample ID: LCS 240-589803/2-A
Matrix: Water
Analysis Batch: 589960

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 589803

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.21		ug/L		104	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-589914/33
Matrix: Water
Analysis Batch: 589914

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			10/05/23 22:27	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Method: 2320B-1997 - Alkalinity, Total (Continued)

Lab Sample ID: MB 240-589914/33
Matrix: Water
Analysis Batch: 589914

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/05/23 22:27	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/05/23 22:27	1

Lab Sample ID: MB 240-589914/4
Matrix: Water
Analysis Batch: 589914

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	2.83	J	5.0	2.6	mg/L			10/05/23 20:02	1
Bicarbonate Alkalinity as CaCO3	2.83	J	5.0	2.6	mg/L			10/05/23 20:02	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/05/23 20:02	1

Lab Sample ID: MB 240-589914/59
Matrix: Water
Analysis Batch: 589914

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			10/06/23 00:23	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/06/23 00:23	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/06/23 00:23	1

Lab Sample ID: LCS 240-589914/32
Matrix: Water
Analysis Batch: 589914

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits

Lab Sample ID: LCS 240-589914/58
Matrix: Water
Analysis Batch: 589914

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits

Lab Sample ID: 240-192754-5 DU
Matrix: Water
Analysis Batch: 589914

Client Sample ID: BAC-16-F-20231002-01
Prep Type: Total/NA

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	RPD Limit
	Result	Qualifier	Result	Qualifier				
Total Alkalinity	160		161		mg/L		0.2	20
Bicarbonate Alkalinity as CaCO3	160		161		mg/L		0.2	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-590235/3
Matrix: Water
Analysis Batch: 590235

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			10/11/23 03:11	1
Fluoride	ND		0.050	0.024	mg/L			10/11/23 03:11	1
Sulfate	ND		1.0	0.35	mg/L			10/11/23 03:11	1

Lab Sample ID: LCS 240-590235/4
Matrix: Water
Analysis Batch: 590235

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.4		mg/L		103	90 - 110
Fluoride	2.50	2.67		mg/L		107	90 - 110
Sulfate	50.0	53.6		mg/L		107	90 - 110

Lab Sample ID: MB 240-592381/3
Matrix: Water
Analysis Batch: 592381

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		1.0	0.35	mg/L			10/27/23 13:35	1

Lab Sample ID: LCS 240-592381/4
Matrix: Water
Analysis Batch: 592381

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	50.0	50.7		mg/L		101	90 - 110

Lab Sample ID: 240-192754-1 MS
Matrix: Water
Analysis Batch: 592381

Client Sample ID: BAC-14-F-20230929-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	220		250	441		mg/L		89	80 - 120

Lab Sample ID: 240-192754-1 MSD
Matrix: Water
Analysis Batch: 592381

Client Sample ID: BAC-14-F-20230929-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	220		250	442		mg/L		89	80 - 120	0	15

Lab Sample ID: MB 240-592383/3
Matrix: Water
Analysis Batch: 592383

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		1.0	0.35	mg/L			10/27/23 04:54	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 240-592383/4
Matrix: Water
Analysis Batch: 592383

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	50.0	54.4		mg/L		109	90 - 110

Lab Sample ID: 240-192754-7 MS
Matrix: Water
Analysis Batch: 592383

Client Sample ID: BAC-17-F-20231002-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	240		250	479		mg/L		95	80 - 120

Lab Sample ID: 240-192754-7 MSD
Matrix: Water
Analysis Batch: 592383

Client Sample ID: BAC-17-F-20231002-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	240		250	480		mg/L		95	80 - 120	0	15

Lab Sample ID: MB 240-592755/3
Matrix: Water
Analysis Batch: 592755

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			10/30/23 13:33	1
Fluoride	ND		0.050	0.024	mg/L			10/30/23 13:33	1
Sulfate	ND		1.0	0.35	mg/L			10/30/23 13:33	1

Lab Sample ID: LCS 240-592755/4
Matrix: Water
Analysis Batch: 592755

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	50.3		mg/L		101	90 - 110
Fluoride	2.50	2.60		mg/L		104	90 - 110
Sulfate	50.0	51.8		mg/L		104	90 - 110

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

Lab Sample ID: MB 240-589728/1
Matrix: Water
Analysis Batch: 589728

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			10/05/23 08:09	1

Lab Sample ID: LCS 240-589728/2
Matrix: Water
Analysis Batch: 589728

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	336	317		mg/L		94	80 - 120

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

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

Lab Sample ID: MB 240-590563/1
 Matrix: Water
 Analysis Batch: 590563

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			10/12/23 10:37	1

Lab Sample ID: LCS 240-590563/2
 Matrix: Water
 Analysis Batch: 590563

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	564	535		mg/L		95	80 - 120

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-630991/1-A
 Matrix: Water
 Analysis Batch: 634363

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 630991

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.02568	U	0.0684	0.0684	1.00	0.129	pCi/L	10/06/23 07:49	10/30/23 12:10	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		30 - 110					10/06/23 07:49	10/30/23 12:10	1

Lab Sample ID: LCS 160-630991/2-A
 Matrix: Water
 Analysis Batch: 634581

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 630991

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	11.3	10.81		1.15	1.00	0.121	pCi/L	95	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	98.8		30 - 110						

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-630993/1-A
 Matrix: Water
 Analysis Batch: 633702

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 630993

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.9340		0.370	0.380	1.00	0.467	pCi/L	10/06/23 07:53	10/26/23 16:20	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		30 - 110					10/06/23 07:53	10/26/23 16:20	1
Y Carrier	84.5		30 - 110					10/06/23 07:53	10/26/23 16:20	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

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

Lab Sample ID: LCS 160-630993/2-A
 Matrix: Water
 Analysis Batch: 633702

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 630993

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	7.77	8.003		1.13	1.00	0.490	pCi/L	103	75 - 125

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	98.8		30 - 110
Y Carrier	84.9		30 - 110

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- 14
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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Metals

Prep Batch: 589789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192754-1	BAC-14-F-20230929-01	Total Recoverable	Water	3005A	
240-192754-2	BAC-12-F-20230929-01	Total Recoverable	Water	3005A	
240-192754-3	MW-6-F-20230929-01	Total Recoverable	Water	3005A	
240-192754-4	FIELD BLANK-001-F-20230929-01	Total Recoverable	Water	3005A	
240-192754-5	BAC-16-F-20231002-01	Total Recoverable	Water	3005A	
240-192754-6	DUP-006-F-20231002-01	Total Recoverable	Water	3005A	
240-192754-7	BAC-17-F-20231002-01	Total Recoverable	Water	3005A	
240-192754-8	BAC-01-F-20231002-01	Total Recoverable	Water	3005A	
240-192754-9	BAC-09-F-20231002-01	Total Recoverable	Water	3005A	
240-192754-10	BAC-03-F-2023100-01	Total Recoverable	Water	3005A	
240-192754-11	FIELD BLANK-001-F-20231002-01	Total Recoverable	Water	3005A	
MB 240-589789/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-589789/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-589789/4-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 240-589789/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
240-192754-1 MS	BAC-14-F-20230929-01	Total Recoverable	Water	3005A	
240-192754-1 MSD	BAC-14-F-20230929-01	Total Recoverable	Water	3005A	

Prep Batch: 589803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192754-1	BAC-14-F-20230929-01	Total/NA	Water	7470A	
240-192754-2	BAC-12-F-20230929-01	Total/NA	Water	7470A	
240-192754-3	MW-6-F-20230929-01	Total/NA	Water	7470A	
240-192754-4	FIELD BLANK-001-F-20230929-01	Total/NA	Water	7470A	
240-192754-5	BAC-16-F-20231002-01	Total/NA	Water	7470A	
240-192754-6	DUP-006-F-20231002-01	Total/NA	Water	7470A	
240-192754-7	BAC-17-F-20231002-01	Total/NA	Water	7470A	
240-192754-8	BAC-01-F-20231002-01	Total/NA	Water	7470A	
240-192754-9	BAC-09-F-20231002-01	Total/NA	Water	7470A	
240-192754-10	BAC-03-F-2023100-01	Total/NA	Water	7470A	
240-192754-11	FIELD BLANK-001-F-20231002-01	Total/NA	Water	7470A	
MB 240-589803/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-589803/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 589960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192754-1	BAC-14-F-20230929-01	Total/NA	Water	7470A	589803
240-192754-2	BAC-12-F-20230929-01	Total/NA	Water	7470A	589803
240-192754-3	MW-6-F-20230929-01	Total/NA	Water	7470A	589803
240-192754-4	FIELD BLANK-001-F-20230929-01	Total/NA	Water	7470A	589803
240-192754-5	BAC-16-F-20231002-01	Total/NA	Water	7470A	589803
240-192754-6	DUP-006-F-20231002-01	Total/NA	Water	7470A	589803
240-192754-7	BAC-17-F-20231002-01	Total/NA	Water	7470A	589803
240-192754-8	BAC-01-F-20231002-01	Total/NA	Water	7470A	589803
240-192754-9	BAC-09-F-20231002-01	Total/NA	Water	7470A	589803
240-192754-10	BAC-03-F-2023100-01	Total/NA	Water	7470A	589803
240-192754-11	FIELD BLANK-001-F-20231002-01	Total/NA	Water	7470A	589803
MB 240-589803/1-A	Method Blank	Total/NA	Water	7470A	589803
LCS 240-589803/2-A	Lab Control Sample	Total/NA	Water	7470A	589803

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Metals

Analysis Batch: 589979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192754-1	BAC-14-F-20230929-01	Total Recoverable	Water	6020B	589789
240-192754-2	BAC-12-F-20230929-01	Total Recoverable	Water	6020B	589789
240-192754-3	MW-6-F-20230929-01	Total Recoverable	Water	6020B	589789
240-192754-4	FIELD BLANK-001-F-20230929-01	Total Recoverable	Water	6020B	589789
240-192754-5	BAC-16-F-20231002-01	Total Recoverable	Water	6020B	589789
240-192754-6	DUP-006-F-20231002-01	Total Recoverable	Water	6020B	589789
240-192754-7	BAC-17-F-20231002-01	Total Recoverable	Water	6020B	589789
240-192754-8	BAC-01-F-20231002-01	Total Recoverable	Water	6020B	589789
240-192754-9	BAC-09-F-20231002-01	Total Recoverable	Water	6020B	589789
240-192754-10	BAC-03-F-2023100-01	Total Recoverable	Water	6020B	589789
240-192754-11	FIELD BLANK-001-F-20231002-01	Total Recoverable	Water	6020B	589789
MB 240-589789/1-A	Method Blank	Total Recoverable	Water	6020B	589789
LCS 240-589789/4-A	Lab Control Sample	Total Recoverable	Water	6020B	589789

Analysis Batch: 590166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192754-1	BAC-14-F-20230929-01	Total Recoverable	Water	6010D	589789
240-192754-2	BAC-12-F-20230929-01	Total Recoverable	Water	6010D	589789
240-192754-3	MW-6-F-20230929-01	Total Recoverable	Water	6010D	589789
240-192754-4	FIELD BLANK-001-F-20230929-01	Total Recoverable	Water	6010D	589789
240-192754-5	BAC-16-F-20231002-01	Total Recoverable	Water	6010D	589789
240-192754-6	DUP-006-F-20231002-01	Total Recoverable	Water	6010D	589789
240-192754-7	BAC-17-F-20231002-01	Total Recoverable	Water	6010D	589789
240-192754-8	BAC-01-F-20231002-01	Total Recoverable	Water	6010D	589789
240-192754-9	BAC-09-F-20231002-01	Total Recoverable	Water	6010D	589789
240-192754-10	BAC-03-F-2023100-01	Total Recoverable	Water	6010D	589789
240-192754-11	FIELD BLANK-001-F-20231002-01	Total Recoverable	Water	6010D	589789
MB 240-589789/1-A	Method Blank	Total Recoverable	Water	6010D	589789
LCS 240-589789/2-A	Lab Control Sample	Total Recoverable	Water	6010D	589789
LCSD 240-589789/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010D	589789
240-192754-1 MS	BAC-14-F-20230929-01	Total Recoverable	Water	6010D	589789
240-192754-1 MSD	BAC-14-F-20230929-01	Total Recoverable	Water	6010D	589789

General Chemistry

Analysis Batch: 589728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192754-1	BAC-14-F-20230929-01	Total/NA	Water	SM 2540C	
240-192754-2	BAC-12-F-20230929-01	Total/NA	Water	SM 2540C	
240-192754-3	MW-6-F-20230929-01	Total/NA	Water	SM 2540C	
240-192754-4	FIELD BLANK-001-F-20230929-01	Total/NA	Water	SM 2540C	
240-192754-5	BAC-16-F-20231002-01	Total/NA	Water	SM 2540C	
240-192754-6	DUP-006-F-20231002-01	Total/NA	Water	SM 2540C	
240-192754-7	BAC-17-F-20231002-01	Total/NA	Water	SM 2540C	
240-192754-8	BAC-01-F-20231002-01	Total/NA	Water	SM 2540C	
240-192754-10	BAC-03-F-2023100-01	Total/NA	Water	SM 2540C	
240-192754-11	FIELD BLANK-001-F-20231002-01	Total/NA	Water	SM 2540C	
MB 240-589728/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-589728/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Eurofins Cleveland

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

General Chemistry

Analysis Batch: 589914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192754-1	BAC-14-F-20230929-01	Total/NA	Water	2320B-1997	
240-192754-2	BAC-12-F-20230929-01	Total/NA	Water	2320B-1997	
240-192754-3	MW-6-F-20230929-01	Total/NA	Water	2320B-1997	
240-192754-4	FIELD BLANK-001-F-20230929-01	Total/NA	Water	2320B-1997	
240-192754-5	BAC-16-F-20231002-01	Total/NA	Water	2320B-1997	
240-192754-6	DUP-006-F-20231002-01	Total/NA	Water	2320B-1997	
240-192754-7	BAC-17-F-20231002-01	Total/NA	Water	2320B-1997	
240-192754-8	BAC-01-F-20231002-01	Total/NA	Water	2320B-1997	
240-192754-9	BAC-09-F-20231002-01	Total/NA	Water	2320B-1997	
240-192754-10	BAC-03-F-2023100-01	Total/NA	Water	2320B-1997	
240-192754-11	FIELD BLANK-001-F-20231002-01	Total/NA	Water	2320B-1997	
MB 240-589914/33	Method Blank	Total/NA	Water	2320B-1997	
MB 240-589914/4	Method Blank	Total/NA	Water	2320B-1997	
MB 240-589914/59	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-589914/32	Lab Control Sample	Total/NA	Water	2320B-1997	
LCS 240-589914/58	Lab Control Sample	Total/NA	Water	2320B-1997	
240-192754-5 DU	BAC-16-F-20231002-01	Total/NA	Water	2320B-1997	

Analysis Batch: 590235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192754-1	BAC-14-F-20230929-01	Total/NA	Water	300.0	
240-192754-2	BAC-12-F-20230929-01	Total/NA	Water	300.0	
240-192754-3	MW-6-F-20230929-01	Total/NA	Water	300.0	
240-192754-4	FIELD BLANK-001-F-20230929-01	Total/NA	Water	300.0	
240-192754-5	BAC-16-F-20231002-01	Total/NA	Water	300.0	
240-192754-6	DUP-006-F-20231002-01	Total/NA	Water	300.0	
240-192754-7	BAC-17-F-20231002-01	Total/NA	Water	300.0	
240-192754-8	BAC-01-F-20231002-01	Total/NA	Water	300.0	
240-192754-9	BAC-09-F-20231002-01	Total/NA	Water	300.0	
240-192754-9	BAC-09-F-20231002-01	Total/NA	Water	300.0	
240-192754-10	BAC-03-F-2023100-01	Total/NA	Water	300.0	
240-192754-11	FIELD BLANK-001-F-20231002-01	Total/NA	Water	300.0	
MB 240-590235/3	Method Blank	Total/NA	Water	300.0	
LCS 240-590235/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 590563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192754-9	BAC-09-F-20231002-01	Total/NA	Water	SM 2540C	
MB 240-590563/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-590563/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 592381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192754-1	BAC-14-F-20230929-01	Total/NA	Water	300.0	
MB 240-592381/3	Method Blank	Total/NA	Water	300.0	
LCS 240-592381/4	Lab Control Sample	Total/NA	Water	300.0	
240-192754-1 MS	BAC-14-F-20230929-01	Total/NA	Water	300.0	
240-192754-1 MSD	BAC-14-F-20230929-01	Total/NA	Water	300.0	

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-192754-1

General Chemistry

Analysis Batch: 592383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192754-7	BAC-17-F-20231002-01	Total/NA	Water	300.0	
MB 240-592383/3	Method Blank	Total/NA	Water	300.0	
LCS 240-592383/4	Lab Control Sample	Total/NA	Water	300.0	
240-192754-7 MS	BAC-17-F-20231002-01	Total/NA	Water	300.0	
240-192754-7 MSD	BAC-17-F-20231002-01	Total/NA	Water	300.0	

Analysis Batch: 592755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192754-2 - RA	BAC-12-F-20230929-01	Total/NA	Water	300.0	
MB 240-592755/3	Method Blank	Total/NA	Water	300.0	
LCS 240-592755/4	Lab Control Sample	Total/NA	Water	300.0	

Rad

Prep Batch: 630991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192754-1	BAC-14-F-20230929-01	Total/NA	Water	PrecSep-21	
240-192754-2	BAC-12-F-20230929-01	Total/NA	Water	PrecSep-21	
240-192754-3	MW-6-F-20230929-01	Total/NA	Water	PrecSep-21	
240-192754-4	FIELD BLANK-001-F-20230929-01	Total/NA	Water	PrecSep-21	
240-192754-5	BAC-16-F-20231002-01	Total/NA	Water	PrecSep-21	
240-192754-6	DUP-006-F-20231002-01	Total/NA	Water	PrecSep-21	
240-192754-7	BAC-17-F-20231002-01	Total/NA	Water	PrecSep-21	
240-192754-8	BAC-01-F-20231002-01	Total/NA	Water	PrecSep-21	
240-192754-9	BAC-09-F-20231002-01	Total/NA	Water	PrecSep-21	
240-192754-10	BAC-03-F-2023100-01	Total/NA	Water	PrecSep-21	
240-192754-11	FIELD BLANK-001-F-20231002-01	Total/NA	Water	PrecSep-21	
MB 160-630991/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-630991/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 630993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192754-1	BAC-14-F-20230929-01	Total/NA	Water	PrecSep_0	
240-192754-2	BAC-12-F-20230929-01	Total/NA	Water	PrecSep_0	
240-192754-3	MW-6-F-20230929-01	Total/NA	Water	PrecSep_0	
240-192754-4	FIELD BLANK-001-F-20230929-01	Total/NA	Water	PrecSep_0	
240-192754-5	BAC-16-F-20231002-01	Total/NA	Water	PrecSep_0	
240-192754-6	DUP-006-F-20231002-01	Total/NA	Water	PrecSep_0	
240-192754-7	BAC-17-F-20231002-01	Total/NA	Water	PrecSep_0	
240-192754-8	BAC-01-F-20231002-01	Total/NA	Water	PrecSep_0	
240-192754-9	BAC-09-F-20231002-01	Total/NA	Water	PrecSep_0	
240-192754-10	BAC-03-F-2023100-01	Total/NA	Water	PrecSep_0	
240-192754-11	FIELD BLANK-001-F-20231002-01	Total/NA	Water	PrecSep_0	
MB 160-630993/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-630993/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: BAC-14-F-20230929-01

Lab Sample ID: 240-192754-1

Date Collected: 09/29/23 12:51

Matrix: Water

Date Received: 10/04/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589789	AJC	EET CLE	10/05/23 14:00
Total Recoverable	Analysis	6010D		1	590166	AJC	EET CLE	10/09/23 16:06
Total Recoverable	Prep	3005A			589789	AJC	EET CLE	10/05/23 14:00
Total Recoverable	Analysis	6020B		1	589979	DSH	EET CLE	10/06/23 13:39
Total/NA	Prep	7470A			589803	AJC	EET CLE	10/05/23 14:00
Total/NA	Analysis	7470A		1	589960	GK	EET CLE	10/06/23 11:10
Total/NA	Analysis	2320B-1997		1	589914	JMR	EET CLE	10/06/23 01:34
Total/NA	Analysis	300.0		5	592381	JWW	EET CLE	10/27/23 23:20
Total/NA	Analysis	300.0		1	590235	JWW	EET CLE	10/11/23 05:12
Total/NA	Analysis	SM 2540C		1	589728	QUY8	EET CLE	10/05/23 08:09
Total/NA	Prep	PrecSep-21			630991	BMW	EET SL	10/06/23 07:49
Total/NA	Analysis	9315		1	634364	MLK	EET SL	10/30/23 12:10
Total/NA	Prep	PrecSep_0			630993	BMW	EET SL	10/06/23 07:53
Total/NA	Analysis	9320		1	633700	FLC	EET SL	10/26/23 16:33
Total/NA	Analysis	Ra226_Ra228		1	634591	EMH	EET SL	11/01/23 16:30

Client Sample ID: BAC-12-F-20230929-01

Lab Sample ID: 240-192754-2

Date Collected: 09/29/23 13:44

Matrix: Water

Date Received: 10/04/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589789	AJC	EET CLE	10/05/23 14:00
Total Recoverable	Analysis	6010D		1	590166	AJC	EET CLE	10/09/23 16:27
Total Recoverable	Prep	3005A			589789	AJC	EET CLE	10/05/23 14:00
Total Recoverable	Analysis	6020B		1	589979	DSH	EET CLE	10/06/23 13:41
Total/NA	Prep	7470A			589803	AJC	EET CLE	10/05/23 14:00
Total/NA	Analysis	7470A		1	589960	GK	EET CLE	10/06/23 11:12
Total/NA	Analysis	2320B-1997		1	589914	JMR	EET CLE	10/06/23 01:39
Total/NA	Analysis	300.0		1	590235	JWW	EET CLE	10/11/23 05:32
Total/NA	Analysis	300.0	RA	5	592755	JWW	EET CLE	10/30/23 20:48
Total/NA	Analysis	SM 2540C		1	589728	QUY8	EET CLE	10/05/23 08:09
Total/NA	Prep	PrecSep-21			630991	BMW	EET SL	10/06/23 07:49
Total/NA	Analysis	9315		1	634364	MLK	EET SL	10/30/23 12:10
Total/NA	Prep	PrecSep_0			630993	BMW	EET SL	10/06/23 07:53
Total/NA	Analysis	9320		1	633700	FLC	EET SL	10/26/23 16:33
Total/NA	Analysis	Ra226_Ra228		1	634591	EMH	EET SL	11/01/23 16:30

Client Sample ID: MW-6-F-20230929-01

Lab Sample ID: 240-192754-3

Date Collected: 09/29/23 14:37

Matrix: Water

Date Received: 10/04/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589789	AJC	EET CLE	10/05/23 14:00
Total Recoverable	Analysis	6010D		1	590166	AJC	EET CLE	10/09/23 16:32

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: MW-6-F-20230929-01
Date Collected: 09/29/23 14:37
Date Received: 10/04/23 08:00

Lab Sample ID: 240-192754-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589789	AJC	EET CLE	10/05/23 14:00
Total Recoverable	Analysis	6020B		1	589979	DSH	EET CLE	10/06/23 13:44
Total/NA	Prep	7470A			589803	AJC	EET CLE	10/05/23 14:00
Total/NA	Analysis	7470A		1	589960	GK	EET CLE	10/06/23 11:14
Total/NA	Analysis	2320B-1997		1	589914	JMR	EET CLE	10/06/23 01:43
Total/NA	Analysis	300.0		1	590235	JWW	EET CLE	10/11/23 05:52
Total/NA	Analysis	SM 2540C		1	589728	QUY8	EET CLE	10/05/23 08:09
Total/NA	Prep	PrecSep-21			630991	BMW	EET SL	10/06/23 07:49
Total/NA	Analysis	9315		1	634364	MLK	EET SL	10/30/23 12:10
Total/NA	Prep	PrecSep_0			630993	BMW	EET SL	10/06/23 07:53
Total/NA	Analysis	9320		1	633700	FLC	EET SL	10/26/23 16:34
Total/NA	Analysis	Ra226_Ra228		1	634591	EMH	EET SL	11/01/23 16:30

Client Sample ID: FIELD BLANK-001-F-20230929-01
Date Collected: 09/29/23 14:50
Date Received: 10/04/23 08:00

Lab Sample ID: 240-192754-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589789	AJC	EET CLE	10/05/23 14:00
Total Recoverable	Analysis	6010D		1	590166	AJC	EET CLE	10/09/23 16:44
Total Recoverable	Prep	3005A			589789	AJC	EET CLE	10/05/23 14:00
Total Recoverable	Analysis	6020B		1	589979	DSH	EET CLE	10/06/23 13:56
Total/NA	Prep	7470A			589803	AJC	EET CLE	10/05/23 14:00
Total/NA	Analysis	7470A		1	589960	GK	EET CLE	10/06/23 11:16
Total/NA	Analysis	2320B-1997		1	589914	JMR	EET CLE	10/06/23 01:49
Total/NA	Analysis	300.0		1	590235	JWW	EET CLE	10/11/23 06:12
Total/NA	Analysis	SM 2540C		1	589728	QUY8	EET CLE	10/05/23 08:09
Total/NA	Prep	PrecSep-21			630991	BMW	EET SL	10/06/23 07:49
Total/NA	Analysis	9315		1	634364	MLK	EET SL	10/30/23 12:10
Total/NA	Prep	PrecSep_0			630993	BMW	EET SL	10/06/23 07:53
Total/NA	Analysis	9320		1	633700	FLC	EET SL	10/26/23 16:34
Total/NA	Analysis	Ra226_Ra228		1	634591	EMH	EET SL	11/01/23 16:30

Client Sample ID: BAC-16-F-20231002-01
Date Collected: 10/02/23 10:51
Date Received: 10/04/23 08:00

Lab Sample ID: 240-192754-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589789	AJC	EET CLE	10/05/23 14:00
Total Recoverable	Analysis	6010D		1	590166	AJC	EET CLE	10/09/23 16:49
Total Recoverable	Prep	3005A			589789	AJC	EET CLE	10/05/23 14:00
Total Recoverable	Analysis	6020B		1	589979	DSH	EET CLE	10/06/23 13:46
Total/NA	Prep	7470A			589803	AJC	EET CLE	10/05/23 14:00
Total/NA	Analysis	7470A		1	589960	GK	EET CLE	10/06/23 11:18

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: BAC-16-F-20231002-01

Lab Sample ID: 240-192754-5

Date Collected: 10/02/23 10:51

Matrix: Water

Date Received: 10/04/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2320B-1997		1	589914	JMR	EET CLE	10/06/23 00:06
Total/NA	Analysis	300.0		1	590235	JWW	EET CLE	10/11/23 07:13
Total/NA	Analysis	SM 2540C		1	589728	QUY8	EET CLE	10/05/23 08:09
Total/NA	Prep	PrecSep-21			630991	BMW	EET SL	10/06/23 07:49
Total/NA	Analysis	9315		1	634364	MLK	EET SL	10/30/23 12:09
Total/NA	Prep	PrecSep_0			630993	BMW	EET SL	10/06/23 07:53
Total/NA	Analysis	9320		1	633700	FLC	EET SL	10/26/23 16:34
Total/NA	Analysis	Ra226_Ra228		1	634591	EMH	EET SL	11/01/23 16:30

Client Sample ID: DUP-006-F-20231002-01

Lab Sample ID: 240-192754-6

Date Collected: 10/02/23 00:00

Matrix: Water

Date Received: 10/04/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589789	AJC	EET CLE	10/05/23 14:00
Total Recoverable	Analysis	6010D		1	590166	AJC	EET CLE	10/09/23 16:53
Total Recoverable	Prep	3005A			589789	AJC	EET CLE	10/05/23 14:00
Total Recoverable	Analysis	6020B		1	589979	DSH	EET CLE	10/06/23 13:54
Total/NA	Prep	7470A			589803	AJC	EET CLE	10/05/23 14:00
Total/NA	Analysis	7470A		1	589960	GK	EET CLE	10/06/23 11:20
Total/NA	Analysis	2320B-1997		1	589914	JMR	EET CLE	10/06/23 00:13
Total/NA	Analysis	300.0		1	590235	JWW	EET CLE	10/11/23 07:33
Total/NA	Analysis	SM 2540C		1	589728	QUY8	EET CLE	10/05/23 08:09
Total/NA	Prep	PrecSep-21			630991	BMW	EET SL	10/06/23 07:49
Total/NA	Analysis	9315		1	634364	MLK	EET SL	10/30/23 12:09
Total/NA	Prep	PrecSep_0			630993	BMW	EET SL	10/06/23 07:53
Total/NA	Analysis	9320		1	633700	FLC	EET SL	10/26/23 16:34
Total/NA	Analysis	Ra226_Ra228		1	634591	EMH	EET SL	11/01/23 16:30

Client Sample ID: BAC-17-F-20231002-01

Lab Sample ID: 240-192754-7

Date Collected: 10/02/23 11:54

Matrix: Water

Date Received: 10/04/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589789	AJC	EET CLE	10/05/23 14:00
Total Recoverable	Analysis	6010D		1	590166	AJC	EET CLE	10/09/23 16:57
Total Recoverable	Prep	3005A			589789	AJC	EET CLE	10/05/23 14:00
Total Recoverable	Analysis	6020B		1	589979	DSH	EET CLE	10/06/23 13:59
Total/NA	Prep	7470A			589803	AJC	EET CLE	10/05/23 14:00
Total/NA	Analysis	7470A		1	589960	GK	EET CLE	10/06/23 11:22
Total/NA	Analysis	2320B-1997		1	589914	JMR	EET CLE	10/06/23 00:26
Total/NA	Analysis	300.0		1	590235	JWW	EET CLE	10/11/23 07:53
Total/NA	Analysis	300.0		5	592383	JWW	EET CLE	10/27/23 13:58
Total/NA	Analysis	SM 2540C		1	589728	QUY8	EET CLE	10/05/23 08:09

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: BAC-17-F-20231002-01

Lab Sample ID: 240-192754-7

Date Collected: 10/02/23 11:54

Matrix: Water

Date Received: 10/04/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			630991	BMW	EET SL	10/06/23 07:49
Total/NA	Analysis	9315		1	634364	MLK	EET SL	10/30/23 12:09
Total/NA	Prep	PrecSep_0			630993	BMW	EET SL	10/06/23 07:53
Total/NA	Analysis	9320		1	633700	FLC	EET SL	10/26/23 16:34
Total/NA	Analysis	Ra226_Ra228		1	634591	EMH	EET SL	11/01/23 16:30

Client Sample ID: BAC-01-F-20231002-01

Lab Sample ID: 240-192754-8

Date Collected: 10/02/23 13:13

Matrix: Water

Date Received: 10/04/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589789	AJC	EET CLE	10/05/23 14:00
Total Recoverable	Analysis	6010D		1	590166	AJC	EET CLE	10/09/23 17:01
Total Recoverable	Prep	3005A			589789	AJC	EET CLE	10/05/23 14:00
Total Recoverable	Analysis	6020B		1	589979	DSH	EET CLE	10/06/23 14:01
Total/NA	Prep	7470A			589803	AJC	EET CLE	10/05/23 14:00
Total/NA	Analysis	7470A		1	589960	GK	EET CLE	10/06/23 11:24
Total/NA	Analysis	2320B-1997		1	589914	JMR	EET CLE	10/06/23 00:31
Total/NA	Analysis	300.0		1	590235	JWW	EET CLE	10/11/23 08:13
Total/NA	Analysis	SM 2540C		1	589728	QUY8	EET CLE	10/05/23 08:09
Total/NA	Prep	PrecSep-21			630991	BMW	EET SL	10/06/23 07:49
Total/NA	Analysis	9315		1	634364	MLK	EET SL	10/30/23 12:09
Total/NA	Prep	PrecSep_0			630993	BMW	EET SL	10/06/23 07:53
Total/NA	Analysis	9320		1	633700	FLC	EET SL	10/26/23 16:35
Total/NA	Analysis	Ra226_Ra228		1	634591	EMH	EET SL	11/01/23 16:30

Client Sample ID: BAC-09-F-20231002-01

Lab Sample ID: 240-192754-9

Date Collected: 10/02/23 13:51

Matrix: Water

Date Received: 10/04/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589789	AJC	EET CLE	10/05/23 14:00
Total Recoverable	Analysis	6010D		1	590166	AJC	EET CLE	10/09/23 17:06
Total Recoverable	Prep	3005A			589789	AJC	EET CLE	10/05/23 14:00
Total Recoverable	Analysis	6020B		1	589979	DSH	EET CLE	10/06/23 14:04
Total/NA	Prep	7470A			589803	AJC	EET CLE	10/05/23 14:00
Total/NA	Analysis	7470A		1	589960	GK	EET CLE	10/06/23 11:26
Total/NA	Analysis	2320B-1997		1	589914	JMR	EET CLE	10/06/23 00:36
Total/NA	Analysis	300.0		2	590235	JWW	EET CLE	10/11/23 13:15
Total/NA	Analysis	300.0		20	590235	JWW	EET CLE	10/11/23 13:36
Total/NA	Analysis	SM 2540C		1	590563	MS	EET CLE	10/12/23 10:37
Total/NA	Prep	PrecSep-21			630991	BMW	EET SL	10/06/23 07:49
Total/NA	Analysis	9315		1	634364	MLK	EET SL	10/30/23 14:46

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

Client Sample ID: BAC-09-F-20231002-01

Lab Sample ID: 240-192754-9

Date Collected: 10/02/23 13:51

Matrix: Water

Date Received: 10/04/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep_0			630993	BMW	EET SL	10/06/23 07:53
Total/NA	Analysis	9320		1	633700	FLC	EET SL	10/26/23 16:35
Total/NA	Analysis	Ra226_Ra228		1	634591	EMH	EET SL	11/01/23 16:30

Client Sample ID: BAC-03-F-2023100-01

Lab Sample ID: 240-192754-10

Date Collected: 10/02/23 14:46

Matrix: Water

Date Received: 10/04/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589789	AJC	EET CLE	10/05/23 14:00
Total Recoverable	Analysis	6010D		1	590166	AJC	EET CLE	10/09/23 17:10
Total Recoverable	Prep	3005A			589789	AJC	EET CLE	10/05/23 14:00
Total Recoverable	Analysis	6020B		1	589979	DSH	EET CLE	10/06/23 14:06
Total/NA	Prep	7470A			589803	AJC	EET CLE	10/05/23 14:00
Total/NA	Analysis	7470A		1	589960	GK	EET CLE	10/06/23 11:28
Total/NA	Analysis	2320B-1997		1	589914	JMR	EET CLE	10/06/23 00:41
Total/NA	Analysis	300.0		1	590235	JWW	EET CLE	10/11/23 11:55
Total/NA	Analysis	SM 2540C		1	589728	QUY8	EET CLE	10/05/23 08:09
Total/NA	Prep	PrecSep-21			630991	BMW	EET SL	10/06/23 07:49
Total/NA	Analysis	9315		1	634364	MLK	EET SL	10/30/23 14:46
Total/NA	Prep	PrecSep_0			630993	BMW	EET SL	10/06/23 07:53
Total/NA	Analysis	9320		1	633701	FLC	EET SL	10/26/23 16:36
Total/NA	Analysis	Ra226_Ra228		1	634591	EMH	EET SL	11/01/23 16:30

Client Sample ID: FIELD BLANK-001-F-20231002-01

Lab Sample ID: 240-192754-11

Date Collected: 10/02/23 15:00

Matrix: Water

Date Received: 10/04/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589789	AJC	EET CLE	10/05/23 14:00
Total Recoverable	Analysis	6010D		1	590166	AJC	EET CLE	10/09/23 17:14
Total Recoverable	Prep	3005A			589789	AJC	EET CLE	10/05/23 14:00
Total Recoverable	Analysis	6020B		1	589979	DSH	EET CLE	10/06/23 14:09
Total/NA	Prep	7470A			589803	AJC	EET CLE	10/05/23 14:00
Total/NA	Analysis	7470A		1	589960	GK	EET CLE	10/06/23 11:34
Total/NA	Analysis	2320B-1997		1	589914	JMR	EET CLE	10/06/23 00:46
Total/NA	Analysis	300.0		1	590235	JWW	EET CLE	10/11/23 11:15
Total/NA	Analysis	SM 2540C		1	589728	QUY8	EET CLE	10/05/23 08:09
Total/NA	Prep	PrecSep-21			630991	BMW	EET SL	10/06/23 07:49
Total/NA	Analysis	9315		1	634364	MLK	EET SL	10/30/23 19:32
Total/NA	Prep	PrecSep_0			630993	BMW	EET SL	10/06/23 07:53
Total/NA	Analysis	9320		1	633701	FLC	EET SL	10/26/23 16:36
Total/NA	Analysis	Ra226_Ra228		1	634591	EMH	EET SL	11/01/23 16:30

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-192754-1

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

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Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192754-1

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
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
Virginia	NELAP	460175	09-14-24
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-24
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-24
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-24
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-24
Massachusetts	State	M-MO054	06-30-24
MI - RadChem Recognition	State	9005	06-30-24
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-24
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-192754-1

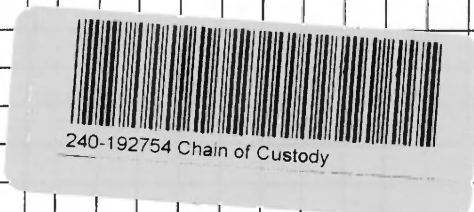
Laboratory: Eurofins St. Louis (Continued)

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 Dakota	State	R-207	06-30-24
Oklahoma	NELAP	9997	08-31-24
Oregon	NELAP	4157	09-01-24
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-24
Texas	NELAP	T104704193	07-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO000542021-14	07-31-24
Virginia	NELAP	10310	06-15-25
Washington	State	C592	08-30-24
West Virginia DEP	State	381	12-31-23

Chain of Custody Record

Client Information		Sample: <i>Asht Cisto</i>		Lab PM: Cisneros, Roxanne	Carmer Tracking No(s): 240-111832-39818.1	
Client Contact: Taylor Huffman		Phone: <i>746 373-4308</i>		E-Mail: roxanne.cisneros@et.eurofins.com	Page: Page 1 of 8	
Company: Lightstone Generation Gavin Power LLC		Address: 7397 OH-7		City: Cheshire	State of Origin:	
State: OH, 45620		Phone: 740-925-3171(Tel)		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No	Job #:	
E-mail: taylor.huffman@lightstonegen.com		PO #: 2935505		WO #:	Analysis Requested:	
Project Name: Gavin CCR		Project #: 24019633		SSOW #:	Preservation Codes:	
Site: <i>Gwin</i>		Due Date Requested:		TAT Requested (days):	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 X - EDTA Y - Trizma Z - other (specify)	
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Solid, Tissue, A=Air)	Total Number of Containers: <input checked="" type="checkbox"/> Special Instructions/Note:
<i>BAC-14-F-20230929-01</i>		<i>9-29-23</i>	<i>1251</i>	<i>6</i>	Water	
<i>BAC-12-F-20230929-01</i>		<i>9-29-23</i>	<i>1344</i>	<i>6</i>	Water	
<i>MW-6-F-20230929-01</i>		<i>9-29-23</i>	<i>1437</i>	<i>6</i>	Water	
<i>Field Blank-001-F-20230929-01</i>		<i>9-29-23</i>	<i>1450</i>	<i>6</i>	Water	
<i>BAC-16-F-20231002-01</i>		<i>10-2-23</i>	<i>1051</i>	<i>6</i>	Water	
<i>DUP-006-F-20231002-01</i>		<i>10-2-23</i>	<i>—</i>	<i>6</i>	Water	
<i>BAC-17-F-20231002-01</i>		<i>10-2-23</i>	<i>1154</i>	<i>6</i>	Water	
<i>BAC-01-F-20231002-01</i>		<i>10-2-23</i>	<i>1313</i>	<i>6</i>	Water	
<i>BAC-09-F-20231002-01</i>		<i>10-2-23</i>	<i>1351</i>	<i>6</i>	Water	
<i>BAC-03-F-20231002-01</i>		<i>10-2-23</i>	<i>1446</i>	<i>6</i>	Water	
<i>Field Blank-001-F-20231002-01</i>		<i>10-2-23</i>	<i>1500</i>	<i>6</i>	Water	
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		
Deliverable Requested I, II, III, IV, Other (specify)		Empty Kit Relinquished by: _____ Date: _____		Special Instructions/QC Requirements: _____		
Reinquired by: <i>Asht Cisto</i>		Date/Time:	Date/Time:	Company:	Method of Shipment:	
Reinquired by: <i>Asht Cisto</i>		<i>10-3-23 / 0900</i>	<i>10-3-23 / 0900</i>	<i>REMBUR</i>	<i>10-3-23 1230</i>	
Reinquired by: <i>Asht Cisto</i>		<i>10-3-23 / 1700</i>	<i>10-3-23 / 1700</i>	<i>EFA</i>	<i>10-4-23 800</i>	
Reinquired by: <i>Asht Cisto</i>		<i>10-3-23 / 1700</i>	<i>10-3-23 / 1700</i>	<i>EFA</i>	<i>10-4-23 800</i>	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		



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Eurofins - Cleveland Sample Receipt Form/Narrative Login # : 192754
Barberton Facility

Client Lightstone Site Name _____ Cooler unpacked by: Nancy Boyer
 Cooler Received on 10-4-23 Opened on 10-4-23
 FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

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

Eurofins Cooler # FL FL 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 # 22 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity leach 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? TR-10-4-23 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# HC312501
 14. Were VOAs on the COC? Yes No
 15. Were air bubbles >6 mm in any VOA vials? Yes ← 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: _____
BAC-03-F-20231002-01 - both filter Nitric bottles labeled for 60ml bottles. And 60 ml labeled for Nitric bottles

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: _____

Temperature readings:

Client Sample ID	Lab ID	Container Type	Container		Preservative	
			pH	Temp	Added (mls)	Lot #
BAC-14-F-20230929-01	240-192754-D-1	Plastic 500ml - with Nitric Acid	<2			
BAC-14-F-20230929-01	240-192754-E-1	Plastic 1 liter - Nitric Acid	<2			
BAC-14-F-20230929-01	240-192754-F-1	Plastic 1 liter - Nitric Acid	<2			
BAC-12-F-20230929-01	240-192754-D-2	Plastic 500ml - with Nitric Acid	<2			
BAC-12-F-20230929-01	240-192754-E-2	Plastic 1 liter - Nitric Acid	<2			
BAC-12-F-20230929-01	240-192754-F-2	Plastic 1 liter - Nitric Acid	<2			
MW-6-F-20230929-01	240-192754-D-3	Plastic 500ml - with Nitric Acid	<2			
MW-6-F-20230929-01	240-192754-E-3	Plastic 1 liter - Nitric Acid	<2			
MW-6-F-20230929-01	240-192754-F-3	Plastic 1 liter - Nitric Acid	<2			
FIELD BLANK-001-F-20230929-01	240-192754-D-4	Plastic 500ml - with Nitric Acid	<2			
FIELD BLANK-001-F-20230929-01	240-192754-E-4	Plastic 1 liter - Nitric Acid	<2			
FIELD BLANK-001-F-20230929-01	240-192754-F-4	Plastic 1 liter - Nitric Acid	<2			
BAC-16-F-20231002-01	240-192754-D-5	Plastic 500ml - with Nitric Acid	<2			
BAC-16-F-20231002-01	240-192754-E-5	Plastic 1 liter - Nitric Acid	<2			
BAC-16-F-20231002-01	240-192754-F-5	Plastic 1 liter - Nitric Acid	<2			
DUP-006-F-20231002-01	240-192754-D-6	Plastic 500ml - with Nitric Acid	<2			
DUP-006-F-20231002-01	240-192754-E-6	Plastic 1 liter - Nitric Acid	<2			
DUP-006-F-20231002-01	240-192754-F-6	Plastic 1 liter - Nitric Acid	<2			
BAC-17-F-20231002-01	240-192754-D-7	Plastic 500ml - with Nitric Acid	<2			
BAC-17-F-20231002-01	240-192754-E-7	Plastic 1 liter - Nitric Acid	<2			
BAC-17-F-20231002-01	240-192754-F-7	Plastic 1 liter - Nitric Acid	<2			
BAC-01-F-20231002-01	240-192754-D-8	Plastic 500ml - with Nitric Acid	<2			
BAC-01-F-20231002-01	240-192754-E-8	Plastic 1 liter - Nitric Acid	<2			
BAC-01-F-20231002-01	240-192754-F-8	Plastic 1 liter - Nitric Acid	<2			
BAC-09-F-20231002-01	240-192754-D-9	Plastic 500ml - with Nitric Acid	<2			
BAC-09-F-20231002-01	240-192754-E-9	Plastic 1 liter - Nitric Acid	<2			
BAC-09-F-20231002-01	240-192754-F-9	Plastic 1 liter - Nitric Acid	<2			
BAC-03-F-2023100-01	240-192754-D-10	Plastic 500ml - with Nitric Acid	<2			
BAC-03-F-2023100-01	240-192754-E-10	Plastic 1 liter - Nitric Acid	<2			
BAC-03-F-2023100-01	240-192754-F-10	Plastic 1 liter - Nitric Acid	<2			
FIELD BLANK-001-F-20231002-01	240-192754-D-11	Plastic 500ml - with Nitric Acid	<2			
FIELD BLANK-001-F-20231002-01	240-192754-E-11	Plastic 1 liter - Nitric Acid	<2			

Eurofins - Canton 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 #: 22	0.8	0.7	Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: 22	12.5	12.4	Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: 22	0.2	0.1	Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: 22	0.8	0.7	Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	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

Eurofins - Cleveland Sample Receipt Form/Narrative
 Barberton Facility

Client Lightstone Site Name _____ Login # : 192754

Cooler Received on 10-4-23 Opened on 10-4-23 Cooler unpacked by: Nancy Boyce

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 # 22 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity each 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? TR-10-4-23 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# HC312501
 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 _____

Tests that are not checked for pH by Receiving:
 VOAs
 Oil and Grease
 TOC

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES additional next page Samples processed by:

BAC-03-F-20231002-01 - both 1 liter Nitric bottles labeled for 60ml bottles. And 60 ml labeled for Nitric bottles

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: _____



Temperature readings:

Client Sample ID	Lab ID	Container Type	Container		Preservative	
			pH	Temp	Added (mls)	Lot #
BAC-14-F-20230929-01	240-192754-D-1	Plastic 500ml - with Nitric Acid	<2			
BAC-14-F-20230929-01	240-192754-E-1	Plastic 1 liter - Nitric Acid	<2			
BAC-14-F-20230929-01	240-192754-F-1	Plastic 1 liter - Nitric Acid	<2			
BAC-12-F-20230929-01	240-192754-D-2	Plastic 500ml - with Nitric Acid	<2			
BAC-12-F-20230929-01	240-192754-E-2	Plastic 1 liter - Nitric Acid	<2			
BAC-12-F-20230929-01	240-192754-F-2	Plastic 1 liter - Nitric Acid	<2			
MW-6-F-20230929-01	240-192754-D-3	Plastic 500ml - with Nitric Acid	<2			
MW-6-F-20230929-01	240-192754-E-3	Plastic 1 liter - Nitric Acid	<2			
MW-6-F-20230929-01	240-192754-F-3	Plastic 1 liter - Nitric Acid	<2			
FIELD BLANK-001-F-20230929-01	240-192754-D-4	Plastic 500ml - with Nitric Acid	<2			
FIELD BLANK-001-F-20230929-01	240-192754-E-4	Plastic 1 liter - Nitric Acid	<2			
FIELD BLANK-001-F-20230929-01	240-192754-F-4	Plastic 1 liter - Nitric Acid	<2			
BAC-16-F-20231002-01	240-192754-D-5	Plastic 500ml - with Nitric Acid	<2			
BAC-16-F-20231002-01	240-192754-E-5	Plastic 1 liter - Nitric Acid	<2			
BAC-16-F-20231002-01	240-192754-F-5	Plastic 1 liter - Nitric Acid	<2			
DUP-006-F-20231002-01	240-192754-D-6	Plastic 500ml - with Nitric Acid	<2			
DUP-006-F-20231002-01	240-192754-E-6	Plastic 1 liter - Nitric Acid	<2			
DUP-006-F-20231002-01	240-192754-F-6	Plastic 1 liter - Nitric Acid	<2			
BAC-17-F-20231002-01	240-192754-D-7	Plastic 500ml - with Nitric Acid	<2			
BAC-17-F-20231002-01	240-192754-E-7	Plastic 1 liter - Nitric Acid	<2			
BAC-17-F-20231002-01	240-192754-F-7	Plastic 1 liter - Nitric Acid	<2			
BAC-01-F-20231002-01	240-192754-D-8	Plastic 500ml - with Nitric Acid	<2			
BAC-01-F-20231002-01	240-192754-E-8	Plastic 1 liter - Nitric Acid	<2			
BAC-01-F-20231002-01	240-192754-F-8	Plastic 1 liter - Nitric Acid	<2			
BAC-09-F-20231002-01	240-192754-D-9	Plastic 500ml - with Nitric Acid	<2			
BAC-09-F-20231002-01	240-192754-E-9	Plastic 1 liter - Nitric Acid	<2			
BAC-09-F-20231002-01	240-192754-F-9	Plastic 1 liter - Nitric Acid	<2			
BAC-03-F-2023100-01	240-192754-D-10	Plastic 500ml - with Nitric Acid	<2			
BAC-03-F-2023100-01	240-192754-E-10	Plastic 1 liter - Nitric Acid	<2			
BAC-03-F-2023100-01	240-192754-F-10	Plastic 1 liter - Nitric Acid	<2			
FIELD BLANK-001-F-20231002-01	240-192754-D-11	Plastic 500ml - with Nitric Acid	<2			
FIELD BLANK-001-F-20231002-01	240-192754-E-11	Plastic 1 liter - Nitric Acid	<2			

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- 13
- 14
- 15

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
FIELD BLANK-001-F-20231002-01	240-192754-F-11	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

Chain of Custody Record



Client Information (Sub Contract Lab)		Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): 240-174683.1
Client Contact: Shipping/Receiving		E-Mail: roxanne.cisneros@eurofins.com	State of Origin: Ohio
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):	
Address: 13715 Rider Trail North,		Due Date Requested: 11/6/2023	
City: Earth City		TAT Requested (days):	
State, Zip: MO, 63045		PO #:	
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		WO #:	
Email:		Project #:	
Federal Name: Federal CCR Wells		SSOW#:	
Site:		Site:	

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Sealed, Orchestration, BT+Tissue, A+Ab)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra226/Precep_0 Radium-226 (GFC)	9315_Ra226/Precep_21 Radium-226 (GFC)	Ra226Ra228 GFC/ Combined Radium-226 and Radium-228	Total Number of Containers	Special Instructions/Note:
BAC-14-F-20230929-01 (240-192754-1)	9/29/23	12:51 Eastern	Water	Water	X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit: save planchet
BAC-12-F-20230929-01 (240-192754-2)	9/29/23	13:44 Eastern	Water	Water	X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit: save planchet
MW-6-F-20230929-01 (240-192754-3)	9/29/23	14:37 Eastern	Water	Water	X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit: save planchet
FIELD BLANK-001-F-20230929-01 (240-192754-4)	9/29/23	14:50 Eastern	Water	Water	X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit: save planchet
BAC-16-F-20231002-01 (240-192754-5)	10/2/23	10:51 Eastern	Water	Water	X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit: save planchet
DUP-006-F-20231002-01 (240-192754-6)	10/2/23	11:54 Eastern	Water	Water	X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit: save planchet
BAC-17-F-20231002-01 (240-192754-7)	10/2/23	13:13 Eastern	Water	Water	X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit: save planchet
BAC-01-F-20231002-01 (240-192754-8)	10/2/23	13:51 Eastern	Water	Water	X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit: save planchet
BAC-09-F-20231002-01 (240-192754-9)	10/2/23	13:51 Eastern	Water	Water	X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit: save planchet

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analysis & 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
 Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
 Special Instructions/QC Requirements:

Empty Kit Relinquished by: _____ Date: _____
 Relinquished by: _____ Date/Time: 10/4/23 14:30 Company: **FEDEX**
 Relinquished by: _____ Date/Time: _____ Company: **FEDEX**
 Relinquished by: _____ Date/Time: _____ Company: _____

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



Client Information (Sub Contract Lab) Client Contact: Shipping/Receiving Company: TestAmerica Laboratories, Inc. Address: 13715 Rider Trail North, City: Earth City State, Zip: MO, 63045 Phone: 314-298-8566(Tel) 314-298-8757(Fax) Email: Project Name: Federal CCR Wells Site:		Lab PM: Cisneros, Roxanne E-Mail: roxanne.cisneros@et.eurofins.com Accreditations Required (See note):	Carrier Tracking No(s): 240-174683.2 State of Origin: Ohio Job #: 240-192754-1	COC No: 240-174683.2 Page: Page 2 of 2
Due Date Requested: 11/6/2023 TAT Requested (days): PO #: WO #: Project #: 24019633 SSOW#:		Analysis Requested		
Sample Identification - Client ID (Lab ID) BAC-03-F-2023100-01 (240-192754-10) FIELD BLANK-001-F-20231002-01 (240-192754-11)		9320_Ra228/PreSep_0_Radium-228 (GFC) 9315_Ra228/PreSep_21_Radium-228 (GFC) Ra228Ra228_GFP/Combined Radium-228 and Radium-228	Total Number of Containers: 2 2	Special Instructions/Note: .Recount of TAR after 21 day ingrowth if > action limit; save planchet .Recount of TAR after 21 day ingrowth if > action limit; save planchet
Sample Date: 10/2/23 Sample Time: 14:46 Eastern 15:00 Eastern	Sample Type (C=comp, G=grab): Water Water	Matrix (W=water, S=solid, O=vegetable oil, B=toothpaste, A=air) Water Water	Preservation Codes: 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:	
Note: Since laboratory accreditation is 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 accreditation 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 Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:				
Empty Kit Relinquished by: <i>P. Fedex</i> Relinquished by: <i>P. Fedex</i> Relinquished by:		Date: 10/4/23 1430 Date/Time: 10/5/2023 0810 Date/Time:		
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-192754-1

Login Number: 192754

List Number: 2

Creator: Pinette, Meadow L

List Source: Eurofins St. Louis

List Creation: 10/05/23 11:54 AM

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



ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 11/7/2023 5:36:57 PM

JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-192977-1

Eurofins Cleveland

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
11/7/2023 5:36:57 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-192977-1

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.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Job ID: 240-192977-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-192977-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample 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 10/5/2023 4:30 PM. 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 0.6°C and 3.2°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 631369: The detection goal was not met for the following sample(s). Sample was prepped at a reduced volume due to the presence of matrix interferences: BAC-15-F-20231003-01 (240-192977-1). Analytical results are reported with the detection limit achieved.

Method 9320_Ra228: Radium-228 batch 631369: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-15-F-20231003-01 (240-192977-1), FIELD BLANK-001-F-20231003-01 (240-192977-2), BAC-05-F-20231003-01 (240-192977-3), BAC-04-F-20231003-01 (240-192977-4), BAC-13-F-20231003-01 (240-192977-5), DUP-007-F-20231003-01 (240-192977-6), FIELD BLANK-002-F-20231003-01 (240-192977-7), (LCS 160-631369/2-A), (MB 160-631369/1-A) and (240-192977-F-2-B 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: 240-192977-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
SM 2540C	Solids, Total Dissolved (TDS)	SM	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: 240-192977-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-192977-1	BAC-15-F-20231003-01	Water	10/03/23 09:20	10/05/23 16:30
240-192977-2	FIELD BLANK-001-F-20231003-01	Water	10/03/23 09:45	10/05/23 16:30
240-192977-3	BAC-05-F-20231003-01	Water	10/03/23 10:29	10/05/23 16:30
240-192977-4	BAC-04-F-20231003-01	Water	10/03/23 11:38	10/05/23 16:30
240-192977-5	BAC-13-F-20231003-01	Water	10/03/23 12:28	10/05/23 16:30
240-192977-6	DUP-007-F-20231003-01	Water	10/03/23 00:00	10/05/23 16:30
240-192977-7	FIELD BLANK-002-F-20231003-01	Water	10/03/23 13:00	10/05/23 16:30

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Client Sample ID: BAC-15-F-20231003-01

Lab Sample ID: 240-192977-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	510		100	57	ug/L	1		6010D	Total Recoverable
Antimony	0.91	J	2.0	0.57	ug/L	1		6020B	Total Recoverable
Arsenic	3.6	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	85		5.0	2.2	ug/L	1		6020B	Total Recoverable
Beryllium	0.75	J	1.0	0.62	ug/L	1		6020B	Total Recoverable
Cadmium	0.58	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Calcium	32000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	7.6		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	9.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	5.6		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	7.2	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	12000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.4	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	1800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	12000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.99	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	51		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	51		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	0.92	J	1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.044	J	0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	100		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	190		20	16	mg/L	1		SM 2540C	Total/NA

Client Sample ID: FIELDBLANK-001-F-20231003-01

Lab Sample ID: 240-192977-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.85	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Thallium	0.34	J	1.0	0.20	ug/L	1		6020B	Total Recoverable

Client Sample ID: BAC-05-F-20231003-01

Lab Sample ID: 240-192977-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2400		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	0.98	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	37		5.0	2.2	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: 240-192977-1

Client Sample ID: BAC-05-F-20231003-01 (Continued)

Lab Sample ID: 240-192977-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.52	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Calcium	79000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	7.9		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.62	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	13		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	24000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	29000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	61		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	61		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	38		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	270		10	3.5	mg/L	10		300.0	Total/NA
Total Dissolved Solids	520		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-04-F-20231003-01

Lab Sample ID: 240-192977-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2500		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	1.9	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	42		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	96000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	1.8		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	6.4	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	28000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.20	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	100		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	100		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	39		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.084		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	210		10	3.5	mg/L	10		300.0	Total/NA
Total Dissolved Solids	470		10	7.8	mg/L	1		SM 2540C	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: 240-192977-1

Client Sample ID: BAC-13-F-20231003-01

Lab Sample ID: 240-192977-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	350		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	3.3	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	5800		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	350000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	0.76	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.56	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	64		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	72000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	17		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	8600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	1500000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	67		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	67		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	3300		25	3.2	mg/L	25		300.0	Total/NA
Fluoride	0.85		0.25	0.12	mg/L	5		300.0	Total/NA
Total Dissolved Solids	5000		50	39	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-007-F-20231003-01

Lab Sample ID: 240-192977-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	360		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	3.0	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	5600		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	340000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	0.69	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	68		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	70000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	17		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	8500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	1400000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	67		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	67		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	3300		25	3.2	mg/L	25		300.0	Total/NA
Fluoride	0.85		0.25	0.12	mg/L	5		300.0	Total/NA
Total Dissolved Solids	4900		50	39	mg/L	1		SM 2540C	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: 240-192977-1

Client Sample ID: FIELD BLANK-002-F-20231003-01

Lab Sample ID: 240-192977-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	4.0	J	8.0	1.7	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland



Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Client Sample ID: BAC-15-F-20231003-01

Lab Sample ID: 240-192977-1

Date Collected: 10/03/23 09:20

Matrix: Water

Date Received: 10/05/23 16:30

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	510		100	57	ug/L		10/06/23 14:00	10/09/23 17:10	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.91	J	2.0	0.57	ug/L		10/06/23 14:00	10/10/23 18:33	1
Arsenic	3.6	J	5.0	0.75	ug/L		10/06/23 14:00	10/10/23 18:33	1
Barium	85		5.0	2.2	ug/L		10/06/23 14:00	10/10/23 18:33	1
Beryllium	0.75	J	1.0	0.62	ug/L		10/06/23 14:00	10/10/23 18:33	1
Cadmium	0.58	J	1.0	0.20	ug/L		10/06/23 14:00	10/10/23 18:33	1
Calcium	32000		1000	250	ug/L		10/06/23 14:00	10/10/23 18:33	1
Chromium	7.6		5.0	1.2	ug/L		10/06/23 14:00	10/10/23 18:33	1
Cobalt	9.1		1.0	0.19	ug/L		10/06/23 14:00	10/10/23 18:33	1
Lead	5.6		1.0	0.45	ug/L		10/06/23 14:00	10/10/23 18:33	1
Lithium	7.2	J	8.0	1.7	ug/L		10/06/23 14:00	10/11/23 15:37	1
Magnesium	12000		1000	61	ug/L		10/06/23 14:00	10/10/23 18:33	1
Molybdenum	1.4	J	5.0	1.1	ug/L		10/06/23 14:00	10/10/23 18:33	1
Potassium	1800		1000	220	ug/L		10/06/23 14:00	10/10/23 18:33	1
Selenium	ND		5.0	0.89	ug/L		10/06/23 14:00	10/10/23 18:33	1
Sodium	12000		1000	330	ug/L		10/06/23 14:00	10/10/23 18:33	1
Thallium	0.99	J	1.0	0.20	ug/L		10/06/23 14:00	10/10/23 18:33	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		10/06/23 14:00	10/09/23 13:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	51		5.0	2.6	mg/L			10/06/23 14:17	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	51		5.0	2.6	mg/L			10/06/23 14:17	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/06/23 14:17	1
Chloride (EPA 300.0)	0.92	J	1.0	0.13	mg/L			10/11/23 17:58	1
Fluoride (EPA 300.0)	0.044	J	0.050	0.024	mg/L			10/11/23 17:58	1
Sulfate (EPA 300.0)	100		1.0	0.35	mg/L			10/11/23 17:58	1
Total Dissolved Solids (SM 2540C)	190		20	16	mg/L			10/09/23 09:09	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	1.40		0.363	0.384	1.00	0.294	pCi/L	10/10/23 12:24	11/01/23 13:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.2		30 - 110					10/10/23 12:24	11/01/23 13:16	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	3.28	G	0.991	1.04	1.00	1.14	pCi/L	10/10/23 12:27	10/27/23 10:16	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Client Sample ID: BAC-15-F-20231003-01

Lab Sample ID: 240-192977-1

Date Collected: 10/03/23 09:20

Matrix: Water

Date Received: 10/05/23 16:30

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	81.2		30 - 110	10/10/23 12:27	10/27/23 10:16	1
Y Carrier	86.7		30 - 110	10/10/23 12:27	10/27/23 10:16	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	4.68		1.06	1.11	5.00	1.14	pCi/L		11/07/23 14:38	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Client Sample ID: FIELDBLANK-001-F-20231003-01

Lab Sample ID: 240-192977-2

Date Collected: 10/03/23 09:45

Matrix: Water

Date Received: 10/05/23 16:30

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		10/06/23 14:00	10/09/23 17:15	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		10/06/23 14:00	10/10/23 18:36	1
Arsenic	0.85	J	5.0	0.75	ug/L		10/06/23 14:00	10/10/23 18:36	1
Barium	ND		5.0	2.2	ug/L		10/06/23 14:00	10/10/23 18:36	1
Beryllium	ND		1.0	0.62	ug/L		10/06/23 14:00	10/10/23 18:36	1
Cadmium	ND		1.0	0.20	ug/L		10/06/23 14:00	10/10/23 18:36	1
Calcium	ND		1000	250	ug/L		10/06/23 14:00	10/10/23 18:36	1
Chromium	ND		5.0	1.2	ug/L		10/06/23 14:00	10/10/23 18:36	1
Cobalt	ND		1.0	0.19	ug/L		10/06/23 14:00	10/10/23 18:36	1
Lead	ND		1.0	0.45	ug/L		10/06/23 14:00	10/10/23 18:36	1
Lithium	ND		8.0	1.7	ug/L		10/06/23 14:00	10/11/23 15:40	1
Magnesium	ND		1000	61	ug/L		10/06/23 14:00	10/10/23 18:36	1
Molybdenum	ND		5.0	1.1	ug/L		10/06/23 14:00	10/10/23 18:36	1
Potassium	ND		1000	220	ug/L		10/06/23 14:00	10/10/23 18:36	1
Selenium	ND		5.0	0.89	ug/L		10/06/23 14:00	10/10/23 18:36	1
Sodium	ND		1000	330	ug/L		10/06/23 14:00	10/10/23 18:36	1
Thallium	0.34	J	1.0	0.20	ug/L		10/06/23 14:00	10/10/23 18:36	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		10/06/23 14:00	10/09/23 13:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/06/23 14:22	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/06/23 14:22	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/06/23 14:22	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			10/11/23 16:57	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			10/11/23 16:57	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			10/11/23 16:57	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			10/09/23 09:09	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	-0.0288	U	0.0550	0.0551	1.00	0.126	pCi/L	10/10/23 12:24	11/01/23 13:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.8		30 - 110					10/10/23 12:24	11/01/23 13:16	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.189	U	0.285	0.286	1.00	0.484	pCi/L	10/10/23 12:27	10/27/23 10:16	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Client Sample ID: FIELDBLANK-001-F-20231003-01

Lab Sample ID: 240-192977-2

Date Collected: 10/03/23 09:45

Matrix: Water

Date Received: 10/05/23 16:30

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	98.8		30 - 110	10/10/23 12:27	10/27/23 10:16	1
Y Carrier	76.6		30 - 110	10/10/23 12:27	10/27/23 10:16	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.160	U	0.290	0.291	5.00	0.484	pCi/L		11/07/23 14:38	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Client Sample ID: BAC-05-F-20231003-01

Lab Sample ID: 240-192977-3

Date Collected: 10/03/23 10:29

Matrix: Water

Date Received: 10/05/23 16:30

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2400		100	57	ug/L		10/06/23 14:00	10/09/23 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		10/06/23 14:00	10/10/23 18:21	1
Arsenic	0.98	J	5.0	0.75	ug/L		10/06/23 14:00	10/10/23 18:21	1
Barium	37		5.0	2.2	ug/L		10/06/23 14:00	10/10/23 18:21	1
Beryllium	ND		1.0	0.62	ug/L		10/06/23 14:00	10/10/23 18:21	1
Cadmium	0.52	J	1.0	0.20	ug/L		10/06/23 14:00	10/10/23 18:21	1
Calcium	79000		1000	250	ug/L		10/06/23 14:00	10/10/23 18:21	1
Chromium	ND		5.0	1.2	ug/L		10/06/23 14:00	10/10/23 18:21	1
Cobalt	7.9		1.0	0.19	ug/L		10/06/23 14:00	10/10/23 18:21	1
Lead	0.62	J	1.0	0.45	ug/L		10/06/23 14:00	10/10/23 18:21	1
Lithium	13		8.0	1.7	ug/L		10/06/23 14:00	10/11/23 15:25	1
Magnesium	24000		1000	61	ug/L		10/06/23 14:00	10/10/23 18:21	1
Molybdenum	ND		5.0	1.1	ug/L		10/06/23 14:00	10/10/23 18:21	1
Potassium	1600		1000	220	ug/L		10/06/23 14:00	10/10/23 18:21	1
Selenium	ND		5.0	0.89	ug/L		10/06/23 14:00	10/10/23 18:21	1
Sodium	29000		1000	330	ug/L		10/06/23 14:00	10/10/23 18:21	1
Thallium	ND		1.0	0.20	ug/L		10/06/23 14:00	10/10/23 18:21	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		10/06/23 14:00	10/09/23 12:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	61		5.0	2.6	mg/L			10/06/23 14:33	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	61		5.0	2.6	mg/L			10/06/23 14:33	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/06/23 14:33	1
Chloride (EPA 300.0)	38		1.0	0.13	mg/L			10/11/23 15:57	1
Fluoride (EPA 300.0)	0.11		0.050	0.024	mg/L			10/11/23 15:57	1
Sulfate (EPA 300.0)	270		10	3.5	mg/L			10/14/23 10:03	10
Total Dissolved Solids (SM 2540C)	520		10	7.8	mg/L			10/09/23 09:09	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.123	U	0.137	0.138	1.00	0.223	pCi/L	10/10/23 12:24	11/01/23 13:16	1
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Ba Carrier</i>	<i>87.0</i>		<i>30 - 110</i>					<i>10/10/23 12:24</i>	<i>11/01/23 13:16</i>	<i>1</i>

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.986		0.537	0.544	1.00	0.763	pCi/L	10/10/23 12:27	10/27/23 10:16	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Client Sample ID: BAC-05-F-20231003-01

Lab Sample ID: 240-192977-3

Date Collected: 10/03/23 10:29

Matrix: Water

Date Received: 10/05/23 16:30

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	87.0		30 - 110	10/10/23 12:27	10/27/23 10:16	1
Y Carrier	81.1		30 - 110	10/10/23 12:27	10/27/23 10:16	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
Combined Radium 226 + 228	1.11		(2σ+/-) 0.554	(2σ+/-) 0.561	5.00	0.763	pCi/L		11/07/23 14:38	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Client Sample ID: BAC-04-F-20231003-01

Lab Sample ID: 240-192977-4

Date Collected: 10/03/23 11:38

Matrix: Water

Date Received: 10/05/23 16:30

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2500		100	57	ug/L		10/06/23 14:00	10/09/23 17:19	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		10/06/23 14:00	10/10/23 18:38	1
Arsenic	1.9	J	5.0	0.75	ug/L		10/06/23 14:00	10/10/23 18:38	1
Barium	42		5.0	2.2	ug/L		10/06/23 14:00	10/10/23 18:38	1
Beryllium	ND		1.0	0.62	ug/L		10/06/23 14:00	10/10/23 18:38	1
Cadmium	ND		1.0	0.20	ug/L		10/06/23 14:00	10/10/23 18:38	1
Calcium	96000		1000	250	ug/L		10/06/23 14:00	10/10/23 18:38	1
Chromium	ND		5.0	1.2	ug/L		10/06/23 14:00	10/10/23 18:38	1
Cobalt	1.8		1.0	0.19	ug/L		10/06/23 14:00	10/10/23 18:38	1
Lead	ND		1.0	0.45	ug/L		10/06/23 14:00	10/10/23 18:38	1
Lithium	6.4	J	8.0	1.7	ug/L		10/06/23 14:00	10/11/23 15:47	1
Magnesium	21000		1000	61	ug/L		10/06/23 14:00	10/10/23 18:38	1
Molybdenum	ND		5.0	1.1	ug/L		10/06/23 14:00	10/10/23 18:38	1
Potassium	1800		1000	220	ug/L		10/06/23 14:00	10/10/23 18:38	1
Selenium	ND		5.0	0.89	ug/L		10/06/23 14:00	10/10/23 18:38	1
Sodium	28000		1000	330	ug/L		10/06/23 14:00	10/10/23 18:38	1
Thallium	0.20	J	1.0	0.20	ug/L		10/06/23 14:00	10/10/23 18:38	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		10/06/23 14:00	10/09/23 13:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	100		5.0	2.6	mg/L			10/06/23 14:43	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	100		5.0	2.6	mg/L			10/06/23 14:43	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/06/23 14:43	1
Chloride (EPA 300.0)	39		1.0	0.13	mg/L			10/11/23 17:17	1
Fluoride (EPA 300.0)	0.084		0.050	0.024	mg/L			10/11/23 17:17	1
Sulfate (EPA 300.0)	210		10	3.5	mg/L			10/14/23 11:08	10
Total Dissolved Solids (SM 2540C)	470		10	7.8	mg/L			10/09/23 07:51	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0597	U	0.0849	0.0851	1.00	0.144	pCi/L	10/10/23 12:24	11/01/23 13:16	1
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Ba Carrier</i>	90.2		30 - 110					10/10/23 12:24	11/01/23 13:16	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.791		0.406	0.412	1.00	0.574	pCi/L	10/10/23 12:27	10/27/23 10:16	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Client Sample ID: BAC-04-F-20231003-01

Lab Sample ID: 240-192977-4

Date Collected: 10/03/23 11:38

Matrix: Water

Date Received: 10/05/23 16:30

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	90.2		30 - 110	10/10/23 12:27	10/27/23 10:16	1
Y Carrier	84.5		30 - 110	10/10/23 12:27	10/27/23 10:16	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
Combined Radium 226 + 228	0.851		(2σ+/-) 0.415	(2σ+/-) 0.421	5.00	0.574	pCi/L		11/07/23 14:38	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Client Sample ID: BAC-13-F-20231003-01

Lab Sample ID: 240-192977-5

Date Collected: 10/03/23 12:28

Matrix: Water

Date Received: 10/05/23 16:30

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	350		100	57	ug/L		10/06/23 14:00	10/09/23 17:24	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		10/06/23 14:00	10/10/23 18:41	1
Arsenic	3.3	J	5.0	0.75	ug/L		10/06/23 14:00	10/10/23 18:41	1
Barium	5800		5.0	2.2	ug/L		10/06/23 14:00	10/10/23 18:41	1
Beryllium	ND		1.0	0.62	ug/L		10/06/23 14:00	10/10/23 18:41	1
Cadmium	ND		1.0	0.20	ug/L		10/06/23 14:00	10/10/23 18:41	1
Calcium	350000		1000	250	ug/L		10/06/23 14:00	10/10/23 18:41	1
Chromium	ND		5.0	1.2	ug/L		10/06/23 14:00	10/10/23 18:41	1
Cobalt	0.76	J	1.0	0.19	ug/L		10/06/23 14:00	10/10/23 18:41	1
Lead	0.56	J	1.0	0.45	ug/L		10/06/23 14:00	10/10/23 18:41	1
Lithium	64		8.0	1.7	ug/L		10/06/23 14:00	10/11/23 15:50	1
Magnesium	72000		1000	61	ug/L		10/06/23 14:00	10/10/23 18:41	1
Molybdenum	17		5.0	1.1	ug/L		10/06/23 14:00	10/10/23 18:41	1
Potassium	8600		1000	220	ug/L		10/06/23 14:00	10/10/23 18:41	1
Selenium	ND		5.0	0.89	ug/L		10/06/23 14:00	10/10/23 18:41	1
Sodium	1500000		1000	330	ug/L		10/06/23 14:00	10/10/23 18:41	1
Thallium	ND		1.0	0.20	ug/L		10/06/23 14:00	10/10/23 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		10/06/23 14:00	10/09/23 13:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	67		5.0	2.6	mg/L			10/06/23 14:47	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	67		5.0	2.6	mg/L			10/06/23 14:47	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/06/23 14:47	1
Chloride (EPA 300.0)	3300		25	3.2	mg/L			10/12/23 04:05	25
Fluoride (EPA 300.0)	0.85		0.25	0.12	mg/L			10/12/23 03:45	5
Sulfate (EPA 300.0)	ND		5.0	1.7	mg/L			10/12/23 03:45	5
Total Dissolved Solids (SM 2540C)	5000		50	39	mg/L			10/09/23 09:09	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	3.05		0.320	0.421	1.00	0.111	pCi/L	10/10/23 12:24	11/01/23 13:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	108		30 - 110					10/10/23 12:24	11/01/23 13:22	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	3.37		0.538	0.621	1.00	0.384	pCi/L	10/10/23 12:27	10/27/23 10:16	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Client Sample ID: BAC-13-F-20231003-01

Lab Sample ID: 240-192977-5

Date Collected: 10/03/23 12:28

Matrix: Water

Date Received: 10/05/23 16:30

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	108		30 - 110	10/10/23 12:27	10/27/23 10:16	1
Y Carrier	84.5		30 - 110	10/10/23 12:27	10/27/23 10:16	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
Combined Radium 226 + 228	6.42		(2σ+/-) 0.626	(2σ+/-) 0.750	5.00	0.384	pCi/L		11/07/23 14:38	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Client Sample ID: DUP-007-F-20231003-01

Lab Sample ID: 240-192977-6

Date Collected: 10/03/23 00:00

Matrix: Water

Date Received: 10/05/23 16:30

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	360		100	57	ug/L		10/06/23 14:00	10/09/23 17:28	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		10/06/23 14:00	10/10/23 18:44	1
Arsenic	3.0	J	5.0	0.75	ug/L		10/06/23 14:00	10/10/23 18:44	1
Barium	5600		5.0	2.2	ug/L		10/06/23 14:00	10/10/23 18:44	1
Beryllium	ND		1.0	0.62	ug/L		10/06/23 14:00	10/10/23 18:44	1
Cadmium	ND		1.0	0.20	ug/L		10/06/23 14:00	10/10/23 18:44	1
Calcium	340000		1000	250	ug/L		10/06/23 14:00	10/10/23 18:44	1
Chromium	ND		5.0	1.2	ug/L		10/06/23 14:00	10/10/23 18:44	1
Cobalt	0.69	J	1.0	0.19	ug/L		10/06/23 14:00	10/10/23 18:44	1
Lead	ND		1.0	0.45	ug/L		10/06/23 14:00	10/10/23 18:44	1
Lithium	68		8.0	1.7	ug/L		10/06/23 14:00	10/11/23 15:52	1
Magnesium	70000		1000	61	ug/L		10/06/23 14:00	10/10/23 18:44	1
Molybdenum	17		5.0	1.1	ug/L		10/06/23 14:00	10/10/23 18:44	1
Potassium	8500		1000	220	ug/L		10/06/23 14:00	10/10/23 18:44	1
Selenium	ND		5.0	0.89	ug/L		10/06/23 14:00	10/10/23 18:44	1
Sodium	1400000		1000	330	ug/L		10/06/23 14:00	10/10/23 18:44	1
Thallium	ND		1.0	0.20	ug/L		10/06/23 14:00	10/10/23 18:44	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		10/06/23 14:00	10/09/23 13:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	67		5.0	2.6	mg/L			10/06/23 14:54	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	67		5.0	2.6	mg/L			10/06/23 14:54	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/06/23 14:54	1
Chloride (EPA 300.0)	3300		25	3.2	mg/L			10/12/23 04:45	25
Fluoride (EPA 300.0)	0.85		0.25	0.12	mg/L			10/12/23 04:25	5
Sulfate (EPA 300.0)	ND		5.0	1.7	mg/L			10/12/23 04:25	5
Total Dissolved Solids (SM 2540C)	4900		50	39	mg/L			10/09/23 09:09	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	2.35		0.286	0.355	1.00	0.126	pCi/L	10/10/23 12:24	11/01/23 13:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		30 - 110					10/10/23 12:24	11/01/23 13:22	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	2.58		0.481	0.537	1.00	0.421	pCi/L	10/10/23 12:27	10/27/23 10:16	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Client Sample ID: DUP-007-F-20231003-01

Lab Sample ID: 240-192977-6

Date Collected: 10/03/23 00:00

Matrix: Water

Date Received: 10/05/23 16:30

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	104		30 - 110	10/10/23 12:27	10/27/23 10:16	1
Y Carrier	89.3		30 - 110	10/10/23 12:27	10/27/23 10:16	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	4.93		0.560	0.644	5.00	0.421	pCi/L		11/07/23 14:38	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Client Sample ID: FIELD BLANK-002-F-20231003-01

Lab Sample ID: 240-192977-7

Date Collected: 10/03/23 13:00

Matrix: Water

Date Received: 10/05/23 16:30

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		10/06/23 11:10	10/09/23 17:33	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		10/06/23 11:10	10/10/23 18:51	1
Arsenic	ND		5.0	0.75	ug/L		10/06/23 11:10	10/10/23 18:51	1
Barium	ND		5.0	2.2	ug/L		10/06/23 11:10	10/10/23 18:51	1
Beryllium	ND		1.0	0.62	ug/L		10/06/23 11:10	10/10/23 18:51	1
Cadmium	ND		1.0	0.20	ug/L		10/06/23 11:10	10/10/23 18:51	1
Calcium	ND		1000	250	ug/L		10/06/23 11:10	10/10/23 18:51	1
Chromium	ND		5.0	1.2	ug/L		10/06/23 11:10	10/10/23 18:51	1
Cobalt	ND		1.0	0.19	ug/L		10/06/23 11:10	10/10/23 18:51	1
Lead	ND		1.0	0.45	ug/L		10/06/23 11:10	10/10/23 18:51	1
Lithium	4.0	J	8.0	1.7	ug/L		10/06/23 11:10	10/11/23 15:55	1
Magnesium	ND		1000	61	ug/L		10/06/23 11:10	10/10/23 18:51	1
Molybdenum	ND		5.0	1.1	ug/L		10/06/23 11:10	10/10/23 18:51	1
Potassium	ND		1000	220	ug/L		10/06/23 11:10	10/10/23 18:51	1
Selenium	ND		5.0	0.89	ug/L		10/06/23 11:10	10/10/23 18:51	1
Sodium	ND		1000	330	ug/L		10/06/23 11:10	10/10/23 18:51	1
Thallium	ND		1.0	0.20	ug/L		10/06/23 11:10	10/10/23 18:51	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		10/06/23 11:08	10/09/23 13:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/06/23 14:59	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/06/23 14:59	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/06/23 14:59	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			10/11/23 17:37	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			10/11/23 17:37	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			10/11/23 17:37	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			10/09/23 09:09	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	-0.0457	U	0.0624	0.0625	1.00	0.148	pCi/L	10/10/23 12:24	11/01/23 13:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		30 - 110					10/10/23 12:24	11/01/23 13:22	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	0.490		0.310	0.313	1.00	0.458	pCi/L	10/10/23 12:27	10/27/23 10:17	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Client Sample ID: FIELD BLANK-002-F-20231003-01

Lab Sample ID: 240-192977-7

Date Collected: 10/03/23 13:00

Matrix: Water

Date Received: 10/05/23 16:30

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	100		30 - 110	10/10/23 12:27	10/27/23 10:17	1
Y Carrier	88.6		30 - 110	10/10/23 12:27	10/27/23 10:17	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.444	U	0.316	0.319	5.00	0.458	pCi/L		11/07/23 14:38	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

			Percent Yield (Acceptance Limits)			
Lab Sample ID	Client Sample ID	Ba (30-110)				
240-192977-1	BAC-15-F-20231003-01	81.2				
240-192977-2	FIELDBLANK-001-F-20231003-01	98.8				
240-192977-2 DU	FIELDBLANK-001-F-20231003-01	96.1				
240-192977-3	BAC-05-F-20231003-01	87.0				
240-192977-4	BAC-04-F-20231003-01	90.2				
240-192977-5	BAC-13-F-20231003-01	108				
240-192977-6	DUP-007-F-20231003-01	104				
240-192977-7	FIELD BLANK-002-F-20231003-01	100				
LCS 160-631368/2-A	Lab Control Sample	97.8				
MB 160-631368/1-A	Method Blank	99.8				

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

					Percent Yield (Acceptance Limits)			
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)					
240-192977-1	BAC-15-F-20231003-01	81.2	86.7					
240-192977-2	FIELDBLANK-001-F-20231003-01	98.8	76.6					
240-192977-2 DU	FIELDBLANK-001-F-20231003-01	96.1	78.9					
240-192977-3	BAC-05-F-20231003-01	87.0	81.1					
240-192977-4	BAC-04-F-20231003-01	90.2	84.5					
240-192977-5	BAC-13-F-20231003-01	108	84.5					
240-192977-6	DUP-007-F-20231003-01	104	89.3					
240-192977-7	FIELD BLANK-002-F-20231003-01	100	88.6					
LCS 160-631369/2-A	Lab Control Sample	100	86.0					
MB 160-631369/1-A	Method Blank	99.8	82.6					

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-589932/1-A
Matrix: Water
Analysis Batch: 590108

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 589932

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		10/06/23 14:00	10/09/23 15:21	1

Lab Sample ID: LCS 240-589932/2-A
Matrix: Water
Analysis Batch: 590108

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 589932

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	983		ug/L		98	80 - 120

Lab Sample ID: 240-192977-3 MS
Matrix: Water
Analysis Batch: 590108

Client Sample ID: BAC-05-F-20231003-01
Prep Type: Total Recoverable
Prep Batch: 589932

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	2400		1000	3550		ug/L		113	75 - 125

Lab Sample ID: 240-192977-3 MSD
Matrix: Water
Analysis Batch: 590108

Client Sample ID: BAC-05-F-20231003-01
Prep Type: Total Recoverable
Prep Batch: 589932

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	2400		1000	3510		ug/L		110	75 - 125	1	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-589932/1-A
Matrix: Water
Analysis Batch: 590283

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 589932

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		10/06/23 14:00	10/10/23 18:11	1
Arsenic	ND		5.0	0.75	ug/L		10/06/23 14:00	10/10/23 18:11	1
Barium	ND		5.0	2.2	ug/L		10/06/23 14:00	10/10/23 18:11	1
Beryllium	ND		1.0	0.62	ug/L		10/06/23 14:00	10/10/23 18:11	1
Cadmium	ND		1.0	0.20	ug/L		10/06/23 14:00	10/10/23 18:11	1
Calcium	ND		1000	250	ug/L		10/06/23 14:00	10/10/23 18:11	1
Chromium	ND		5.0	1.2	ug/L		10/06/23 14:00	10/10/23 18:11	1
Cobalt	ND		1.0	0.19	ug/L		10/06/23 14:00	10/10/23 18:11	1
Lead	ND		1.0	0.45	ug/L		10/06/23 14:00	10/10/23 18:11	1
Lithium	ND		8.0	1.7	ug/L		10/06/23 14:00	10/10/23 18:11	1
Magnesium	ND		1000	61	ug/L		10/06/23 14:00	10/10/23 18:11	1
Molybdenum	ND		5.0	1.1	ug/L		10/06/23 14:00	10/10/23 18:11	1
Potassium	ND		1000	220	ug/L		10/06/23 14:00	10/10/23 18:11	1
Selenium	ND		5.0	0.89	ug/L		10/06/23 14:00	10/10/23 18:11	1
Sodium	ND		1000	330	ug/L		10/06/23 14:00	10/10/23 18:11	1
Thallium	ND		1.0	0.20	ug/L		10/06/23 14:00	10/10/23 18:11	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

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

Lab Sample ID: LCS 240-589932/3-A
Matrix: Water
Analysis Batch: 590283

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 589932

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	102		ug/L		102	80 - 120
Arsenic	1000	920		ug/L		92	80 - 120
Barium	1000	928		ug/L		93	80 - 120
Beryllium	500	488		ug/L		98	80 - 120
Cadmium	500	482		ug/L		96	80 - 120
Calcium	25000	22800		ug/L		91	80 - 120
Chromium	500	469		ug/L		94	80 - 120
Cobalt	500	455		ug/L		91	80 - 120
Lead	500	469		ug/L		94	80 - 120
Lithium	500	517		ug/L		103	80 - 120
Magnesium	25000	23500		ug/L		94	80 - 120
Molybdenum	500	462		ug/L		92	80 - 120
Potassium	25000	23500		ug/L		94	80 - 120
Selenium	1000	933		ug/L		93	80 - 120
Sodium	25000	23900		ug/L		96	80 - 120
Thallium	1000	952		ug/L		95	80 - 120

Lab Sample ID: 240-192977-3 MS
Matrix: Water
Analysis Batch: 590283

Client Sample ID: BAC-05-F-20231003-01
Prep Type: Total Recoverable
Prep Batch: 589932

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND		100	111		ug/L		111	80 - 120
Arsenic	0.98	J	1000	1000		ug/L		100	80 - 120
Barium	37		1000	1020		ug/L		99	80 - 120
Beryllium	ND		500	521		ug/L		104	80 - 120
Cadmium	0.52	J	500	510		ug/L		102	80 - 120
Calcium	79000		25000	105000		ug/L		106	80 - 120
Chromium	ND		500	496		ug/L		99	80 - 120
Cobalt	7.9		500	494		ug/L		97	80 - 120
Lead	0.62	J	500	509		ug/L		102	80 - 120
Magnesium	24000		25000	48400		ug/L		99	80 - 120
Molybdenum	ND		500	507		ug/L		101	80 - 120
Potassium	1600		25000	26500		ug/L		100	80 - 120
Selenium	ND		1000	985		ug/L		98	80 - 120
Sodium	29000		25000	55400		ug/L		104	80 - 120
Thallium	ND		1000	1030		ug/L		103	80 - 120

Lab Sample ID: 240-192977-3 MS
Matrix: Water
Analysis Batch: 590461

Client Sample ID: BAC-05-F-20231003-01
Prep Type: Total Recoverable
Prep Batch: 589932

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lithium	13		500	525		ug/L		102	80 - 120

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

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

Lab Sample ID: 240-192977-3 MSD
Matrix: Water
Analysis Batch: 590283

Client Sample ID: BAC-05-F-20231003-01
Prep Type: Total Recoverable
Prep Batch: 589932

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Antimony	ND		100	104		ug/L		104	80 - 120	6	20
Arsenic	0.98	J	1000	1010		ug/L		101	80 - 120	1	20
Barium	37		1000	1020		ug/L		98	80 - 120	0	20
Beryllium	ND		500	518		ug/L		104	80 - 120	1	20
Cadmium	0.52	J	500	503		ug/L		101	80 - 120	1	20
Calcium	79000		25000	105000		ug/L		103	80 - 120	1	20
Chromium	ND		500	498		ug/L		100	80 - 120	0	20
Cobalt	7.9		500	497		ug/L		98	80 - 120	1	20
Lead	0.62	J	500	506		ug/L		101	80 - 120	0	20
Magnesium	24000		25000	48200		ug/L		98	80 - 120	0	20
Molybdenum	ND		500	512		ug/L		102	80 - 120	1	20
Potassium	1600		25000	26000		ug/L		98	80 - 120	2	20
Selenium	ND		1000	993		ug/L		99	80 - 120	1	20
Sodium	29000		25000	54800		ug/L		101	80 - 120	1	20
Thallium	ND		1000	1010		ug/L		101	80 - 120	2	20

Lab Sample ID: 240-192977-3 MSD
Matrix: Water
Analysis Batch: 590461

Client Sample ID: BAC-05-F-20231003-01
Prep Type: Total Recoverable
Prep Batch: 589932

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Lithium	13		500	523		ug/L		102	80 - 120	0	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-589935/1-A
Matrix: Water
Analysis Batch: 590147

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 589935

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.20	0.13	ug/L		10/06/23 14:00	10/09/23 12:48	1

Lab Sample ID: LCS 240-589935/2-A
Matrix: Water
Analysis Batch: 590147

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 589935

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec
							Limits
Mercury	5.00	5.13		ug/L		103	80 - 120

Lab Sample ID: 240-192977-3 MS
Matrix: Water
Analysis Batch: 590147

Client Sample ID: BAC-05-F-20231003-01
Prep Type: Total/NA
Prep Batch: 589935

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				Limits
Mercury	ND		1.00	1.03		ug/L		103	80 - 120

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 240-192977-3 MSD
 Matrix: Water
 Analysis Batch: 590147

Client Sample ID: BAC-05-F-20231003-01
 Prep Type: Total/NA
 Prep Batch: 589935

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		1.00	0.916		ug/L		92	80 - 120	11	20

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-589976/30
 Matrix: Water
 Analysis Batch: 589976

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			10/06/23 14:30	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/06/23 14:30	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/06/23 14:30	1

Lab Sample ID: MB 240-589976/4
 Matrix: Water
 Analysis Batch: 589976

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			10/06/23 11:38	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/06/23 11:38	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/06/23 11:38	1

Lab Sample ID: LCS 240-589976/29
 Matrix: Water
 Analysis Batch: 589976

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	80.2		mg/L		100	86 - 123

Lab Sample ID: LCS 240-589976/3
 Matrix: Water
 Analysis Batch: 589976

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	81.1		mg/L		101	86 - 123

Lab Sample ID: 240-192977-3 DU
 Matrix: Water
 Analysis Batch: 589976

Client Sample ID: BAC-05-F-20231003-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	61		61.6		mg/L		0.2	20
Bicarbonate Alkalinity as CaCO3	61		61.6		mg/L		0.2	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-590242/15
Matrix: Water
Analysis Batch: 590242

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			10/11/23 19:18	1
Fluoride	ND		0.050	0.024	mg/L			10/11/23 19:18	1
Sulfate	ND		1.0	0.35	mg/L			10/11/23 19:18	1

Lab Sample ID: MB 240-590242/3
Matrix: Water
Analysis Batch: 590242

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			10/11/23 15:16	1
Fluoride	ND		0.050	0.024	mg/L			10/11/23 15:16	1
Sulfate	ND		1.0	0.35	mg/L			10/11/23 15:16	1

Lab Sample ID: LCS 240-590242/16
Matrix: Water
Analysis Batch: 590242

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.6		mg/L		103	90 - 110
Fluoride	2.50	2.69		mg/L		107	90 - 110
Sulfate	50.0	53.6		mg/L		107	90 - 110

Lab Sample ID: LCS 240-590242/4
Matrix: Water
Analysis Batch: 590242

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.4		mg/L		103	90 - 110
Fluoride	2.50	2.68		mg/L		107	90 - 110
Sulfate	50.0	53.6		mg/L		107	90 - 110

Lab Sample ID: 240-192977-3 MS
Matrix: Water
Analysis Batch: 590242

Client Sample ID: BAC-05-F-20231003-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	38		50.0	89.8		mg/L		103	80 - 120
Fluoride	0.11		2.50	2.85		mg/L		110	80 - 120

Lab Sample ID: 240-192977-3 MSD
Matrix: Water
Analysis Batch: 590242

Client Sample ID: BAC-05-F-20231003-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Chloride	38		50.0	87.6		mg/L		99	80 - 120	2	15
Fluoride	0.11		2.50	2.68		mg/L		103	80 - 120	6	15

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 240-590490/3
Matrix: Water
Analysis Batch: 590490

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			10/14/23 09:19	1
Fluoride	ND		0.050	0.024	mg/L			10/14/23 09:19	1
Sulfate	ND		1.0	0.35	mg/L			10/14/23 09:19	1

Lab Sample ID: LCS 240-590490/4
Matrix: Water
Analysis Batch: 590490

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	48.6		mg/L		97	90 - 110
Fluoride	2.50	2.48		mg/L		99	90 - 110
Sulfate	50.0	49.2		mg/L		98	90 - 110

Lab Sample ID: 240-192977-3 MS
Matrix: Water
Analysis Batch: 590490

Client Sample ID: BAC-05-F-20231003-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	270		500	728		mg/L		92	80 - 120

Lab Sample ID: 240-192977-3 MSD
Matrix: Water
Analysis Batch: 590490

Client Sample ID: BAC-05-F-20231003-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	270		500	728		mg/L		92	80 - 120	0	15

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

Lab Sample ID: MB 240-590010/1
Matrix: Water
Analysis Batch: 590010

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			10/09/23 07:51	1

Lab Sample ID: LCS 240-590010/2
Matrix: Water
Analysis Batch: 590010

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	336	313		mg/L		93	80 - 120

Lab Sample ID: MB 240-590030/1
Matrix: Water
Analysis Batch: 590030

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			10/09/23 09:09	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

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

Lab Sample ID: LCS 240-590030/2
 Matrix: Water
 Analysis Batch: 590030

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	336	319		mg/L		95	80 - 120

Lab Sample ID: 240-192977-3 DU
 Matrix: Water
 Analysis Batch: 590030

Client Sample ID: BAC-05-F-20231003-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	520		538		mg/L		3	20

Lab Sample ID: 240-192977-5 DU
 Matrix: Water
 Analysis Batch: 590030

Client Sample ID: BAC-13-F-20231003-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	5000		4930		mg/L		1	20

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-631368/1-A
 Matrix: Water
 Analysis Batch: 634754

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 631368

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.005978	U	0.0647	0.0647	1.00	0.135	pCi/L	10/10/23 12:24	11/01/23 11:35	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.8		30 - 110					10/10/23 12:24	11/01/23 11:35	1

Lab Sample ID: LCS 160-631368/2-A
 Matrix: Water
 Analysis Batch: 635643

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 631368

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	11.3	11.18		1.17	1.00	0.0896	pCi/L	99	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	97.8		30 - 110						

Lab Sample ID: 240-192977-2 DU
 Matrix: Water
 Analysis Batch: 634755

Client Sample ID: FIELDBLANK-001-F-20231003-01
 Prep Type: Total/NA
 Prep Batch: 631368

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	-0.0288	U	-0.00685	U	0.0570	1.00	0.123	pCi/L	0.20	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: 240-192977-2 DU
 Matrix: Water
 Analysis Batch: 634755

Client Sample ID: FIELDBLANK-001-F-20231003-01
 Prep Type: Total/NA
 Prep Batch: 631368

Carrier	<i>DU</i> %Yield	<i>DU</i> Qualifier	Limits
Ba Carrier	96.1		30 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-631369/1-A
 Matrix: Water
 Analysis Batch: 633906

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 631369

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.5805		0.317	0.322	1.00	0.446	pCi/L	10/10/23 12:27	10/27/23 10:13	1
Carrier	<i>MB</i> %Yield	<i>MB</i> Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.8		30 - 110					10/10/23 12:27	10/27/23 10:13	1
Y Carrier	82.6		30 - 110					10/10/23 12:27	10/27/23 10:13	1

Lab Sample ID: LCS 160-631369/2-A
 Matrix: Water
 Analysis Batch: 633906

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 631369

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec
				Uncert. (2σ+/-)					Limits
Radium-228	7.77	7.985		1.09	1.00	0.450	pCi/L	103	75 - 125
Carrier	<i>LCS</i> %Yield	<i>LCS</i> Qualifier	Limits						
Ba Carrier	100		30 - 110						
Y Carrier	86.0		30 - 110						

Lab Sample ID: 240-192977-2 DU
 Matrix: Water
 Analysis Batch: 633752

Client Sample ID: FIELDBLANK-001-F-20231003-01
 Prep Type: Total/NA
 Prep Batch: 631369

Analyte	Sample Sample		DU DU		Total	RL	MDC	Unit	RER	RER	
	Result	Qual	Result	Qual	Uncert. (2σ+/-)					Limit	
Radium-228	0.189	U	-0.02596	U	0.249	1.00	0.482	pCi/L	0.40	1	
Carrier	<i>DU</i> %Yield	<i>DU</i> Qualifier	Limits								
Ba Carrier	96.1		30 - 110								
Y Carrier	78.9		30 - 110								

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Metals

Prep Batch: 589932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192977-1	BAC-15-F-20231003-01	Total Recoverable	Water	3005A	
240-192977-2	FIELD BLANK-001-F-20231003-01	Total Recoverable	Water	3005A	
240-192977-3	BAC-05-F-20231003-01	Total Recoverable	Water	3005A	
240-192977-4	BAC-04-F-20231003-01	Total Recoverable	Water	3005A	
240-192977-5	BAC-13-F-20231003-01	Total Recoverable	Water	3005A	
240-192977-6	DUP-007-F-20231003-01	Total Recoverable	Water	3005A	
240-192977-7	FIELD BLANK-002-F-20231003-01	Total Recoverable	Water	3005A	
MB 240-589932/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-589932/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-589932/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-192977-3 MS	BAC-05-F-20231003-01	Total Recoverable	Water	3005A	
240-192977-3 MS	BAC-05-F-20231003-01	Total Recoverable	Water	3005A	
240-192977-3 MSD	BAC-05-F-20231003-01	Total Recoverable	Water	3005A	
240-192977-3 MSD	BAC-05-F-20231003-01	Total Recoverable	Water	3005A	

Prep Batch: 589935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192977-1	BAC-15-F-20231003-01	Total/NA	Water	7470A	
240-192977-2	FIELD BLANK-001-F-20231003-01	Total/NA	Water	7470A	
240-192977-3	BAC-05-F-20231003-01	Total/NA	Water	7470A	
240-192977-4	BAC-04-F-20231003-01	Total/NA	Water	7470A	
240-192977-5	BAC-13-F-20231003-01	Total/NA	Water	7470A	
240-192977-6	DUP-007-F-20231003-01	Total/NA	Water	7470A	
240-192977-7	FIELD BLANK-002-F-20231003-01	Total/NA	Water	7470A	
MB 240-589935/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-589935/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-192977-3 MS	BAC-05-F-20231003-01	Total/NA	Water	7470A	
240-192977-3 MSD	BAC-05-F-20231003-01	Total/NA	Water	7470A	

Analysis Batch: 590108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192977-1	BAC-15-F-20231003-01	Total Recoverable	Water	6010D	589932
240-192977-2	FIELD BLANK-001-F-20231003-01	Total Recoverable	Water	6010D	589932
240-192977-3	BAC-05-F-20231003-01	Total Recoverable	Water	6010D	589932
240-192977-4	BAC-04-F-20231003-01	Total Recoverable	Water	6010D	589932
240-192977-5	BAC-13-F-20231003-01	Total Recoverable	Water	6010D	589932
240-192977-6	DUP-007-F-20231003-01	Total Recoverable	Water	6010D	589932
240-192977-7	FIELD BLANK-002-F-20231003-01	Total Recoverable	Water	6010D	589932
MB 240-589932/1-A	Method Blank	Total Recoverable	Water	6010D	589932
LCS 240-589932/2-A	Lab Control Sample	Total Recoverable	Water	6010D	589932
240-192977-3 MS	BAC-05-F-20231003-01	Total Recoverable	Water	6010D	589932
240-192977-3 MSD	BAC-05-F-20231003-01	Total Recoverable	Water	6010D	589932

Analysis Batch: 590147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192977-1	BAC-15-F-20231003-01	Total/NA	Water	7470A	589935
240-192977-2	FIELD BLANK-001-F-20231003-01	Total/NA	Water	7470A	589935
240-192977-3	BAC-05-F-20231003-01	Total/NA	Water	7470A	589935
240-192977-4	BAC-04-F-20231003-01	Total/NA	Water	7470A	589935
240-192977-5	BAC-13-F-20231003-01	Total/NA	Water	7470A	589935
240-192977-6	DUP-007-F-20231003-01	Total/NA	Water	7470A	589935

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Metals (Continued)

Analysis Batch: 590147 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192977-7	FIELD BLANK-002-F-20231003-01	Total/NA	Water	7470A	589935
MB 240-589935/1-A	Method Blank	Total/NA	Water	7470A	589935
LCS 240-589935/2-A	Lab Control Sample	Total/NA	Water	7470A	589935
240-192977-3 MS	BAC-05-F-20231003-01	Total/NA	Water	7470A	589935
240-192977-3 MSD	BAC-05-F-20231003-01	Total/NA	Water	7470A	589935

Analysis Batch: 590283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192977-1	BAC-15-F-20231003-01	Total Recoverable	Water	6020B	589932
240-192977-2	FIELD BLANK-001-F-20231003-01	Total Recoverable	Water	6020B	589932
240-192977-3	BAC-05-F-20231003-01	Total Recoverable	Water	6020B	589932
240-192977-4	BAC-04-F-20231003-01	Total Recoverable	Water	6020B	589932
240-192977-5	BAC-13-F-20231003-01	Total Recoverable	Water	6020B	589932
240-192977-6	DUP-007-F-20231003-01	Total Recoverable	Water	6020B	589932
240-192977-7	FIELD BLANK-002-F-20231003-01	Total Recoverable	Water	6020B	589932
MB 240-589932/1-A	Method Blank	Total Recoverable	Water	6020B	589932
LCS 240-589932/3-A	Lab Control Sample	Total Recoverable	Water	6020B	589932
240-192977-3 MS	BAC-05-F-20231003-01	Total Recoverable	Water	6020B	589932
240-192977-3 MSD	BAC-05-F-20231003-01	Total Recoverable	Water	6020B	589932

Analysis Batch: 590461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192977-1	BAC-15-F-20231003-01	Total Recoverable	Water	6020B	589932
240-192977-2	FIELD BLANK-001-F-20231003-01	Total Recoverable	Water	6020B	589932
240-192977-3	BAC-05-F-20231003-01	Total Recoverable	Water	6020B	589932
240-192977-4	BAC-04-F-20231003-01	Total Recoverable	Water	6020B	589932
240-192977-5	BAC-13-F-20231003-01	Total Recoverable	Water	6020B	589932
240-192977-6	DUP-007-F-20231003-01	Total Recoverable	Water	6020B	589932
240-192977-7	FIELD BLANK-002-F-20231003-01	Total Recoverable	Water	6020B	589932
240-192977-3 MS	BAC-05-F-20231003-01	Total Recoverable	Water	6020B	589932
240-192977-3 MSD	BAC-05-F-20231003-01	Total Recoverable	Water	6020B	589932

General Chemistry

Analysis Batch: 589976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192977-1	BAC-15-F-20231003-01	Total/NA	Water	2320B-1997	
240-192977-2	FIELD BLANK-001-F-20231003-01	Total/NA	Water	2320B-1997	
240-192977-3	BAC-05-F-20231003-01	Total/NA	Water	2320B-1997	
240-192977-4	BAC-04-F-20231003-01	Total/NA	Water	2320B-1997	
240-192977-5	BAC-13-F-20231003-01	Total/NA	Water	2320B-1997	
240-192977-6	DUP-007-F-20231003-01	Total/NA	Water	2320B-1997	
240-192977-7	FIELD BLANK-002-F-20231003-01	Total/NA	Water	2320B-1997	
MB 240-589976/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-589976/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-589976/29	Lab Control Sample	Total/NA	Water	2320B-1997	
LCS 240-589976/3	Lab Control Sample	Total/NA	Water	2320B-1997	
240-192977-3 DU	BAC-05-F-20231003-01	Total/NA	Water	2320B-1997	

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-192977-1

General Chemistry

Analysis Batch: 590010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192977-4	BAC-04-F-20231003-01	Total/NA	Water	SM 2540C	
MB 240-590010/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-590010/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 590030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192977-1	BAC-15-F-20231003-01	Total/NA	Water	SM 2540C	
240-192977-2	FIELD BLANK-001-F-20231003-01	Total/NA	Water	SM 2540C	
240-192977-3	BAC-05-F-20231003-01	Total/NA	Water	SM 2540C	
240-192977-5	BAC-13-F-20231003-01	Total/NA	Water	SM 2540C	
240-192977-6	DUP-007-F-20231003-01	Total/NA	Water	SM 2540C	
240-192977-7	FIELD BLANK-002-F-20231003-01	Total/NA	Water	SM 2540C	
MB 240-590030/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-590030/2	Lab Control Sample	Total/NA	Water	SM 2540C	
240-192977-3 DU	BAC-05-F-20231003-01	Total/NA	Water	SM 2540C	
240-192977-5 DU	BAC-13-F-20231003-01	Total/NA	Water	SM 2540C	

Analysis Batch: 590242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192977-1	BAC-15-F-20231003-01	Total/NA	Water	300.0	
240-192977-2	FIELD BLANK-001-F-20231003-01	Total/NA	Water	300.0	
240-192977-3	BAC-05-F-20231003-01	Total/NA	Water	300.0	
240-192977-4	BAC-04-F-20231003-01	Total/NA	Water	300.0	
240-192977-5	BAC-13-F-20231003-01	Total/NA	Water	300.0	
240-192977-5	BAC-13-F-20231003-01	Total/NA	Water	300.0	
240-192977-6	DUP-007-F-20231003-01	Total/NA	Water	300.0	
240-192977-6	DUP-007-F-20231003-01	Total/NA	Water	300.0	
240-192977-7	FIELD BLANK-002-F-20231003-01	Total/NA	Water	300.0	
MB 240-590242/15	Method Blank	Total/NA	Water	300.0	
MB 240-590242/3	Method Blank	Total/NA	Water	300.0	
LCS 240-590242/16	Lab Control Sample	Total/NA	Water	300.0	
LCS 240-590242/4	Lab Control Sample	Total/NA	Water	300.0	
240-192977-3 MS	BAC-05-F-20231003-01	Total/NA	Water	300.0	
240-192977-3 MSD	BAC-05-F-20231003-01	Total/NA	Water	300.0	

Analysis Batch: 590490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192977-3	BAC-05-F-20231003-01	Total/NA	Water	300.0	
240-192977-4	BAC-04-F-20231003-01	Total/NA	Water	300.0	
MB 240-590490/3	Method Blank	Total/NA	Water	300.0	
LCS 240-590490/4	Lab Control Sample	Total/NA	Water	300.0	
240-192977-3 MS	BAC-05-F-20231003-01	Total/NA	Water	300.0	
240-192977-3 MSD	BAC-05-F-20231003-01	Total/NA	Water	300.0	

Rad

Prep Batch: 631368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192977-1	BAC-15-F-20231003-01	Total/NA	Water	PrecSep-21	
240-192977-2	FIELD BLANK-001-F-20231003-01	Total/NA	Water	PrecSep-21	
240-192977-3	BAC-05-F-20231003-01	Total/NA	Water	PrecSep-21	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Rad (Continued)

Prep Batch: 631368 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192977-4	BAC-04-F-20231003-01	Total/NA	Water	PrecSep-21	
240-192977-5	BAC-13-F-20231003-01	Total/NA	Water	PrecSep-21	
240-192977-6	DUP-007-F-20231003-01	Total/NA	Water	PrecSep-21	
240-192977-7	FIELD BLANK-002-F-20231003-01	Total/NA	Water	PrecSep-21	
MB 160-631368/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-631368/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
240-192977-2 DU	FIELDBLANK-001-F-20231003-01	Total/NA	Water	PrecSep-21	

Prep Batch: 631369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-192977-1	BAC-15-F-20231003-01	Total/NA	Water	PrecSep_0	
240-192977-2	FIELDBLANK-001-F-20231003-01	Total/NA	Water	PrecSep_0	
240-192977-3	BAC-05-F-20231003-01	Total/NA	Water	PrecSep_0	
240-192977-4	BAC-04-F-20231003-01	Total/NA	Water	PrecSep_0	
240-192977-5	BAC-13-F-20231003-01	Total/NA	Water	PrecSep_0	
240-192977-6	DUP-007-F-20231003-01	Total/NA	Water	PrecSep_0	
240-192977-7	FIELD BLANK-002-F-20231003-01	Total/NA	Water	PrecSep_0	
MB 160-631369/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-631369/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
240-192977-2 DU	FIELDBLANK-001-F-20231003-01	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Client Sample ID: BAC-15-F-20231003-01

Lab Sample ID: 240-192977-1

Date Collected: 10/03/23 09:20

Matrix: Water

Date Received: 10/05/23 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589932	AJC	EET CLE	10/06/23 14:00
Total Recoverable	Analysis	6010D		1	590108	RKT	EET CLE	10/09/23 17:10
Total Recoverable	Prep	3005A			589932	AJC	EET CLE	10/06/23 14:00
Total Recoverable	Analysis	6020B		1	590283	RKT	EET CLE	10/10/23 18:33
Total Recoverable	Prep	3005A			589932	AJC	EET CLE	10/06/23 14:00
Total Recoverable	Analysis	6020B		1	590461	RKT	EET CLE	10/11/23 15:37
Total/NA	Prep	7470A			589935	AJC	EET CLE	10/06/23 14:00
Total/NA	Analysis	7470A		1	590147	GK	EET CLE	10/09/23 13:29
Total/NA	Analysis	2320B-1997		1	589976	JMR	EET CLE	10/06/23 14:17
Total/NA	Analysis	300.0		1	590242	JWW	EET CLE	10/11/23 17:58
Total/NA	Analysis	SM 2540C		1	590030	QUY8	EET CLE	10/09/23 09:09
Total/NA	Prep	PrecSep-21			631368	KAC	EET SL	10/10/23 12:24
Total/NA	Analysis	9315		1	634755	FLC	EET SL	11/01/23 13:16
Total/NA	Prep	PrecSep_0			631369	KAC	EET SL	10/10/23 12:27
Total/NA	Analysis	9320		1	633752	FLC	EET SL	10/27/23 10:16
Total/NA	Analysis	Ra226_Ra228		1	635691	CAH	EET SL	11/07/23 14:38

Client Sample ID: FIELDBLANK-001-F-20231003-01

Lab Sample ID: 240-192977-2

Date Collected: 10/03/23 09:45

Matrix: Water

Date Received: 10/05/23 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589932	AJC	EET CLE	10/06/23 14:00
Total Recoverable	Analysis	6010D		1	590108	RKT	EET CLE	10/09/23 17:15
Total Recoverable	Prep	3005A			589932	AJC	EET CLE	10/06/23 14:00
Total Recoverable	Analysis	6020B		1	590283	RKT	EET CLE	10/10/23 18:36
Total Recoverable	Prep	3005A			589932	AJC	EET CLE	10/06/23 14:00
Total Recoverable	Analysis	6020B		1	590461	RKT	EET CLE	10/11/23 15:40
Total/NA	Prep	7470A			589935	AJC	EET CLE	10/06/23 14:00
Total/NA	Analysis	7470A		1	590147	GK	EET CLE	10/09/23 13:31
Total/NA	Analysis	2320B-1997		1	589976	JMR	EET CLE	10/06/23 14:22
Total/NA	Analysis	300.0		1	590242	JWW	EET CLE	10/11/23 16:57
Total/NA	Analysis	SM 2540C		1	590030	QUY8	EET CLE	10/09/23 09:09
Total/NA	Prep	PrecSep-21			631368	KAC	EET SL	10/10/23 12:24
Total/NA	Analysis	9315		1	634755	FLC	EET SL	11/01/23 13:16
Total/NA	Prep	PrecSep_0			631369	KAC	EET SL	10/10/23 12:27
Total/NA	Analysis	9320		1	633752	FLC	EET SL	10/27/23 10:16
Total/NA	Analysis	Ra226_Ra228		1	635691	CAH	EET SL	11/07/23 14:38

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Client Sample ID: BAC-05-F-20231003-01

Lab Sample ID: 240-192977-3

Date Collected: 10/03/23 10:29

Matrix: Water

Date Received: 10/05/23 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589932	AJC	EET CLE	10/06/23 14:00
Total Recoverable	Analysis	6010D		1	590108	RKT	EET CLE	10/09/23 15:29
Total Recoverable	Prep	3005A			589932	AJC	EET CLE	10/06/23 14:00
Total Recoverable	Analysis	6020B		1	590283	RKT	EET CLE	10/10/23 18:21
Total Recoverable	Prep	3005A			589932	AJC	EET CLE	10/06/23 14:00
Total Recoverable	Analysis	6020B		1	590461	RKT	EET CLE	10/11/23 15:25
Total/NA	Prep	7470A			589935	AJC	EET CLE	10/06/23 14:00
Total/NA	Analysis	7470A		1	590147	GK	EET CLE	10/09/23 12:52
Total/NA	Analysis	2320B-1997		1	589976	JMR	EET CLE	10/06/23 14:33
Total/NA	Analysis	300.0		10	590490	JWW	EET CLE	10/14/23 10:03
Total/NA	Analysis	300.0		1	590242	JWW	EET CLE	10/11/23 15:57
Total/NA	Analysis	SM 2540C		1	590030	QUY8	EET CLE	10/09/23 09:09
Total/NA	Prep	PrecSep-21			631368	KAC	EET SL	10/10/23 12:24
Total/NA	Analysis	9315		1	634755	FLC	EET SL	11/01/23 13:16
Total/NA	Prep	PrecSep_0			631369	KAC	EET SL	10/10/23 12:27
Total/NA	Analysis	9320		1	633752	FLC	EET SL	10/27/23 10:16
Total/NA	Analysis	Ra226_Ra228		1	635691	CAH	EET SL	11/07/23 14:38

Client Sample ID: BAC-04-F-20231003-01

Lab Sample ID: 240-192977-4

Date Collected: 10/03/23 11:38

Matrix: Water

Date Received: 10/05/23 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589932	AJC	EET CLE	10/06/23 14:00
Total Recoverable	Analysis	6010D		1	590108	RKT	EET CLE	10/09/23 17:19
Total Recoverable	Prep	3005A			589932	AJC	EET CLE	10/06/23 14:00
Total Recoverable	Analysis	6020B		1	590283	RKT	EET CLE	10/10/23 18:38
Total Recoverable	Prep	3005A			589932	AJC	EET CLE	10/06/23 14:00
Total Recoverable	Analysis	6020B		1	590461	RKT	EET CLE	10/11/23 15:47
Total/NA	Prep	7470A			589935	AJC	EET CLE	10/06/23 14:00
Total/NA	Analysis	7470A		1	590147	GK	EET CLE	10/09/23 13:38
Total/NA	Analysis	2320B-1997		1	589976	JMR	EET CLE	10/06/23 14:43
Total/NA	Analysis	300.0		10	590490	JWW	EET CLE	10/14/23 11:08
Total/NA	Analysis	300.0		1	590242	JWW	EET CLE	10/11/23 17:17
Total/NA	Analysis	SM 2540C		1	590010	QUY8	EET CLE	10/09/23 07:51
Total/NA	Prep	PrecSep-21			631368	KAC	EET SL	10/10/23 12:24
Total/NA	Analysis	9315		1	634755	FLC	EET SL	11/01/23 13:16
Total/NA	Prep	PrecSep_0			631369	KAC	EET SL	10/10/23 12:27
Total/NA	Analysis	9320		1	633752	FLC	EET SL	10/27/23 10:16
Total/NA	Analysis	Ra226_Ra228		1	635691	CAH	EET SL	11/07/23 14:38

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Client Sample ID: BAC-13-F-20231003-01

Lab Sample ID: 240-192977-5

Date Collected: 10/03/23 12:28

Matrix: Water

Date Received: 10/05/23 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589932	AJC	EET CLE	10/06/23 14:00
Total Recoverable	Analysis	6010D		1	590108	RKT	EET CLE	10/09/23 17:24
Total Recoverable	Prep	3005A			589932	AJC	EET CLE	10/06/23 14:00
Total Recoverable	Analysis	6020B		1	590283	RKT	EET CLE	10/10/23 18:41
Total Recoverable	Prep	3005A			589932	AJC	EET CLE	10/06/23 14:00
Total Recoverable	Analysis	6020B		1	590461	RKT	EET CLE	10/11/23 15:50
Total/NA	Prep	7470A			589935	AJC	EET CLE	10/06/23 14:00
Total/NA	Analysis	7470A		1	590147	GK	EET CLE	10/09/23 13:40
Total/NA	Analysis	2320B-1997		1	589976	JMR	EET CLE	10/06/23 14:47
Total/NA	Analysis	300.0		5	590242	JWW	EET CLE	10/12/23 03:45
Total/NA	Analysis	300.0		25	590242	JWW	EET CLE	10/12/23 04:05
Total/NA	Analysis	SM 2540C		1	590030	QUY8	EET CLE	10/09/23 09:09
Total/NA	Prep	PrecSep-21			631368	KAC	EET SL	10/10/23 12:24
Total/NA	Analysis	9315		1	634754	FLC	EET SL	11/01/23 13:22
Total/NA	Prep	PrecSep_0			631369	KAC	EET SL	10/10/23 12:27
Total/NA	Analysis	9320		1	633752	FLC	EET SL	10/27/23 10:16
Total/NA	Analysis	Ra226_Ra228		1	635691	CAH	EET SL	11/07/23 14:38

Client Sample ID: DUP-007-F-20231003-01

Lab Sample ID: 240-192977-6

Date Collected: 10/03/23 00:00

Matrix: Water

Date Received: 10/05/23 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589932	AJC	EET CLE	10/06/23 14:00
Total Recoverable	Analysis	6010D		1	590108	RKT	EET CLE	10/09/23 17:28
Total Recoverable	Prep	3005A			589932	AJC	EET CLE	10/06/23 14:00
Total Recoverable	Analysis	6020B		1	590283	RKT	EET CLE	10/10/23 18:44
Total Recoverable	Prep	3005A			589932	AJC	EET CLE	10/06/23 14:00
Total Recoverable	Analysis	6020B		1	590461	RKT	EET CLE	10/11/23 15:52
Total/NA	Prep	7470A			589935	AJC	EET CLE	10/06/23 14:00
Total/NA	Analysis	7470A		1	590147	GK	EET CLE	10/09/23 13:42
Total/NA	Analysis	2320B-1997		1	589976	JMR	EET CLE	10/06/23 14:54
Total/NA	Analysis	300.0		5	590242	JWW	EET CLE	10/12/23 04:25
Total/NA	Analysis	300.0		25	590242	JWW	EET CLE	10/12/23 04:45
Total/NA	Analysis	SM 2540C		1	590030	QUY8	EET CLE	10/09/23 09:09
Total/NA	Prep	PrecSep-21			631368	KAC	EET SL	10/10/23 12:24
Total/NA	Analysis	9315		1	634754	FLC	EET SL	11/01/23 13:22
Total/NA	Prep	PrecSep_0			631369	KAC	EET SL	10/10/23 12:27
Total/NA	Analysis	9320		1	633752	FLC	EET SL	10/27/23 10:16
Total/NA	Analysis	Ra226_Ra228		1	635691	CAH	EET SL	11/07/23 14:38

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

Client Sample ID: FIELD BLANK-002-F-20231003-01

Lab Sample ID: 240-192977-7

Date Collected: 10/03/23 13:00

Matrix: Water

Date Received: 10/05/23 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			589932	AJC	EET CLE	10/06/23 11:10
Total Recoverable	Analysis	6010D		1	590108	RKT	EET CLE	10/09/23 17:33
Total Recoverable	Prep	3005A			589932	AJC	EET CLE	10/06/23 11:10
Total Recoverable	Analysis	6020B		1	590283	RKT	EET CLE	10/10/23 18:51
Total Recoverable	Prep	3005A			589932	AJC	EET CLE	10/06/23 11:10
Total Recoverable	Analysis	6020B		1	590461	RKT	EET CLE	10/11/23 15:55
Total/NA	Prep	7470A			589935	AJC	EET CLE	10/06/23 11:08
Total/NA	Analysis	7470A		1	590147	GK	EET CLE	10/09/23 13:44
Total/NA	Analysis	2320B-1997		1	589976	JMR	EET CLE	10/06/23 14:59
Total/NA	Analysis	300.0		1	590242	JWW	EET CLE	10/11/23 17:37
Total/NA	Analysis	SM 2540C		1	590030	QUY8	EET CLE	10/09/23 09:09
Total/NA	Prep	PrecSep-21			631368	KAC	EET SL	10/10/23 12:24
Total/NA	Analysis	9315		1	634754	FLC	EET SL	11/01/23 13:22
Total/NA	Prep	PrecSep_0			631369	KAC	EET SL	10/10/23 12:27
Total/NA	Analysis	9320		1	633752	FLC	EET SL	10/27/23 10:17
Total/NA	Analysis	Ra226_Ra228		1	635691	CAH	EET SL	11/07/23 14:38

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
 Project/Site: Federal CCR Wells

Job ID: 240-192977-1

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
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
Virginia	NELAP	460175	09-14-24
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-24
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-24
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-24
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-24
Massachusetts	State	M-MO054	06-30-24
MI - RadChem Recognition	State	9005	06-30-24
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-24
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-192977-1

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 Dakota	State	R-207	06-30-24
Oklahoma	NELAP	9997	08-31-24
Oregon	NELAP	4157	09-01-24
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-24
Texas	NELAP	T104704193	07-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO000542021-14	07-31-24
Virginia	NELAP	10310	06-15-25
Washington	State	C592	08-30-24
West Virginia DEP	State	381	12-31-23

Chain of Custody Record



Environment Tests

Client Information Client Contact: Roxanne Cisneros, Roxanne 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: Gavin		Lab PM: Cisneros, Roxanne E-Mail: roxanne.cisneros@et.eurofins.com State of Origin: _____ Carner Tracking No(s): _____ COC No: 240-111832-38818 1 Page: Page 1 of 8 Job #: _____	
Due Date Requested: _____ TAT Requested (days): _____ Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: 2935505 WFO #: _____ Project #: _____ SOW#: _____		Analysis Requested Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> <input type="checkbox"/> Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> <input type="checkbox"/> 5010B, 6020, 7470A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 2540C, Calcd. TDS <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 915, Ra226, 9120, Ra228, Ra228Ra228, GFCP <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 300.0_28D - Chloride, Fluoride & Sulfate <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 2320B - (MOD) Alkalinity <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Sample Identification Sample Date Sample Time Sample Type (C=Comp, G=grab) Matrix (W=water, S=solid, O=other, A=Air) Preservation Code:		Total Number of Containers: _____ Special Instructions/Note: _____ 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 Other: _____ M: Hexane N: None O: AsNaO2 P: Na2OAS Q: Na2SO3 R: Na2S2O3 S: H2SO4 T: TSP Dodecahydrate U: Acetone V: MCAA W: pH 4-5 Y: Inzma Z: other (specify)	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant Deliverable Requested I, II, III, IV, Other (specify) _____ <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements: _____	
Empty Kit Relinquished by: _____ Relinquished by: _____ Relinquished by: _____ Relinquished by: _____		Date: _____ Date/Time: 10-5-23/0836 Date/Time: _____ Date/Time: _____ Date/Time: _____	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.: _____ Cooler Temperature(s) °C and Other Remarks: _____		Method of Shipment: _____ Received by: KEMPON Received by: _____ Received by: _____ Received by: _____ Date/Time: 10-5-23 Date/Time: _____ Date/Time: _____ Date/Time: _____	



Eurofins – Cleveland Sample Receipt Form/Narrative Login # : _____
Barberton Facility

Client Lighthouse Generation Gavin Power LLC Site Name _____ Cooler unpacked by: L Osborne
Cooler Received on 10/5/23 Opened on 10/5/23
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 +0.4 °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)? 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# HC316719
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 _____

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

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: _____

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container		Preservative	
			pH	Temp	Added (mls)	Lot #
BAC-15-F-20231003-01	240-192977-D-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-15-F-20231003-01	240-192977-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-15-F-20231003-01	240-192977-F-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
FIELD BLANK-001-F-20231003-01	240-192977-D-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
FIELD BLANK-001-F-20231003-01	240-192977-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
FIELD BLANK-001-F-20231003-01	240-192977-F-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-05-F-20231003-01	240-192977-M-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-05-F-20231003-01	240-192977-N-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-05-F-20231003-01	240-192977-O-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-05-F-20231003-01	240-192977-P-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-05-F-20231003-01	240-192977-Q-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-05-F-20231003-01	240-192977-R-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-05-F-20231003-01	240-192977-S-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-05-F-20231003-01	240-192977-T-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-05-F-20231003-01	240-192977-U-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-05-F-20231003-01	240-192977-V-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-05-F-20231003-01	240-192977-W-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-05-F-20231003-01	240-192977-X-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-04-F-20231003-01	240-192977-D-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-04-F-20231003-01	240-192977-E-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-04-F-20231003-01	240-192977-F-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-13-F-20231003-01	240-192977-D-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-13-F-20231003-01	240-192977-E-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-13-F-20231003-01	240-192977-F-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-007-F-20231003-01	240-192977-D-6	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-007-F-20231003-01	240-192977-E-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-007-F-20231003-01	240-192977-F-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
FIELD BLANK-002-F-20231003-01	240-192977-D-7	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
FIELD BLANK-002-F-20231003-01	240-192977-E-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
FIELD BLANK-002-F-20231003-01	240-192977-F-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

Chain of Custody Record



Environmental Testing



Client Information (Sub Contract Lab)		Sampler: Cisneros, Roxanne	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): 240-174815-1	COC No: 240-174815-1
Shipping/Receiving		Phone: roxanne.cisneros@et.eurofins.com	E-Mail: roxanne.cisneros@et.eurofins.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 240-192977-1	
Address: 13715 Rider Trail North,		Due Date Requested: 10/18/2023		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 Other:	
City: Earth City		TAT Requested (days):		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 X - Trizma Y - Trizma Z - other (specify)	
State, Zip: MO, 63045		PO #:		Analysis Requested	
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		WO #:		Total Number of Containers	
Email:		Project #:		Field Filtered Sample (Yes or No)	
Federal GWM Wells		SSOW#:		Perform MS/MSD (Yes or No)	
Site:		Sample Date		Radium-228	
Sample Identification - Client ID (Lab ID)		Sample Time		9315_Ra226/PreSep_21 Radium-226 (GFC)	
BAC-15-F-20231003-01 (240-192977-1)	10/3/23	09:20 Eastern	Water	X	X
FIELDBLANK-001-F-20231003-01 (240-192977-2)	10/3/23	09:45 Eastern	Water	X	X
BAC-05-F-20231003-01 (240-192977-3)	10/3/23	10:29 Eastern	Water	X	X
BAC-04-F-20231003-01 (240-192977-4)	10/3/23	11:38 Eastern	Water	X	X
BAC-13-F-20231003-01 (240-192977-5)	10/3/23	12:28 Eastern	Water	X	X
DUP-007-F-20231003-01 (240-192977-6)	10/3/23	13:00 Eastern	Water	X	X
FIELD BLANK-002-F-20231003-01 (240-192977-7)	10/3/23	13:00 Eastern	Water	X	X

Special Instructions/Note:
 2 . Recount of TAR after 21 day ingrowth if > action limit, save planchet
 2 . Recount of TAR after 21 day ingrowth if > action limit, save planchet
 6 . Recount of TAR after 21 day ingrowth if > action limit, save planchet
 2 . Recount of TAR after 21 day ingrowth if > action limit, save planchet
 2 . Recount of TAR after 21 day ingrowth if > action limit, save planchet
 2 . Recount of TAR after 21 day ingrowth if > action limit, save planchet
 2 . Recount of TAR after 21 day ingrowth if > action limit, save planchet

Possible Hazard Identification
 Unconfirmed
 Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2
 Special Instructions/QC Requirements:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
 Method of Shipment:

Relinquished by: *Roxanne Cisneros* Date: 10/23/2023
Relinquished by: *M. Pinette* Date: 10/09/2023
Relinquished by: _____ Date: _____
 Company: BEAC Company: Company
 Cooler Temperature(s) °C and Other Remarks:



Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)		Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): 240-174815-1
Client Contact: Shipping/Receiving		E-Mail: roxanne.cisneros@et.eurofins.com	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		State of Origin: Ohio	Job #: 240-192977-1
Address: 13715 Rider Trail North,		Preservation Codes: A - HCL M - Hexane B - NaOH N - None O - AsNaO2 C - Zn Acetate P - Na2O4S D - Nitric Acid Q - Na2SO3 E - NaHSO4 R - Na2SO3 F - MeOH S - H2SO4 G - Amchlor T - TSP Dodecahydrate H - Ascorbic Acid U - Acetone I - Ice J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Y - Trizma Z - other (specify) Other:	
City: Earth City		Analysis Requested	
State, Zip: MO, 63045		Total Number of Containers	
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		9320_Ra228/PreSep_0 Radium-228 (GFC)	
Email:		9315_Ra228/PreSep_21 Radium-226 (GFC)	
Project #: 24019633		9326Ra228_GFC/ Combined Radium-226 and Radium-228	
SSOW#:		Perform MS/MSD (Yes or No)	
Site:		Field Filtered Sample (Yes or No)	
		Matrix (Water, Swab, On-water, Bit-Tissue, A=Air)	
		Sample Type (C=Comp, G=grab)	
		Sample Date	
		Sample Time	
		Preservation Code:	
		Special Instructions/Note:	
Sample Identification - Client ID (Lab ID)			
BAC-15-F-20231003-01 (240-192977-1)	10/3/23	09:20 Eastern	Water
FIELDBLANK-001-F-20231003-01 (240-192977-2)	10/3/23	09:45 Eastern	Water
BAC-05-F-20231003-01 (240-192977-3)	10/3/23	10:29 Eastern	Water
BAC-04-F-20231003-01 (240-192977-4)	10/3/23	11:38 Eastern	Water
BAC-13-F-20231003-01 (240-192977-5)	10/3/23	12:28 Eastern	Water
DUP-007-F-20231003-01 (240-192977-6)	10/3/23	13:00 Eastern	Water
FIELD BLANK-002-F-20231003-01 (240-192977-7)	10/3/23	13:00 Eastern	Water
2		. Recount of TAR after 21 day ingrowth if > action limit; save planchet	
2		. Recount of TAR after 21 day ingrowth if > action limit; save planchet	
6		. Recount of TAR after 21 day ingrowth if > action limit; save planchet	
2		. Recount of TAR after 21 day ingrowth if > action limit; save planchet	
2		. Recount of TAR after 21 day ingrowth if > action limit; save planchet	
2		. Recount of TAR after 21 day ingrowth if > action limit; save planchet	
2		. Recount of TAR after 21 day ingrowth if > action limit; save planchet	

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

Empty Kit Relinquished by: _____ Date: _____ Time: _____
 Relinquished by: *Roxanne Cisneros* Date: *10/09/2023* Time: *10:10* Company: *BEINC*
 Relinquished by: *M. Pinette* Date: *10/09/2023* Time: *09:45* Company: _____
 Relinquished by: _____ Date: _____ Time: _____ Company: _____

Custody Seals Intact: _____ Custody Seal No.: _____
 Δ Yes Δ No

Cooler Temperature(s) °C and Other Remarks:



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-192977-1

Login Number: 192977

List Number: 2

Creator: Pinette, Meadow L

List Source: Eurofins St. Louis

List Creation: 10/09/23 01:16 PM

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



 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 3/8/2023 8:07:41 PM

JOB DESCRIPTION

Federal CCR Wells - App III

JOB NUMBER

240-181022-1

Eurofins Canton

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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
3/8/2023 8:07:41 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181022-1

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181022-1

Job ID: 240-181022-1

Laboratory: Eurofins Canton

Narrative

Job Narrative
240-181022-1

Receipt

The samples were received on 2/27/2023 1:20 PM. 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 0.7°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.

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Method Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181022-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CAN
6020B	Metals (ICP/MS)	SW846	EET CAN
2320B-1997	Alkalinity, Total	SM	EET CAN
300.0	Anions, Ion Chromatography	EPA	EET CAN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CAN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CAN

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 CAN = Eurofins Canton, 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 - App III

Job ID: 240-181022-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-181022-1	BAC-21-F-20230224-01	Water	02/24/23 12:48	02/27/23 13:20
240-181022-2	BAC-22-F-20230224-01	Water	02/24/23 14:31	02/27/23 13:20
240-181022-3	EB-001-F-20230224-01	Water	02/24/23 15:00	02/27/23 13:20

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181022-1

Client Sample ID: BAC-21-F-20230224-01

Lab Sample ID: 240-181022-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	370		100	57	ug/L	1		6010D	Total Recoverable
Calcium	130000		1000	580	ug/L	1		6020B	Total Recoverable
Magnesium	15000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	2400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	28000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	66		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.068		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	130		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	530		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-22-F-20230224-01

Lab Sample ID: 240-181022-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	240		100	57	ug/L	1		6010D	Total Recoverable
Calcium	150000		1000	580	ug/L	1		6020B	Total Recoverable
Magnesium	19000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	2800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	21000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	36		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.079		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	230		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	540		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-001-F-20230224-01

Lab Sample ID: 240-181022-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181022-1

Client Sample ID: BAC-21-F-20230224-01

Lab Sample ID: 240-181022-1

Date Collected: 02/24/23 12:48

Matrix: Water

Date Received: 02/27/23 13:20

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	370		100	57	ug/L		03/01/23 15:00	03/02/23 12:57	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130000		1000	580	ug/L		03/01/23 15:00	03/02/23 10:48	1
Magnesium	15000		1000	200	ug/L		03/01/23 15:00	03/02/23 10:48	1
Potassium	2400		1000	220	ug/L		03/01/23 15:00	03/02/23 10:48	1
Sodium	28000		1000	330	ug/L		03/01/23 15:00	03/02/23 10:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230		5.0	2.6	mg/L			03/06/23 14:51	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230		5.0	2.6	mg/L			03/06/23 14:51	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 14:51	1
Chloride (EPA 300.0)	66		1.0	0.13	mg/L			03/06/23 22:47	1
Fluoride (EPA 300.0)	0.068		0.050	0.024	mg/L			03/06/23 22:47	1
Sulfate (EPA 300.0)	130		1.0	0.35	mg/L			03/06/23 22:47	1
Total Dissolved Solids (SM 2540C)	530		10	7.8	mg/L			03/02/23 17:58	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181022-1

Client Sample ID: BAC-22-F-20230224-01

Lab Sample ID: 240-181022-2

Date Collected: 02/24/23 14:31

Matrix: Water

Date Received: 02/27/23 13:20

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	240		100	57	ug/L		03/01/23 15:00	03/02/23 13:01	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	150000		1000	580	ug/L		03/01/23 15:00	03/02/23 11:13	1
Magnesium	19000		1000	200	ug/L		03/01/23 15:00	03/02/23 11:13	1
Potassium	2800		1000	220	ug/L		03/01/23 15:00	03/02/23 11:13	1
Sodium	21000		1000	330	ug/L		03/01/23 15:00	03/02/23 11:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 15:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 15:06	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:06	1
Chloride (EPA 300.0)	36		1.0	0.13	mg/L			03/06/23 23:31	1
Fluoride (EPA 300.0)	0.079		0.050	0.024	mg/L			03/06/23 23:31	1
Sulfate (EPA 300.0)	230		5.0	1.7	mg/L			03/07/23 00:36	5
Total Dissolved Solids (SM 2540C)	540		10	7.8	mg/L			03/02/23 17:58	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181022-1

Client Sample ID: EB-001-F-20230224-01

Lab Sample ID: 240-181022-3

Date Collected: 02/24/23 15:00

Matrix: Water

Date Received: 02/27/23 13:20

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		03/01/23 15:00	03/02/23 13:05	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	580	ug/L		03/01/23 15:00	03/02/23 11:16	1
Magnesium	ND		1000	200	ug/L		03/01/23 15:00	03/02/23 11:16	1
Potassium	ND		1000	220	ug/L		03/01/23 15:00	03/02/23 11:16	1
Sodium	ND		1000	330	ug/L		03/01/23 15:00	03/02/23 11:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:14	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:14	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:14	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			03/07/23 00:57	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			03/07/23 00:57	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			03/07/23 00:57	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			03/02/23 17:58	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181022-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-563845/1-A
 Matrix: Water
 Analysis Batch: 564046

Client Sample ID: Method Blank
 Prep Type: Total Recoverable
 Prep Batch: 563845

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		03/01/23 15:00	03/02/23 11:35	1

Lab Sample ID: LCS 240-563845/2-A
 Matrix: Water
 Analysis Batch: 564046

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 563845

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1020		ug/L		102	80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-563845/1-A
 Matrix: Water
 Analysis Batch: 564038

Client Sample ID: Method Blank
 Prep Type: Total Recoverable
 Prep Batch: 563845

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	580	ug/L		03/01/23 15:00	03/02/23 10:32	1
Magnesium	ND		1000	200	ug/L		03/01/23 15:00	03/02/23 10:32	1
Potassium	ND		1000	220	ug/L		03/01/23 15:00	03/02/23 10:32	1
Sodium	ND		1000	330	ug/L		03/01/23 15:00	03/02/23 10:32	1

Lab Sample ID: LCS 240-563845/3-A
 Matrix: Water
 Analysis Batch: 564038

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 563845

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	24100		ug/L		97	80 - 120
Magnesium	25000	24000		ug/L		96	80 - 120
Potassium	25000	24200		ug/L		97	80 - 120
Sodium	25000	24000		ug/L		96	80 - 120

Lab Sample ID: 240-181022-1 MS
 Matrix: Water
 Analysis Batch: 564038

Client Sample ID: BAC-21-F-20230224-01
 Prep Type: Total Recoverable
 Prep Batch: 563845

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	130000		25000	153000	4	ug/L		100	80 - 120
Magnesium	15000		25000	38100		ug/L		93	80 - 120
Potassium	2400		25000	25800		ug/L		94	80 - 120
Sodium	28000		25000	51100		ug/L		93	80 - 120

Lab Sample ID: 240-181022-1 MSD
 Matrix: Water
 Analysis Batch: 564038

Client Sample ID: BAC-21-F-20230224-01
 Prep Type: Total Recoverable
 Prep Batch: 563845

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	130000		25000	154000	4	ug/L		103	80 - 120	1	20
Magnesium	15000		25000	38900		ug/L		96	80 - 120	2	20
Potassium	2400		25000	26300		ug/L		96	80 - 120	2	20
Sodium	28000		25000	52300		ug/L		98	80 - 120	2	20

Eurofins Canton

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181022-1

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-564459/30
Matrix: Water
Analysis Batch: 564459

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			03/06/23 13:08	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 13:08	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 13:08	1

Lab Sample ID: MB 240-564459/4
Matrix: Water
Analysis Batch: 564459

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			03/06/23 11:25	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 11:25	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 11:25	1

Lab Sample ID: MB 240-564459/56
Matrix: Water
Analysis Batch: 564459

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			03/06/23 14:59	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 14:59	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 14:59	1

Lab Sample ID: LCS 240-564459/29
Matrix: Water
Analysis Batch: 564459

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	138		mg/L		95	86 - 123

Lab Sample ID: LCS 240-564459/55
Matrix: Water
Analysis Batch: 564459

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	138		mg/L		95	86 - 123

Lab Sample ID: 240-181022-2 DU
Matrix: Water
Analysis Batch: 564459

Client Sample ID: BAC-22-F-20230224-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	220		219		mg/L		0.4	20
Bicarbonate Alkalinity as CaCO3	220		219		mg/L		0.4	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181022-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-564377/3
 Matrix: Water
 Analysis Batch: 564377

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			03/06/23 11:34	1
Fluoride	ND		0.050	0.024	mg/L			03/06/23 11:34	1
Sulfate	ND		1.0	0.35	mg/L			03/06/23 11:34	1

Lab Sample ID: LCS 240-564377/4
 Matrix: Water
 Analysis Batch: 564377

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	47.9		mg/L		96	90 - 110
Fluoride	2.50	2.60		mg/L		104	90 - 110
Sulfate	50.0	49.4		mg/L		99	90 - 110

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

Lab Sample ID: MB 240-564087/1
 Matrix: Water
 Analysis Batch: 564087

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			03/02/23 17:58	1

Lab Sample ID: LCS 240-564087/2
 Matrix: Water
 Analysis Batch: 564087

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	475	449		mg/L		95	80 - 120

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181022-1

Metals

Prep Batch: 563845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181022-1	BAC-21-F-20230224-01	Total Recoverable	Water	3005A	
240-181022-2	BAC-22-F-20230224-01	Total Recoverable	Water	3005A	
240-181022-3	EB-001-F-20230224-01	Total Recoverable	Water	3005A	
MB 240-563845/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-563845/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-563845/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-181022-1 MS	BAC-21-F-20230224-01	Total Recoverable	Water	3005A	
240-181022-1 MSD	BAC-21-F-20230224-01	Total Recoverable	Water	3005A	

Analysis Batch: 564038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181022-1	BAC-21-F-20230224-01	Total Recoverable	Water	6020B	563845
240-181022-2	BAC-22-F-20230224-01	Total Recoverable	Water	6020B	563845
240-181022-3	EB-001-F-20230224-01	Total Recoverable	Water	6020B	563845
MB 240-563845/1-A	Method Blank	Total Recoverable	Water	6020B	563845
LCS 240-563845/3-A	Lab Control Sample	Total Recoverable	Water	6020B	563845
240-181022-1 MS	BAC-21-F-20230224-01	Total Recoverable	Water	6020B	563845
240-181022-1 MSD	BAC-21-F-20230224-01	Total Recoverable	Water	6020B	563845

Analysis Batch: 564046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181022-1	BAC-21-F-20230224-01	Total Recoverable	Water	6010D	563845
240-181022-2	BAC-22-F-20230224-01	Total Recoverable	Water	6010D	563845
240-181022-3	EB-001-F-20230224-01	Total Recoverable	Water	6010D	563845
MB 240-563845/1-A	Method Blank	Total Recoverable	Water	6010D	563845
LCS 240-563845/2-A	Lab Control Sample	Total Recoverable	Water	6010D	563845

General Chemistry

Analysis Batch: 564087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181022-1	BAC-21-F-20230224-01	Total/NA	Water	SM 2540C	
240-181022-2	BAC-22-F-20230224-01	Total/NA	Water	SM 2540C	
240-181022-3	EB-001-F-20230224-01	Total/NA	Water	SM 2540C	
MB 240-564087/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-564087/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 564377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181022-1	BAC-21-F-20230224-01	Total/NA	Water	300.0	
240-181022-2	BAC-22-F-20230224-01	Total/NA	Water	300.0	
240-181022-2	BAC-22-F-20230224-01	Total/NA	Water	300.0	
240-181022-3	EB-001-F-20230224-01	Total/NA	Water	300.0	
MB 240-564377/3	Method Blank	Total/NA	Water	300.0	
LCS 240-564377/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 564459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181022-1	BAC-21-F-20230224-01	Total/NA	Water	2320B-1997	
240-181022-2	BAC-22-F-20230224-01	Total/NA	Water	2320B-1997	
240-181022-3	EB-001-F-20230224-01	Total/NA	Water	2320B-1997	

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181022-1

General Chemistry (Continued)

Analysis Batch: 564459 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-564459/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-564459/4	Method Blank	Total/NA	Water	2320B-1997	
MB 240-564459/56	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-564459/29	Lab Control Sample	Total/NA	Water	2320B-1997	
LCS 240-564459/55	Lab Control Sample	Total/NA	Water	2320B-1997	
240-181022-2 DU	BAC-22-F-20230224-01	Total/NA	Water	2320B-1997	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181022-1

Client Sample ID: BAC-21-F-20230224-01

Lab Sample ID: 240-181022-1

Date Collected: 02/24/23 12:48

Matrix: Water

Date Received: 02/27/23 13:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			563845	AJC	EET CAN	03/01/23 15:00
Total Recoverable	Analysis	6010D		1	564046	RKT	EET CAN	03/02/23 12:57
Total Recoverable	Prep	3005A			563845	AJC	EET CAN	03/01/23 15:00
Total Recoverable	Analysis	6020B		1	564038	DSH	EET CAN	03/02/23 10:48
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 14:51
Total/NA	Analysis	300.0		1	564377	JWW	EET CAN	03/06/23 22:47
Total/NA	Analysis	SM 2540C		1	564087	GH	EET CAN	03/02/23 17:58

Client Sample ID: BAC-22-F-20230224-01

Lab Sample ID: 240-181022-2

Date Collected: 02/24/23 14:31

Matrix: Water

Date Received: 02/27/23 13:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			563845	AJC	EET CAN	03/01/23 15:00
Total Recoverable	Analysis	6010D		1	564046	RKT	EET CAN	03/02/23 13:01
Total Recoverable	Prep	3005A			563845	AJC	EET CAN	03/01/23 15:00
Total Recoverable	Analysis	6020B		1	564038	DSH	EET CAN	03/02/23 11:13
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 15:06
Total/NA	Analysis	300.0		1	564377	JWW	EET CAN	03/06/23 23:31
Total/NA	Analysis	300.0		5	564377	JWW	EET CAN	03/07/23 00:36
Total/NA	Analysis	SM 2540C		1	564087	GH	EET CAN	03/02/23 17:58

Client Sample ID: EB-001-F-20230224-01

Lab Sample ID: 240-181022-3

Date Collected: 02/24/23 15:00

Matrix: Water

Date Received: 02/27/23 13:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			563845	AJC	EET CAN	03/01/23 15:00
Total Recoverable	Analysis	6010D		1	564046	RKT	EET CAN	03/02/23 13:05
Total Recoverable	Prep	3005A			563845	AJC	EET CAN	03/01/23 15:00
Total Recoverable	Analysis	6020B		1	564038	DSH	EET CAN	03/02/23 11:16
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 15:14
Total/NA	Analysis	300.0		1	564377	JWW	EET CAN	03/07/23 00:57
Total/NA	Analysis	SM 2540C		1	564087	GH	EET CAN	03/02/23 17:58

Laboratory References:

EET CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181022-1

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23 *
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-27-23 *
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23 *
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-23 *
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-27-23 *
Ohio VAP	State	CL0024	02-27-23 *
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Barberton Facility
 Client Lightstone Site Name _____ Cooler unpacked by: Nancy Ryan
 Cooler Received on 2-27-23 Opened on 2-28-23
 FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off Eurofins Courier Other _____

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

Eurofins Cooler # ES ~~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
 See Multiple Cooler Form

1. Cooler temperature upon receipt
 IR GUN # IR-13 (CF -0.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN # IR-16 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN # IR-17 (CF -0.3 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity each 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# HC203864

14. Were VOAs on the COC? Yes No

15. Were air bubbles >6 mm in any VOA vials? Yes ← 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: _____

Tests that are not checked for pH by Receiving:
 VOAs
 Oil and Grease
 TOC

1
2
3
4
5
6
7
8
9
10
11
12
13

Chain of Custody Record




Client Information Client Contact: Taylor Huffman Company: Lightstone Generation Gavin Power LLC Address: 7387 OH-7 City: Cheshire State, Zip: OH, 45620 Phone: 740-925-3171(Tel) Email: taylor.huffman@lightstonegen.com Project Name: Federal CCR Wells - App. III Site:		Lab PM: Cisneros, Roxanne E-Mail: roxanne.cisneros@Eurofinsnet.com Carrier Tracking No(s): State of Origin:		COC No: 240-93465-34577.1 Page: Page 1 of 1 Job #:	
Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: 2935505 WO #: Project #: 24019633 SSOV#:		Analysis Requested			
Perform MS/MSD (Yes or No)		Field Filtered Sample (Yes or No)		Total Number of Containers	
Sample Identification		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Sediment, Other)
BAC-21-F-20230224-01		2-24-23	1248	G	W
BAC-22-F-20230224-01		2-24-23	1431	G	W
EB-001-F-20230224-01		2-24-23	1500	G	W
Special Instructions/Note:		Preservation Codes:		Other:	
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 - EDTA 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)		6010B, 6020 2540C_Calcd, 300.0, 28D 2320B - Alkalinity		Special Instructions/Note:	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological					
Deliverable Requested: I, II, III, IV, Other (specify)					
Empty Kit Relinquished by:					
Relinquished by: Bobby Castle		Date: 2-27-23/0855		Company: Kehlron	
Relinquished by: Tom Edwards		Date/Time: 2-27-23 1320hrs		Company: Aub Options	
Relinquished by:		Date/Time:		Company:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:	

Client Lightstone Site Name _____ Cooler unpacked by: Nancy Rye
Cooler Received on 2-27-23 Opened on 2-28-23
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off Eurofins Courier Other _____

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

Eurofins Cooler # ES ~~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

- Cooler temperature upon receipt See Multiple Cooler Form
 IR GUN # IR-13 (CF -0.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN # IR-16 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN # IR-17 (CF -0.3 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 - Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity each 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
 - Shippers' packing slip attached to the cooler(s)? Yes No
 - Did custody papers accompany the sample(s)? Yes No
 - Were the custody papers relinquished & signed in the appropriate place? Yes No
 - Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
 - Did all bottles arrive in good condition (Unbroken)? Yes No
 - Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes No
 - For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)? Yes No
 - Were correct bottle(s) used for the test(s) indicated? Yes No
 - Sufficient quantity received to perform indicated analyses? Yes No
 - 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.
- Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC203864
 - Were VOAs on the COC? Yes No
 - Were air bubbles >6 mm in any VOA vials?  ← Larger than this. Yes No NA
 - Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
 - 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: _____

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ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 3/30/2023 3:21:48 PM

JOB DESCRIPTION

Federal CCR Wells - App IV

JOB NUMBER

240-181023-1

Eurofins Canton

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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
3/30/2023 3:21:48 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Job ID: 240-181023-1

Laboratory: Eurofins Canton

Narrative

Job Narrative 240-181023-1

Receipt

The samples were received on 2/27/2023 1:20 PM. 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 0.9°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

Method 9315_Ra226: Radium-226 batch 602324: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. MW-1-F-20230224-01 (240-181023-1), BAC-21-F-20230224-01 (240-181023-2), BAC-22-F-20230224-01 (240-181023-3), EB-001-F-20230224-01 (240-181023-4), (LCS 160-602324/2-A), (MB 160-602324/1-A)

Method 9320_Ra228: Radium-228 batch 602331: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. MW-1-F-20230224-01 (240-181023-1), BAC-21-F-20230224-01 (240-181023-2), BAC-22-F-20230224-01 (240-181023-3), EB-001-F-20230224-01 (240-181023-4), (LCS 160-602331/2-A), (MB 160-602331/1-A)

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 - App IV

Job ID: 240-181023-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CAN
7470A	Mercury (CVAA)	SW846	EET CAN
2320B-1997	Alkalinity, Total	SM	EET CAN
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CAN
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 CAN
7470A	Preparation, Mercury	SW846	EET CAN
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 CAN = Eurofins Canton, 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 - App IV

Job ID: 240-181023-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-181023-1	MW-1-F-20230224-01	Water	02/24/23 12:02	02/27/23 13:20
240-181023-2	BAC-21-F-20230224-01	Water	02/24/23 12:48	02/27/23 13:20
240-181023-3	BAC-22-F-20230224-01	Water	02/24/23 14:31	02/27/23 13:20
240-181023-4	EB-001-F-20230224-01	Water	02/24/23 15:00	02/27/23 13:20

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Client Sample ID: MW-1-F-20230224-01

Lab Sample ID: 240-181023-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	120		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.20	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Cobalt	0.74	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	4.1	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	15000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	17000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.71	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.11		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-21-F-20230224-01

Lab Sample ID: 240-181023-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.8	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	160		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.94	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.5		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.0	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	16000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	2500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	30000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.26	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.058		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-22-F-20230224-01

Lab Sample ID: 240-181023-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.4	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	140		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.66	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.55	J	1.0	0.45	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Client Sample ID: BAC-22-F-20230224-01 (Continued)

Lab Sample ID: 240-181023-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	4.4	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	19000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	2900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	21000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.076		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: EB-001-F-20230224-01

Lab Sample ID: 240-181023-4

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Canton



Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Client Sample ID: MW-1-F-20230224-01

Lab Sample ID: 240-181023-1

Date Collected: 02/24/23 12:02

Matrix: Water

Date Received: 02/27/23 13:20

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		03/01/23 15:00	03/02/23 10:37	1
Arsenic	ND		5.0	0.75	ug/L		03/01/23 15:00	03/02/23 10:37	1
Barium	120		5.0	2.2	ug/L		03/01/23 15:00	03/02/23 10:37	1
Beryllium	ND		1.0	0.62	ug/L		03/01/23 15:00	03/02/23 10:37	1
Cadmium	0.20	J	1.0	0.20	ug/L		03/01/23 15:00	03/02/23 10:37	1
Chromium	ND		5.0	2.5	ug/L		03/01/23 15:00	03/02/23 10:37	1
Cobalt	0.74	J	1.0	0.19	ug/L		03/01/23 15:00	03/02/23 10:37	1
Lead	ND		1.0	0.45	ug/L		03/01/23 15:00	03/02/23 10:37	1
Lithium	4.1	J	8.0	1.7	ug/L		03/01/23 15:00	03/02/23 10:37	1
Magnesium	15000		1000	200	ug/L		03/01/23 15:00	03/02/23 10:37	1
Molybdenum	ND		5.0	1.1	ug/L		03/01/23 15:00	03/02/23 10:37	1
Potassium	1500		1000	220	ug/L		03/01/23 15:00	03/02/23 10:37	1
Selenium	ND		5.0	0.89	ug/L		03/01/23 15:00	03/02/23 10:37	1
Sodium	17000		1000	330	ug/L		03/01/23 15:00	03/02/23 10:37	1
Thallium	0.71	J	1.0	0.20	ug/L		03/01/23 15:00	03/02/23 10:37	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		03/01/23 16:00	03/02/23 09:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			03/06/23 15:19	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			03/06/23 15:19	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:19	1
Fluoride (EPA 300.0-1993 R2.1)	0.11		0.050	0.024	mg/L			03/22/23 00:39	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	0.0889		0.0639	0.0644	1.00	0.0873	pCi/L	03/03/23 11:25	03/27/23 21:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.1		30 - 110					03/03/23 11:25	03/27/23 21:09	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	0.167	U	0.273	0.274	1.00	0.469	pCi/L	03/03/23 12:12	03/15/23 11:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.1		30 - 110					03/03/23 12:12	03/15/23 11:46	1
Y Carrier	84.1		30 - 110					03/03/23 12:12	03/15/23 11:46	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Client Sample ID: MW-1-F-20230224-01

Lab Sample ID: 240-181023-1

Date Collected: 02/24/23 12:02

Matrix: Water

Date Received: 02/27/23 13:20

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	0.256	U	0.280	0.281	5.00	0.469	pCi/L		03/29/23 19:31	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Client Sample ID: BAC-21-F-20230224-01

Lab Sample ID: 240-181023-2

Date Collected: 02/24/23 12:48

Matrix: Water

Date Received: 02/27/23 13:20

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		03/01/23 15:00	03/02/23 10:40	1
Arsenic	3.8	J	5.0	0.75	ug/L		03/01/23 15:00	03/02/23 10:40	1
Barium	160		5.0	2.2	ug/L		03/01/23 15:00	03/02/23 10:40	1
Beryllium	ND		1.0	0.62	ug/L		03/01/23 15:00	03/02/23 10:40	1
Cadmium	ND		1.0	0.20	ug/L		03/01/23 15:00	03/02/23 10:40	1
Chromium	ND		5.0	2.5	ug/L		03/01/23 15:00	03/02/23 10:40	1
Cobalt	0.94	J	1.0	0.19	ug/L		03/01/23 15:00	03/02/23 10:40	1
Lead	1.5		1.0	0.45	ug/L		03/01/23 15:00	03/02/23 10:40	1
Lithium	6.0	J	8.0	1.7	ug/L		03/01/23 15:00	03/02/23 10:40	1
Magnesium	16000		1000	200	ug/L		03/01/23 15:00	03/02/23 10:40	1
Molybdenum	ND		5.0	1.1	ug/L		03/01/23 15:00	03/02/23 10:40	1
Potassium	2500		1000	220	ug/L		03/01/23 15:00	03/02/23 10:40	1
Selenium	ND		5.0	0.89	ug/L		03/01/23 15:00	03/02/23 10:40	1
Sodium	30000		1000	330	ug/L		03/01/23 15:00	03/02/23 10:40	1
Thallium	0.26	J	1.0	0.20	ug/L		03/01/23 15:00	03/02/23 10:40	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		03/01/23 16:00	03/02/23 09:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			03/06/23 15:23	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			03/06/23 15:23	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:23	1
Fluoride (EPA 300.0-1993 R2.1)	0.058		0.050	0.024	mg/L			03/22/23 01:01	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	0.397		0.160	0.164	1.00	0.179	pCi/L	03/03/23 11:25	03/28/23 13:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	67.8		30 - 110					03/03/23 11:25	03/28/23 13:13	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	0.474	U	0.598	0.600	1.00	0.993	pCi/L	03/03/23 12:12	03/15/23 11:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	67.8		30 - 110					03/03/23 12:12	03/15/23 11:46	1
Y Carrier	82.2		30 - 110					03/03/23 12:12	03/15/23 11:46	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Client Sample ID: BAC-21-F-20230224-01

Lab Sample ID: 240-181023-2

Date Collected: 02/24/23 12:48

Matrix: Water

Date Received: 02/27/23 13:20

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	0.871	U	0.619	0.622	5.00	0.993	pCi/L		03/29/23 19:31	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Client Sample ID: BAC-22-F-20230224-01

Lab Sample ID: 240-181023-3

Date Collected: 02/24/23 14:31

Matrix: Water

Date Received: 02/27/23 13:20

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		03/01/23 15:00	03/02/23 10:43	1
Arsenic	2.4	J	5.0	0.75	ug/L		03/01/23 15:00	03/02/23 10:43	1
Barium	140		5.0	2.2	ug/L		03/01/23 15:00	03/02/23 10:43	1
Beryllium	ND		1.0	0.62	ug/L		03/01/23 15:00	03/02/23 10:43	1
Cadmium	ND		1.0	0.20	ug/L		03/01/23 15:00	03/02/23 10:43	1
Chromium	ND		5.0	2.5	ug/L		03/01/23 15:00	03/02/23 10:43	1
Cobalt	0.66	J	1.0	0.19	ug/L		03/01/23 15:00	03/02/23 10:43	1
Lead	0.55	J	1.0	0.45	ug/L		03/01/23 15:00	03/02/23 10:43	1
Lithium	4.4	J	8.0	1.7	ug/L		03/01/23 15:00	03/02/23 10:43	1
Magnesium	19000		1000	200	ug/L		03/01/23 15:00	03/02/23 10:43	1
Molybdenum	ND		5.0	1.1	ug/L		03/01/23 15:00	03/02/23 10:43	1
Potassium	2900		1000	220	ug/L		03/01/23 15:00	03/02/23 10:43	1
Selenium	ND		5.0	0.89	ug/L		03/01/23 15:00	03/02/23 10:43	1
Sodium	21000		1000	330	ug/L		03/01/23 15:00	03/02/23 10:43	1
Thallium	ND		1.0	0.20	ug/L		03/01/23 15:00	03/02/23 10:43	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		03/01/23 16:00	03/02/23 09:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 15:28	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 15:28	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:28	1
Fluoride (EPA 300.0-1993 R2.1)	0.076		0.050	0.024	mg/L			03/22/23 01:22	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	0.288		0.0997	0.103	1.00	0.102	pCi/L	03/03/23 11:25	03/28/23 13:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.9		30 - 110					03/03/23 11:25	03/28/23 13:14	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	0.133	U	0.307	0.307	1.00	0.540	pCi/L	03/03/23 12:12	03/15/23 11:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.9		30 - 110					03/03/23 12:12	03/15/23 11:46	1
Y Carrier	83.0		30 - 110					03/03/23 12:12	03/15/23 11:46	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Client Sample ID: BAC-22-F-20230224-01

Lab Sample ID: 240-181023-3

Date Collected: 02/24/23 14:31

Matrix: Water

Date Received: 02/27/23 13:20

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	0.421	U	0.323	0.324	5.00	0.540	pCi/L		03/29/23 19:31	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Client Sample ID: EB-001-F-20230224-01

Lab Sample ID: 240-181023-4

Date Collected: 02/24/23 15:00

Matrix: Water

Date Received: 02/27/23 13:20

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		03/01/23 15:00	03/02/23 10:45	1
Arsenic	ND		5.0	0.75	ug/L		03/01/23 15:00	03/02/23 10:45	1
Barium	ND		5.0	2.2	ug/L		03/01/23 15:00	03/02/23 10:45	1
Beryllium	ND		1.0	0.62	ug/L		03/01/23 15:00	03/02/23 10:45	1
Cadmium	ND		1.0	0.20	ug/L		03/01/23 15:00	03/02/23 10:45	1
Chromium	ND		5.0	2.5	ug/L		03/01/23 15:00	03/02/23 10:45	1
Cobalt	ND		1.0	0.19	ug/L		03/01/23 15:00	03/02/23 10:45	1
Lead	ND		1.0	0.45	ug/L		03/01/23 15:00	03/02/23 10:45	1
Lithium	ND		8.0	1.7	ug/L		03/01/23 15:00	03/02/23 10:45	1
Magnesium	ND		1000	200	ug/L		03/01/23 15:00	03/02/23 10:45	1
Molybdenum	ND		5.0	1.1	ug/L		03/01/23 15:00	03/02/23 10:45	1
Potassium	ND		1000	220	ug/L		03/01/23 15:00	03/02/23 10:45	1
Selenium	ND		5.0	0.89	ug/L		03/01/23 15:00	03/02/23 10:45	1
Sodium	ND		1000	330	ug/L		03/01/23 15:00	03/02/23 10:45	1
Thallium	ND		1.0	0.20	ug/L		03/01/23 15:00	03/02/23 10:45	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		03/01/23 16:00	03/02/23 09:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:31	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:31	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			03/22/23 02:27	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0486	U	0.0766	0.0768	1.00	0.131	pCi/L	03/03/23 11:25	03/27/23 21:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.7		30 - 110					03/03/23 11:25	03/27/23 21:09	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.255	U	0.297	0.297	1.00	0.487	pCi/L	03/03/23 12:12	03/15/23 11:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.7		30 - 110					03/03/23 12:12	03/15/23 11:48	1
Y Carrier	83.4		30 - 110					03/03/23 12:12	03/15/23 11:48	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Client Sample ID: EB-001-F-20230224-01

Lab Sample ID: 240-181023-4

Date Collected: 02/24/23 15:00

Matrix: Water

Date Received: 02/27/23 13:20

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	0.304	U	0.307	0.307	5.00	0.487	pCi/L		03/29/23 19:31	1

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Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)
240-181023-1	MW-1-F-20230224-01	90.1
240-181023-2	BAC-21-F-20230224-01	67.8
240-181023-3	BAC-22-F-20230224-01	85.9
240-181023-4	EB-001-F-20230224-01	90.7
LCS 160-602324/2-A	Lab Control Sample	81.9
MB 160-602324/1-A	Method Blank	91.0

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-181023-1	MW-1-F-20230224-01	90.1	84.1
240-181023-2	BAC-21-F-20230224-01	67.8	82.2
240-181023-3	BAC-22-F-20230224-01	85.9	83.0
240-181023-4	EB-001-F-20230224-01	90.7	83.4
LCS 160-602331/2-A	Lab Control Sample	81.9	86.0
MB 160-602331/1-A	Method Blank	91.0	83.0

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-563845/1-A
Matrix: Water
Analysis Batch: 564038

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 563845

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/01/23 15:00	03/02/23 10:32	1
Arsenic	ND		5.0	0.75	ug/L		03/01/23 15:00	03/02/23 10:32	1
Barium	ND		5.0	2.2	ug/L		03/01/23 15:00	03/02/23 10:32	1
Beryllium	ND		1.0	0.62	ug/L		03/01/23 15:00	03/02/23 10:32	1
Cadmium	ND		1.0	0.20	ug/L		03/01/23 15:00	03/02/23 10:32	1
Chromium	ND		5.0	2.5	ug/L		03/01/23 15:00	03/02/23 10:32	1
Cobalt	ND		1.0	0.19	ug/L		03/01/23 15:00	03/02/23 10:32	1
Lead	ND		1.0	0.45	ug/L		03/01/23 15:00	03/02/23 10:32	1
Lithium	ND		8.0	1.7	ug/L		03/01/23 15:00	03/02/23 10:32	1
Magnesium	ND		1000	200	ug/L		03/01/23 15:00	03/02/23 10:32	1
Molybdenum	ND		5.0	1.1	ug/L		03/01/23 15:00	03/02/23 10:32	1
Potassium	ND		1000	220	ug/L		03/01/23 15:00	03/02/23 10:32	1
Selenium	ND		5.0	0.89	ug/L		03/01/23 15:00	03/02/23 10:32	1
Sodium	ND		1000	330	ug/L		03/01/23 15:00	03/02/23 10:32	1
Thallium	ND		1.0	0.20	ug/L		03/01/23 15:00	03/02/23 10:32	1

Lab Sample ID: LCS 240-563845/3-A
Matrix: Water
Analysis Batch: 564038

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 563845

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	98.1		ug/L		98	80 - 120
Arsenic	1000	924		ug/L		92	80 - 120
Barium	1000	930		ug/L		93	80 - 120
Beryllium	500	495		ug/L		99	80 - 120
Cadmium	500	478		ug/L		96	80 - 120
Chromium	500	474		ug/L		95	80 - 120
Cobalt	500	469		ug/L		94	80 - 120
Lead	500	477		ug/L		95	80 - 120
Lithium	500	486		ug/L		97	80 - 120
Magnesium	25000	24000		ug/L		96	80 - 120
Molybdenum	500	459		ug/L		92	80 - 120
Potassium	25000	24200		ug/L		97	80 - 120
Selenium	1000	920		ug/L		92	80 - 120
Sodium	25000	24000		ug/L		96	80 - 120
Thallium	1000	941		ug/L		94	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-563849/1-A
Matrix: Water
Analysis Batch: 564034

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563849

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/01/23 16:00	03/02/23 08:50	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-563849/2-A
 Matrix: Water
 Analysis Batch: 564034

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 563849

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.14		ug/L		103	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-564459/30
 Matrix: Water
 Analysis Batch: 564459

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			03/06/23 13:08	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 13:08	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 13:08	1

Lab Sample ID: MB 240-564459/56
 Matrix: Water
 Analysis Batch: 564459

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			03/06/23 14:59	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 14:59	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 14:59	1

Lab Sample ID: LCS 240-564459/55
 Matrix: Water
 Analysis Batch: 564459

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	138		mg/L		95	86 - 123

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-566256/3
 Matrix: Water
 Analysis Batch: 566256

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			03/21/23 14:06	1

Lab Sample ID: LCS 240-566256/4
 Matrix: Water
 Analysis Batch: 566256

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.72		mg/L		109	90 - 110

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-602324/1-A
Matrix: Water
Analysis Batch: 605095

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602324

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.02066	U	0.0536	0.0537	1.00	0.0993	pCi/L	03/03/23 11:25	03/27/23 16:04	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	91.0		30 - 110					03/03/23 11:25	03/27/23 16:04	1

Lab Sample ID: LCS 160-602324/2-A
Matrix: Water
Analysis Batch: 605095

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602324

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	11.64		1.20	1.00	0.113	pCi/L	103	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits		Prepared	Analyzed	Dil Fac		
Ba Carrier	81.9		30 - 110					03/03/23 11:25	03/27/23 16:04

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-602331/1-A
Matrix: Water
Analysis Batch: 603705

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602331

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.6207		0.332	0.337	1.00	0.457	pCi/L	03/03/23 12:12	03/15/23 11:40	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	91.0		30 - 110					03/03/23 12:12	03/15/23 11:40	1
Y Carrier	83.0		30 - 110		03/03/23 12:12	03/15/23 11:40	1			

Lab Sample ID: LCS 160-602331/2-A
Matrix: Water
Analysis Batch: 603705

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602331

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-228	8.12	8.960		1.27	1.00	0.583	pCi/L	110	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits		Prepared	Analyzed	Dil Fac		
Ba Carrier	81.9		30 - 110					03/03/23 12:12	03/15/23 11:40
Y Carrier	86.0		30 - 110		03/03/23 12:12	03/15/23 11:40	1		

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Metals

Prep Batch: 563845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181023-1	MW-1-F-20230224-01	Total Recoverable	Water	3005A	
240-181023-2	BAC-21-F-20230224-01	Total Recoverable	Water	3005A	
240-181023-3	BAC-22-F-20230224-01	Total Recoverable	Water	3005A	
240-181023-4	EB-001-F-20230224-01	Total Recoverable	Water	3005A	
MB 240-563845/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-563845/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 563849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181023-1	MW-1-F-20230224-01	Total/NA	Water	7470A	
240-181023-2	BAC-21-F-20230224-01	Total/NA	Water	7470A	
240-181023-3	BAC-22-F-20230224-01	Total/NA	Water	7470A	
240-181023-4	EB-001-F-20230224-01	Total/NA	Water	7470A	
MB 240-563849/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-563849/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 564034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181023-1	MW-1-F-20230224-01	Total/NA	Water	7470A	563849
240-181023-2	BAC-21-F-20230224-01	Total/NA	Water	7470A	563849
240-181023-3	BAC-22-F-20230224-01	Total/NA	Water	7470A	563849
240-181023-4	EB-001-F-20230224-01	Total/NA	Water	7470A	563849
MB 240-563849/1-A	Method Blank	Total/NA	Water	7470A	563849
LCS 240-563849/2-A	Lab Control Sample	Total/NA	Water	7470A	563849

Analysis Batch: 564038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181023-1	MW-1-F-20230224-01	Total Recoverable	Water	6020B	563845
240-181023-2	BAC-21-F-20230224-01	Total Recoverable	Water	6020B	563845
240-181023-3	BAC-22-F-20230224-01	Total Recoverable	Water	6020B	563845
240-181023-4	EB-001-F-20230224-01	Total Recoverable	Water	6020B	563845
MB 240-563845/1-A	Method Blank	Total Recoverable	Water	6020B	563845
LCS 240-563845/3-A	Lab Control Sample	Total Recoverable	Water	6020B	563845

General Chemistry

Analysis Batch: 564459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181023-1	MW-1-F-20230224-01	Total/NA	Water	2320B-1997	
240-181023-2	BAC-21-F-20230224-01	Total/NA	Water	2320B-1997	
240-181023-3	BAC-22-F-20230224-01	Total/NA	Water	2320B-1997	
240-181023-4	EB-001-F-20230224-01	Total/NA	Water	2320B-1997	
MB 240-564459/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-564459/56	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-564459/55	Lab Control Sample	Total/NA	Water	2320B-1997	

Analysis Batch: 566256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181023-1	MW-1-F-20230224-01	Total/NA	Water	300.0-1993 R2.1	
240-181023-2	BAC-21-F-20230224-01	Total/NA	Water	300.0-1993 R2.1	
240-181023-3	BAC-22-F-20230224-01	Total/NA	Water	300.0-1993 R2.1	

Eurofins Canton

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

General Chemistry (Continued)

Analysis Batch: 566256 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181023-4	EB-001-F-20230224-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-566256/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-566256/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

Rad

Prep Batch: 602324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181023-1	MW-1-F-20230224-01	Total/NA	Water	PrecSep-21	
240-181023-2	BAC-21-F-20230224-01	Total/NA	Water	PrecSep-21	
240-181023-3	BAC-22-F-20230224-01	Total/NA	Water	PrecSep-21	
240-181023-4	EB-001-F-20230224-01	Total/NA	Water	PrecSep-21	
MB 160-602324/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-602324/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 602331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181023-1	MW-1-F-20230224-01	Total/NA	Water	PrecSep_0	
240-181023-2	BAC-21-F-20230224-01	Total/NA	Water	PrecSep_0	
240-181023-3	BAC-22-F-20230224-01	Total/NA	Water	PrecSep_0	
240-181023-4	EB-001-F-20230224-01	Total/NA	Water	PrecSep_0	
MB 160-602331/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-602331/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Client Sample ID: MW-1-F-20230224-01

Lab Sample ID: 240-181023-1

Date Collected: 02/24/23 12:02

Matrix: Water

Date Received: 02/27/23 13:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			563845	AJC	EET CAN	03/01/23 15:00
Total Recoverable	Analysis	6020B		1	564038	DSH	EET CAN	03/02/23 10:37
Total/NA	Prep	7470A			563849	AJC	EET CAN	03/01/23 16:00
Total/NA	Analysis	7470A		1	564034	MRL	EET CAN	03/02/23 09:01
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 15:19
Total/NA	Analysis	300.0-1993 R2.1		1	566256	JMB	EET CAN	03/22/23 00:39
Total/NA	Prep	PrecSep-21			602324	DJP	EET SL	03/03/23 11:25
Total/NA	Analysis	9315		1	605094	FLC	EET SL	03/27/23 21:09
Total/NA	Prep	PrecSep_0			602331	DJP	EET SL	03/03/23 12:12
Total/NA	Analysis	9320		1	603705	FLC	EET SL	03/15/23 11:46
Total/NA	Analysis	Ra226_Ra228		1	605403	MLK	EET SL	03/29/23 19:31

Client Sample ID: BAC-21-F-20230224-01

Lab Sample ID: 240-181023-2

Date Collected: 02/24/23 12:48

Matrix: Water

Date Received: 02/27/23 13:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			563845	AJC	EET CAN	03/01/23 15:00
Total Recoverable	Analysis	6020B		1	564038	DSH	EET CAN	03/02/23 10:40
Total/NA	Prep	7470A			563849	AJC	EET CAN	03/01/23 16:00
Total/NA	Analysis	7470A		1	564034	MRL	EET CAN	03/02/23 09:03
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 15:23
Total/NA	Analysis	300.0-1993 R2.1		1	566256	JMB	EET CAN	03/22/23 01:01
Total/NA	Prep	PrecSep-21			602324	DJP	EET SL	03/03/23 11:25
Total/NA	Analysis	9315		1	605277	FLC	EET SL	03/28/23 13:13
Total/NA	Prep	PrecSep_0			602331	DJP	EET SL	03/03/23 12:12
Total/NA	Analysis	9320		1	603705	FLC	EET SL	03/15/23 11:46
Total/NA	Analysis	Ra226_Ra228		1	605403	MLK	EET SL	03/29/23 19:31

Client Sample ID: BAC-22-F-20230224-01

Lab Sample ID: 240-181023-3

Date Collected: 02/24/23 14:31

Matrix: Water

Date Received: 02/27/23 13:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			563845	AJC	EET CAN	03/01/23 15:00
Total Recoverable	Analysis	6020B		1	564038	DSH	EET CAN	03/02/23 10:43
Total/NA	Prep	7470A			563849	AJC	EET CAN	03/01/23 16:00
Total/NA	Analysis	7470A		1	564034	MRL	EET CAN	03/02/23 09:05
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 15:28
Total/NA	Analysis	300.0-1993 R2.1		1	566256	JMB	EET CAN	03/22/23 01:22
Total/NA	Prep	PrecSep-21			602324	DJP	EET SL	03/03/23 11:25
Total/NA	Analysis	9315		1	605277	FLC	EET SL	03/28/23 13:14
Total/NA	Prep	PrecSep_0			602331	DJP	EET SL	03/03/23 12:12
Total/NA	Analysis	9320		1	603705	FLC	EET SL	03/15/23 11:46

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Client Sample ID: BAC-22-F-20230224-01

Lab Sample ID: 240-181023-3

Date Collected: 02/24/23 14:31

Matrix: Water

Date Received: 02/27/23 13:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228		1	605403	MLK	EET SL	03/29/23 19:31

Client Sample ID: EB-001-F-20230224-01

Lab Sample ID: 240-181023-4

Date Collected: 02/24/23 15:00

Matrix: Water

Date Received: 02/27/23 13:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			563845	AJC	EET CAN	03/01/23 15:00
Total Recoverable	Analysis	6020B		1	564038	DSH	EET CAN	03/02/23 10:45
Total/NA	Prep	7470A			563849	AJC	EET CAN	03/01/23 16:00
Total/NA	Analysis	7470A		1	564034	MRL	EET CAN	03/02/23 09:07
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 15:31
Total/NA	Analysis	300.0-1993 R2.1		1	566256	JMB	EET CAN	03/22/23 02:27
Total/NA	Prep	PrecSep-21			602324	DJP	EET SL	03/03/23 11:25
Total/NA	Analysis	9315		1	605094	FLC	EET SL	03/27/23 21:09
Total/NA	Prep	PrecSep_0			602331	DJP	EET SL	03/03/23 12:12
Total/NA	Analysis	9320		1	603705	FLC	EET SL	03/15/23 11:48
Total/NA	Analysis	Ra226_Ra228		1	605403	MLK	EET SL	03/29/23 19:31

Laboratory References:

EET CAN = Eurofins Canton, 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
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23 *
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-28-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23 *
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-23 *
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	03-22-23
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	03-27-23
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-23
Connecticut	State	PH-0241	03-31-23
Florida	NELAP	E87689	06-30-23
HI - RadChem Recognition	State	n/a	06-30-23
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana (All)	NELAP	04080	06-30-23
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-23
MI - RadChem Recognition	State	9005	06-30-23
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-23
New Jersey	NELAP	MO002	06-30-23
New York	NELAP	11616	04-01-23
North Carolina (DW)	State	29700	07-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Canton

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

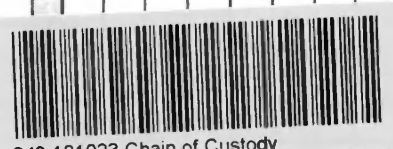
Job ID: 240-181023-1

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 Dakota	State	R-207	06-30-23
Oklahoma	NELAP	9997	08-31-23
Oregon	NELAP	4157	09-01-23
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23
Texas	NELAP	T104704193	07-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00028	06-11-23
Utah	NELAP	MO000542021-14	07-31-23
Virginia	NELAP	10310	06-14-24
Washington	State	C592	08-30-23
West Virginia DEP	State	381	10-31-23

Chain of Custody Record


Client Information	Sampler: <i>Edy Bobby Caste</i> Photos: <i>740-373-4308</i> PWSID:	Lab PM: Cisneros, Roxanne E-Mail: roxanne.cisneros@Eurolins.com	Carmer Tracking No(s): 240-93466-34578-1 State of Origin:	COC No: 240-93466-34578-1 Page: Page 1 of 1 Job #:																														
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: Federal CCR Wells - App IV Site:																																		
Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: 2935505 WO #:																																		
Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 6020, 7470A 300.0, 28D - Fluoride 2320B - Alkalinity 9315, Ra226, 9320, Ra228, Ra226Ra228, GPPC																																		
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 Other:																																		
M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)																																		
Special Instructions/Note: Total Number of Containers: <input checked="" type="checkbox"/>																																		
240-181023 Chain of Custody 																																		
Sample Identification <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Sample ID</th> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=comp, G=grab)</th> <th>Preservation Code</th> <th>Matrix (W=water, S=solid, O=oil, A=air)</th> </tr> </thead> <tbody> <tr> <td>MW-1-F-20230224-01</td> <td>2-24-23</td> <td>1202</td> <td>G</td> <td>6</td> <td>Water</td> </tr> <tr> <td>BAC-21-F-20230224-01</td> <td>2-24-23</td> <td>1748</td> <td>G</td> <td>6</td> <td>Water</td> </tr> <tr> <td>BAC-22-F-20230224-01</td> <td>2-24-23</td> <td>1431</td> <td>G</td> <td>6</td> <td>Water</td> </tr> <tr> <td>EB-001-F-20230224-01</td> <td>2-24-23</td> <td>1500</td> <td>G</td> <td>6</td> <td>Water</td> </tr> </tbody> </table>					Sample ID	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Preservation Code	Matrix (W=water, S=solid, O=oil, A=air)	MW-1-F-20230224-01	2-24-23	1202	G	6	Water	BAC-21-F-20230224-01	2-24-23	1748	G	6	Water	BAC-22-F-20230224-01	2-24-23	1431	G	6	Water	EB-001-F-20230224-01	2-24-23	1500	G	6	Water
Sample ID	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Preservation Code	Matrix (W=water, S=solid, O=oil, A=air)																													
MW-1-F-20230224-01	2-24-23	1202	G	6	Water																													
BAC-21-F-20230224-01	2-24-23	1748	G	6	Water																													
BAC-22-F-20230224-01	2-24-23	1431	G	6	Water																													
EB-001-F-20230224-01	2-24-23	1500	G	6	Water																													
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)																																		
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:																																		
Empty Kit Relinquished by: _____ Date: _____ Relinquished by: <i>Edy Bobby Caste</i> Relinquished by: <i>Tom Edwards</i> Relinquished by:																																		
Received by: <i>Tom Edwards</i> Received by: <i>M. A. D.</i> Received by:																																		
Date/Time: <i>2-27-23 0855</i> Date/Time: <i>2-27-23 1320hrs</i> Date/Time:																																		
Company: <i>Auto Options</i> Company: <i>Auto Options</i> Company:																																		
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.:																																		



Client Lightstone Site Name _____ Cooler unpacked by: Vanykyer
 Cooler Received on 2-27-23 Opened on 2-28-23
 FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off Eurofins Courier Other _____

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

Eurofins Cooler # ES Foam Box Client Cooler Box Other _____
 Packing material used: Bubble Wrap Foam Plastic Bag None Other _____
 COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt See Multiple Cooler Form
 IR GUN # IR-13 (CF -0.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN # IR-16 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN # IR-17 (CF -0.3 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity each 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 NA
 -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# HC203864
14. Were VOAs on the COC? Yes No
15. Were air bubbles >6 mm in any VOA vials? Yes No NA  ← Larger than this.
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: _____

Temperature readings:

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
MW-1-F-20230224-01	240-181023-A-1	Plastic 250ml - unpreserved				
MW-1-F-20230224-01	240-181023-B-1	Plastic 250ml - unpreserved				
MW-1-F-20230224-01	240-181023-C-1	Plastic 500ml - with Nitric Acid	<2			
MW-1-F-20230224-01	240-181023-D-1	Plastic 1 liter - Nitric Acid	<2			
MW-1-F-20230224-01	240-181023-E-1	Plastic 1 liter - Nitric Acid	<2			
BAC-21-F-20230224-01	240-181023-A-2	Plastic 250ml - unpreserved				
BAC-21-F-20230224-01	240-181023-B-2	Plastic 250ml - unpreserved				
BAC-21-F-20230224-01	240-181023-C-2	Plastic 500ml - with Nitric Acid	<2			
BAC-21-F-20230224-01	240-181023-D-2	Plastic 1 liter - Nitric Acid	<2			
BAC-21-F-20230224-01	240-181023-E-2	Plastic 1 liter - Nitric Acid	<2			
BAC-22-F-20230224-01	240-181023-A-3	Plastic 250ml - unpreserved				
BAC-22-F-20230224-01	240-181023-B-3	Plastic 250ml - unpreserved				
BAC-22-F-20230224-01	240-181023-C-3	Plastic 500ml - with Nitric Acid	<2			
BAC-22-F-20230224-01	240-181023-D-3	Plastic 1 liter - Nitric Acid	<2			
BAC-22-F-20230224-01	240-181023-E-3	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-20230224-01	240-181023-A-4	Plastic 250ml - unpreserved				
EB-001-F-20230224-01	240-181023-B-4	Plastic 250ml - unpreserved				
EB-001-F-20230224-01	240-181023-C-4	Plastic 500ml - with Nitric Acid	<2			
EB-001-F-20230224-01	240-181023-D-4	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-20230224-01	240-181023-E-4	Plastic 1 liter - Nitric Acid	<2			

Chain of Custody Record



Client Information (Sub Contract Lab)			Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): 240-164418.1																																																																								
Client Contact: Shipping/Receiving			E-Mail: roxanne.cisneros@et.eurofinsus.com	Page: Page 1 of 1																																																																								
Company: TestAmerica Laboratories, Inc.			Accreditations Required (See note):	Job #: 240-181023-1																																																																								
Address: 13715 Rider Trail North,			State of Origin: Ohio	Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma L - EDTA Z - other (specify) Other:																																																																								
City: Earth City			Analysis Requested																																																																									
State, Zip: MO, 63045																																																																												
Phone: 314-298-8566(Tel) 314-298-8757(Fax)			<table border="1"> <thead> <tr> <th>Sample ID</th> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=comp, G=grab)</th> <th>Matrix (W=water, S=solid, O=water/oil, BT=leach, A=air)</th> <th>Field Filtered Sample (Yes or No)</th> <th>Perform MS/MSD (Yes or No)</th> <th>9315 Ra226/PreSep_21 Radium-226 (GFC)</th> <th>9320 Ra228/PreSep_0 Radium-228 (GFC)</th> <th>Ra226Ra228_GFC/ Combined Radium-226 and</th> <th>Total Number of containers</th> <th>Special Instructions/Note:</th> </tr> </thead> <tbody> <tr> <td>MW-1-F-20230224-01 (240-181023-1)</td> <td>2/24/23</td> <td>12:02 Eastern</td> <td>Water</td> <td>Water</td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>2</td> <td>Recount of TAR after 21 day ingrowth if > action limit, save planchet</td> </tr> <tr> <td>BAC-21-F-20230224-01 (240-181023-2)</td> <td>2/24/23</td> <td>12:48 Eastern</td> <td>Water</td> <td>Water</td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>2</td> <td>Recount of TAR after 21 day ingrowth if > action limit, save planchet</td> </tr> <tr> <td>BAC-22-F-20230224-01 (240-181023-3)</td> <td>2/24/23</td> <td>14:31 Eastern</td> <td>Water</td> <td>Water</td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>2</td> <td>Recount of TAR after 21 day ingrowth if > action limit, save planchet</td> </tr> <tr> <td>EB-001-F-20230224-01 (240-181023-4)</td> <td>2/24/23</td> <td>15:00 Eastern</td> <td>Water</td> <td>Water</td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>2</td> <td>Recount of TAR after 21 day ingrowth if > action limit, save planchet</td> </tr> <tr> <td colspan="12">8</td> </tr> </tbody> </table>		Sample ID	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=water/oil, BT=leach, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315 Ra226/PreSep_21 Radium-226 (GFC)	9320 Ra228/PreSep_0 Radium-228 (GFC)	Ra226Ra228_GFC/ Combined Radium-226 and	Total Number of containers	Special Instructions/Note:	MW-1-F-20230224-01 (240-181023-1)	2/24/23	12:02 Eastern	Water	Water		X	X	X		2	Recount of TAR after 21 day ingrowth if > action limit, save planchet	BAC-21-F-20230224-01 (240-181023-2)	2/24/23	12:48 Eastern	Water	Water		X	X	X		2	Recount of TAR after 21 day ingrowth if > action limit, save planchet	BAC-22-F-20230224-01 (240-181023-3)	2/24/23	14:31 Eastern	Water	Water		X	X	X		2	Recount of TAR after 21 day ingrowth if > action limit, save planchet	EB-001-F-20230224-01 (240-181023-4)	2/24/23	15:00 Eastern	Water	Water		X	X	X		2	Recount of TAR after 21 day ingrowth if > action limit, save planchet	8											
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Project Name: Federal CCR Wells - App IV			Project #: 24019633																																																																									
Site:			SSOW#:																																																																									
<p>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/test/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.</p> <p>Possible Hazard Identification</p> <p>Unconfirmed</p> <p>Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2</p> <p>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months</p> <p>Special Instructions/QC Requirements:</p>																																																																												
Relinquished by: [Signature]			Date: [Signature]																																																																									
Relinquished by: [Signature]			Date: [Signature]																																																																									
Relinquished by: [Signature]			Date: [Signature]																																																																									
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No			Custody Seal No.:																																																																									
Cooler Temperature(s) °C and Other Remarks:																																																																												



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-181023-1

Login Number: 181023

List Number: 2

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

List Creation: 03/01/23 07:58 PM

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



 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 3/14/2023 4:06:40 PM

JOB DESCRIPTION

Federal CCR Wells - App III

JOB NUMBER

240-181143-1

Eurofins Canton

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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



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Designee for
Roxanne Cisneros, Senior Project Manager
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(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

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.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Job ID: 240-181143-1

Laboratory: Eurofins Canton

Narrative

Job Narrative
240-181143-1

Receipt

The samples were received on 3/1/2023 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 0.2°C, 1.1°C, 2.3°C and 13.6°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.

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Method Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CAN
6020B	Metals (ICP/MS)	SW846	EET CAN
2320B-1997	Alkalinity, Total	SM	EET CAN
300.0	Anions, Ion Chromatography	EPA	EET CAN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CAN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CAN

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 CAN = Eurofins Canton, 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 - App III

Job ID: 240-181143-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-181143-1	BAC-16-F-20230227-01	Water	02/27/23 10:05	03/01/23 08:00
240-181143-2	DUP-002-BAC-16-F-20230227-01	Water	02/27/23 10:05	03/01/23 08:00
240-181143-3	BAC-14-F-20230227-01	Water	02/27/23 11:46	03/01/23 08:00
240-181143-4	BAC-12-F-20230227-01	Water	02/27/23 12:29	03/01/23 08:00
240-181143-5	BAC-10-F-20230227-01	Water	02/27/23 13:22	03/01/23 08:00
240-181143-6	EB-001-F-20230227-01	Water	02/27/23 14:10	03/01/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Client Sample ID: BAC-16-F-20230227-01

Lab Sample ID: 240-181143-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1500		100	57	ug/L	1		6010D	Total Recoverable
Calcium	100000		1000	580	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	2300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	26		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.044	J	0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	180		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	460		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-002-BAC-16-F-20230227-01

Lab Sample ID: 240-181143-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1500		100	57	ug/L	1		6010D	Total Recoverable
Calcium	100000		1000	580	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	2500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	26		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.046	J	0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	470		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-14-F-20230227-01

Lab Sample ID: 240-181143-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2900		100	57	ug/L	1		6010D	Total Recoverable
Calcium	78000		1000	580	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	23000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	77		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	77		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	34		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.051		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	210		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	440		10	7.8	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Client Sample ID: BAC-12-F-20230227-01

Lab Sample ID: 240-181143-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2200		100	57	ug/L	1		6010D	Total Recoverable
Calcium	77000		1000	580	ug/L	1		6020B	Total Recoverable
Magnesium	17000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	3300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	28000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	93		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	93		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	56		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.068		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	180		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	440		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-10-F-20230227-01

Lab Sample ID: 240-181143-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	710		100	57	ug/L	1		6010D	Total Recoverable
Calcium	110000		1000	580	ug/L	1		6020B	Total Recoverable
Magnesium	27000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	2200		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	52000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	45		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.16		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	230		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	640		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-001-F-20230227-01

Lab Sample ID: 240-181143-6

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Client Sample ID: BAC-16-F-20230227-01

Lab Sample ID: 240-181143-1

Date Collected: 02/27/23 10:05

Matrix: Water

Date Received: 03/01/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1500		100	57	ug/L		03/02/23 17:00	03/06/23 14:43	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	100000		1000	580	ug/L		03/02/23 17:00	03/03/23 15:46	1
Magnesium	22000		1000	200	ug/L		03/02/23 17:00	03/03/23 15:46	1
Potassium	2300		1000	220	ug/L		03/02/23 17:00	03/03/23 15:46	1
Sodium	15000		1000	330	ug/L		03/02/23 17:00	03/03/23 15:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	160		5.0	2.6	mg/L			03/06/23 15:35	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	160		5.0	2.6	mg/L			03/06/23 15:35	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:35	1
Chloride (EPA 300.0)	26		1.0	0.13	mg/L			03/08/23 15:21	1
Fluoride (EPA 300.0)	0.044	J	0.050	0.024	mg/L			03/08/23 15:21	1
Sulfate (EPA 300.0)	180		1.0	0.35	mg/L			03/08/23 15:21	1
Total Dissolved Solids (SM 2540C)	460		10	7.8	mg/L			03/06/23 10:27	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Client Sample ID: DUP-002-BAC-16-F-20230227-01

Lab Sample ID: 240-181143-2

Date Collected: 02/27/23 10:05

Matrix: Water

Date Received: 03/01/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1500		100	57	ug/L		03/02/23 17:00	03/06/23 15:00	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	100000		1000	580	ug/L		03/02/23 17:00	03/03/23 16:16	1
Magnesium	22000		1000	200	ug/L		03/02/23 17:00	03/03/23 16:16	1
Potassium	2500		1000	220	ug/L		03/02/23 17:00	03/03/23 16:16	1
Sodium	15000		1000	330	ug/L		03/02/23 17:00	03/03/23 16:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	160		5.0	2.6	mg/L			03/06/23 15:39	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	160		5.0	2.6	mg/L			03/06/23 15:39	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:39	1
Chloride (EPA 300.0)	26		1.0	0.13	mg/L			03/08/23 15:43	1
Fluoride (EPA 300.0)	0.046	J	0.050	0.024	mg/L			03/08/23 15:43	1
Sulfate (EPA 300.0)	190		1.0	0.35	mg/L			03/08/23 15:43	1
Total Dissolved Solids (SM 2540C)	470		10	7.8	mg/L			03/06/23 10:27	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Client Sample ID: BAC-14-F-20230227-01

Lab Sample ID: 240-181143-3

Date Collected: 02/27/23 11:46

Matrix: Water

Date Received: 03/01/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2900		100	57	ug/L		03/02/23 17:00	03/06/23 15:13	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	78000		1000	580	ug/L		03/02/23 17:00	03/03/23 16:19	1
Magnesium	21000		1000	200	ug/L		03/02/23 17:00	03/03/23 16:19	1
Potassium	1900		1000	220	ug/L		03/02/23 17:00	03/03/23 16:19	1
Sodium	23000		1000	330	ug/L		03/02/23 17:00	03/03/23 16:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	77		5.0	2.6	mg/L			03/06/23 15:43	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	77		5.0	2.6	mg/L			03/06/23 15:43	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:43	1
Chloride (EPA 300.0)	34		1.0	0.13	mg/L			03/08/23 16:04	1
Fluoride (EPA 300.0)	0.051		0.050	0.024	mg/L			03/08/23 16:04	1
Sulfate (EPA 300.0)	210		5.0	1.7	mg/L			03/10/23 18:27	5
Total Dissolved Solids (SM 2540C)	440		10	7.8	mg/L			03/06/23 10:27	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Client Sample ID: BAC-12-F-20230227-01

Lab Sample ID: 240-181143-4

Date Collected: 02/27/23 12:29

Matrix: Water

Date Received: 03/01/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2200		100	57	ug/L		03/02/23 17:00	03/06/23 15:17	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	77000		1000	580	ug/L		03/02/23 17:00	03/03/23 16:27	1
Magnesium	17000		1000	200	ug/L		03/02/23 17:00	03/03/23 16:27	1
Potassium	3300		1000	220	ug/L		03/02/23 17:00	03/03/23 16:27	1
Sodium	28000		1000	330	ug/L		03/02/23 17:00	03/03/23 16:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	93		5.0	2.6	mg/L			03/06/23 15:49	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	93		5.0	2.6	mg/L			03/06/23 15:49	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:49	1
Chloride (EPA 300.0)	56		1.0	0.13	mg/L			03/08/23 16:26	1
Fluoride (EPA 300.0)	0.068		0.050	0.024	mg/L			03/08/23 16:26	1
Sulfate (EPA 300.0)	180		1.0	0.35	mg/L			03/08/23 16:26	1
Total Dissolved Solids (SM 2540C)	440		10	7.8	mg/L			03/06/23 10:27	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Client Sample ID: BAC-10-F-20230227-01

Lab Sample ID: 240-181143-5

Date Collected: 02/27/23 13:22

Matrix: Water

Date Received: 03/01/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	710		100	57	ug/L		03/02/23 17:00	03/06/23 15:21	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110000		1000	580	ug/L		03/02/23 17:00	03/03/23 16:30	1
Magnesium	27000		1000	200	ug/L		03/02/23 17:00	03/03/23 16:30	1
Potassium	2200		1000	220	ug/L		03/02/23 17:00	03/03/23 16:30	1
Sodium	52000		1000	330	ug/L		03/02/23 17:00	03/03/23 16:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 15:53	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 15:53	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:53	1
Chloride (EPA 300.0)	45		1.0	0.13	mg/L			03/08/23 16:48	1
Fluoride (EPA 300.0)	0.16		0.050	0.024	mg/L			03/08/23 16:48	1
Sulfate (EPA 300.0)	230		5.0	1.7	mg/L			03/08/23 17:09	5
Total Dissolved Solids (SM 2540C)	640		10	7.8	mg/L			03/06/23 10:27	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Client Sample ID: EB-001-F-20230227-01

Lab Sample ID: 240-181143-6

Date Collected: 02/27/23 14:10

Matrix: Water

Date Received: 03/01/23 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		03/02/23 17:00	03/06/23 15:26	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	580	ug/L		03/02/23 17:00	03/03/23 16:32	1
Magnesium	ND		1000	200	ug/L		03/02/23 17:00	03/03/23 16:32	1
Potassium	ND		1000	220	ug/L		03/02/23 17:00	03/03/23 16:32	1
Sodium	ND		1000	330	ug/L		03/02/23 17:00	03/03/23 16:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 16:01	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 16:01	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 16:01	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			03/08/23 17:31	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			03/08/23 17:31	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			03/08/23 17:31	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			03/06/23 10:27	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-564052/1-A
Matrix: Water
Analysis Batch: 564447

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 564052

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		03/02/23 17:00	03/06/23 14:31	1

Lab Sample ID: LCS 240-564052/2-A
Matrix: Water
Analysis Batch: 564447

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 564052

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1060		ug/L		106	80 - 120

Lab Sample ID: 240-181143-1 MS
Matrix: Water
Analysis Batch: 564447

Client Sample ID: BAC-16-F-20230227-01
Prep Type: Total Recoverable
Prep Batch: 564052

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1500		1000	2630		ug/L		108	75 - 125

Lab Sample ID: 240-181143-1 MSD
Matrix: Water
Analysis Batch: 564447

Client Sample ID: BAC-16-F-20230227-01
Prep Type: Total Recoverable
Prep Batch: 564052

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	1500		1000	2680		ug/L		113	75 - 125	2	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-564052/1-A
Matrix: Water
Analysis Batch: 564223

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 564052

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	580	ug/L		03/02/23 17:00	03/03/23 15:25	1
Magnesium	ND		1000	200	ug/L		03/02/23 17:00	03/03/23 15:25	1
Potassium	ND		1000	220	ug/L		03/02/23 17:00	03/03/23 15:25	1
Sodium	ND		1000	330	ug/L		03/02/23 17:00	03/03/23 15:25	1

Lab Sample ID: LCS 240-564052/3-A
Matrix: Water
Analysis Batch: 564223

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 564052

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	24100		ug/L		96	80 - 120
Magnesium	25000	23800		ug/L		95	80 - 120
Potassium	25000	23800		ug/L		95	80 - 120
Sodium	25000	23700		ug/L		95	80 - 120

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

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

Lab Sample ID: 240-181143-1 MS
Matrix: Water
Analysis Batch: 564223

Client Sample ID: BAC-16-F-20230227-01
Prep Type: Total Recoverable
Prep Batch: 564052

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD
Calcium	100000		25000	129000	4	ug/L		112	80 - 120	
Magnesium	22000		25000	46700		ug/L		98	80 - 120	
Potassium	2300		25000	27100		ug/L		99	80 - 120	
Sodium	15000		25000	39100		ug/L		96	80 - 120	

Lab Sample ID: 240-181143-1 MSD
Matrix: Water
Analysis Batch: 564223

Client Sample ID: BAC-16-F-20230227-01
Prep Type: Total Recoverable
Prep Batch: 564052

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec		RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit	
Calcium	100000		25000	127000	4	ug/L		104	80 - 120	2	20	
Magnesium	22000		25000	46000		ug/L		95	80 - 120	1	20	
Potassium	2300		25000	26800		ug/L		98	80 - 120	1	20	
Sodium	15000		25000	38700		ug/L		94	80 - 120	1	20	

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-564459/30
Matrix: Water
Analysis Batch: 564459

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			03/06/23 13:08	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 13:08	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 13:08	1

Lab Sample ID: MB 240-564459/56
Matrix: Water
Analysis Batch: 564459

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			03/06/23 14:59	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 14:59	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 14:59	1

Lab Sample ID: LCS 240-564459/55
Matrix: Water
Analysis Batch: 564459

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec	
		Result	Qualifier				Limits	RPD
Total Alkalinity	146	138		mg/L		95	86 - 123	

Lab Sample ID: 240-181143-5 DU
Matrix: Water
Analysis Batch: 564459

Client Sample ID: BAC-10-F-20230227-01
Prep Type: Total/NA

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Total Alkalinity	220		218		mg/L		3	20
Bicarbonate Alkalinity as CaCO3	220		218		mg/L		3	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-564711/3
 Matrix: Water
 Analysis Batch: 564711

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			03/08/23 09:56	1
Fluoride	ND		0.050	0.024	mg/L			03/08/23 09:56	1
Sulfate	ND		1.0	0.35	mg/L			03/08/23 09:56	1

Lab Sample ID: LCS 240-564711/4
 Matrix: Water
 Analysis Batch: 564711

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	2.65		mg/L		106	90 - 110
Sulfate	50.0	50.8		mg/L		102	90 - 110

Lab Sample ID: MB 240-565017/3
 Matrix: Water
 Analysis Batch: 565017

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		1.0	0.35	mg/L			03/10/23 15:01	1

Lab Sample ID: LCS 240-565017/4
 Matrix: Water
 Analysis Batch: 565017

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	50.0	50.8		mg/L		102	90 - 110

Lab Sample ID: 240-181143-3 MS
 Matrix: Water
 Analysis Batch: 565017

Client Sample ID: BAC-14-F-20230227-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	210		250	442		mg/L		91	80 - 120

Lab Sample ID: 240-181143-3 MSD
 Matrix: Water
 Analysis Batch: 565017

Client Sample ID: BAC-14-F-20230227-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	210		250	457		mg/L		98	80 - 120	3	15

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

Lab Sample ID: MB 240-564373/1
 Matrix: Water
 Analysis Batch: 564373

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			03/06/23 10:27	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

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

Lab Sample ID: LCS 240-564373/2
Matrix: Water
Analysis Batch: 564373

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	475	452		mg/L		95	80 - 120

Lab Sample ID: 240-181143-1 DU
Matrix: Water
Analysis Batch: 564373

Client Sample ID: BAC-16-F-20230227-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	460		470		mg/L		2	20

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Metals

Prep Batch: 564052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181143-1	BAC-16-F-20230227-01	Total Recoverable	Water	3005A	
240-181143-2	DUP-002-BAC-16-F-20230227-01	Total Recoverable	Water	3005A	
240-181143-3	BAC-14-F-20230227-01	Total Recoverable	Water	3005A	
240-181143-4	BAC-12-F-20230227-01	Total Recoverable	Water	3005A	
240-181143-5	BAC-10-F-20230227-01	Total Recoverable	Water	3005A	
240-181143-6	EB-001-F-20230227-01	Total Recoverable	Water	3005A	
MB 240-564052/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-564052/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-564052/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-181143-1 MS	BAC-16-F-20230227-01	Total Recoverable	Water	3005A	
240-181143-1 MS	BAC-16-F-20230227-01	Total Recoverable	Water	3005A	
240-181143-1 MSD	BAC-16-F-20230227-01	Total Recoverable	Water	3005A	
240-181143-1 MSD	BAC-16-F-20230227-01	Total Recoverable	Water	3005A	

Analysis Batch: 564223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181143-1	BAC-16-F-20230227-01	Total Recoverable	Water	6020B	564052
240-181143-2	DUP-002-BAC-16-F-20230227-01	Total Recoverable	Water	6020B	564052
240-181143-3	BAC-14-F-20230227-01	Total Recoverable	Water	6020B	564052
240-181143-4	BAC-12-F-20230227-01	Total Recoverable	Water	6020B	564052
240-181143-5	BAC-10-F-20230227-01	Total Recoverable	Water	6020B	564052
240-181143-6	EB-001-F-20230227-01	Total Recoverable	Water	6020B	564052
MB 240-564052/1-A	Method Blank	Total Recoverable	Water	6020B	564052
LCS 240-564052/3-A	Lab Control Sample	Total Recoverable	Water	6020B	564052
240-181143-1 MS	BAC-16-F-20230227-01	Total Recoverable	Water	6020B	564052
240-181143-1 MSD	BAC-16-F-20230227-01	Total Recoverable	Water	6020B	564052

Analysis Batch: 564447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181143-1	BAC-16-F-20230227-01	Total Recoverable	Water	6010D	564052
240-181143-2	DUP-002-BAC-16-F-20230227-01	Total Recoverable	Water	6010D	564052
240-181143-3	BAC-14-F-20230227-01	Total Recoverable	Water	6010D	564052
240-181143-4	BAC-12-F-20230227-01	Total Recoverable	Water	6010D	564052
240-181143-5	BAC-10-F-20230227-01	Total Recoverable	Water	6010D	564052
240-181143-6	EB-001-F-20230227-01	Total Recoverable	Water	6010D	564052
MB 240-564052/1-A	Method Blank	Total Recoverable	Water	6010D	564052
LCS 240-564052/2-A	Lab Control Sample	Total Recoverable	Water	6010D	564052
240-181143-1 MS	BAC-16-F-20230227-01	Total Recoverable	Water	6010D	564052
240-181143-1 MSD	BAC-16-F-20230227-01	Total Recoverable	Water	6010D	564052

General Chemistry

Analysis Batch: 564373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181143-1	BAC-16-F-20230227-01	Total/NA	Water	SM 2540C	
240-181143-2	DUP-002-BAC-16-F-20230227-01	Total/NA	Water	SM 2540C	
240-181143-3	BAC-14-F-20230227-01	Total/NA	Water	SM 2540C	
240-181143-4	BAC-12-F-20230227-01	Total/NA	Water	SM 2540C	
240-181143-5	BAC-10-F-20230227-01	Total/NA	Water	SM 2540C	
240-181143-6	EB-001-F-20230227-01	Total/NA	Water	SM 2540C	
MB 240-564373/1	Method Blank	Total/NA	Water	SM 2540C	

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

General Chemistry (Continued)

Analysis Batch: 564373 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-564373/2	Lab Control Sample	Total/NA	Water	SM 2540C	
240-181143-1 DU	BAC-16-F-20230227-01	Total/NA	Water	SM 2540C	

Analysis Batch: 564459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181143-1	BAC-16-F-20230227-01	Total/NA	Water	2320B-1997	
240-181143-2	DUP-002-BAC-16-F-20230227-01	Total/NA	Water	2320B-1997	
240-181143-3	BAC-14-F-20230227-01	Total/NA	Water	2320B-1997	
240-181143-4	BAC-12-F-20230227-01	Total/NA	Water	2320B-1997	
240-181143-5	BAC-10-F-20230227-01	Total/NA	Water	2320B-1997	
240-181143-6	EB-001-F-20230227-01	Total/NA	Water	2320B-1997	
MB 240-564459/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-564459/56	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-564459/55	Lab Control Sample	Total/NA	Water	2320B-1997	
240-181143-5 DU	BAC-10-F-20230227-01	Total/NA	Water	2320B-1997	

Analysis Batch: 564711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181143-1	BAC-16-F-20230227-01	Total/NA	Water	300.0	
240-181143-2	DUP-002-BAC-16-F-20230227-01	Total/NA	Water	300.0	
240-181143-3	BAC-14-F-20230227-01	Total/NA	Water	300.0	
240-181143-4	BAC-12-F-20230227-01	Total/NA	Water	300.0	
240-181143-5	BAC-10-F-20230227-01	Total/NA	Water	300.0	
240-181143-5	BAC-10-F-20230227-01	Total/NA	Water	300.0	
240-181143-6	EB-001-F-20230227-01	Total/NA	Water	300.0	
MB 240-564711/3	Method Blank	Total/NA	Water	300.0	
LCS 240-564711/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 565017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181143-3	BAC-14-F-20230227-01	Total/NA	Water	300.0	
MB 240-565017/3	Method Blank	Total/NA	Water	300.0	
LCS 240-565017/4	Lab Control Sample	Total/NA	Water	300.0	
240-181143-3 MS	BAC-14-F-20230227-01	Total/NA	Water	300.0	
240-181143-3 MSD	BAC-14-F-20230227-01	Total/NA	Water	300.0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Client Sample ID: BAC-16-F-20230227-01

Lab Sample ID: 240-181143-1

Date Collected: 02/27/23 10:05

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564052	AJC	EET CAN	03/02/23 17:00
Total Recoverable	Analysis	6010D		1	564447	KLC	EET CAN	03/06/23 14:43
Total Recoverable	Prep	3005A			564052	AJC	EET CAN	03/02/23 17:00
Total Recoverable	Analysis	6020B		1	564223	DSH	EET CAN	03/03/23 15:46
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 15:35
Total/NA	Analysis	300.0		1	564711	JWW	EET CAN	03/08/23 15:21
Total/NA	Analysis	SM 2540C		1	564373	GH	EET CAN	03/06/23 10:27

Client Sample ID: DUP-002-BAC-16-F-20230227-01

Lab Sample ID: 240-181143-2

Date Collected: 02/27/23 10:05

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564052	AJC	EET CAN	03/02/23 17:00
Total Recoverable	Analysis	6010D		1	564447	KLC	EET CAN	03/06/23 15:00
Total Recoverable	Prep	3005A			564052	AJC	EET CAN	03/02/23 17:00
Total Recoverable	Analysis	6020B		1	564223	DSH	EET CAN	03/03/23 16:16
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 15:39
Total/NA	Analysis	300.0		1	564711	JWW	EET CAN	03/08/23 15:43
Total/NA	Analysis	SM 2540C		1	564373	GH	EET CAN	03/06/23 10:27

Client Sample ID: BAC-14-F-20230227-01

Lab Sample ID: 240-181143-3

Date Collected: 02/27/23 11:46

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564052	AJC	EET CAN	03/02/23 17:00
Total Recoverable	Analysis	6010D		1	564447	KLC	EET CAN	03/06/23 15:13
Total Recoverable	Prep	3005A			564052	AJC	EET CAN	03/02/23 17:00
Total Recoverable	Analysis	6020B		1	564223	DSH	EET CAN	03/03/23 16:19
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 15:43
Total/NA	Analysis	300.0		1	564711	JWW	EET CAN	03/08/23 16:04
Total/NA	Analysis	300.0		5	565017	JMB	EET CAN	03/10/23 18:27
Total/NA	Analysis	SM 2540C		1	564373	GH	EET CAN	03/06/23 10:27

Client Sample ID: BAC-12-F-20230227-01

Lab Sample ID: 240-181143-4

Date Collected: 02/27/23 12:29

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564052	AJC	EET CAN	03/02/23 17:00
Total Recoverable	Analysis	6010D		1	564447	KLC	EET CAN	03/06/23 15:17
Total Recoverable	Prep	3005A			564052	AJC	EET CAN	03/02/23 17:00
Total Recoverable	Analysis	6020B		1	564223	DSH	EET CAN	03/03/23 16:27

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Client Sample ID: BAC-12-F-20230227-01

Lab Sample ID: 240-181143-4

Date Collected: 02/27/23 12:29

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 15:49
Total/NA	Analysis	300.0		1	564711	JWW	EET CAN	03/08/23 16:26
Total/NA	Analysis	SM 2540C		1	564373	GH	EET CAN	03/06/23 10:27

Client Sample ID: BAC-10-F-20230227-01

Lab Sample ID: 240-181143-5

Date Collected: 02/27/23 13:22

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564052	AJC	EET CAN	03/02/23 17:00
Total Recoverable	Analysis	6010D		1	564447	KLC	EET CAN	03/06/23 15:21
Total Recoverable	Prep	3005A			564052	AJC	EET CAN	03/02/23 17:00
Total Recoverable	Analysis	6020B		1	564223	DSH	EET CAN	03/03/23 16:30
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 15:53
Total/NA	Analysis	300.0		1	564711	JWW	EET CAN	03/08/23 16:48
Total/NA	Analysis	300.0		5	564711	JWW	EET CAN	03/08/23 17:09
Total/NA	Analysis	SM 2540C		1	564373	GH	EET CAN	03/06/23 10:27

Client Sample ID: EB-001-F-20230227-01

Lab Sample ID: 240-181143-6

Date Collected: 02/27/23 14:10

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564052	AJC	EET CAN	03/02/23 17:00
Total Recoverable	Analysis	6010D		1	564447	KLC	EET CAN	03/06/23 15:26
Total Recoverable	Prep	3005A			564052	AJC	EET CAN	03/02/23 17:00
Total Recoverable	Analysis	6020B		1	564223	DSH	EET CAN	03/03/23 16:32
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 16:01
Total/NA	Analysis	300.0		1	564711	JWW	EET CAN	03/08/23 17:31
Total/NA	Analysis	SM 2540C		1	564373	GH	EET CAN	03/06/23 10:27

Laboratory References:

EET CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23 *
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-27-23 *
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23 *
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-23 *
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-27-23 *
Ohio VAP	State	CL0024	02-27-23 *
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.



Client Information		Lab PM: Cisneros, Roxanne		COC No: 240-93465-34577.1		
Client Contact: Taylor Huffman		E-Mail: roxanne.cisneros@Eurofinset.com		Page: Page 1 of 1		
Company: Lightstone Generation Gavin Power LLC		Address: 7397 OH-7		Job #: _____		
City: Cheshire		State: OH, 45620		Carrier Tracking No(s): _____		
Phone: 740-925-3171(Tel)		PO #: 2935505		State of Origin: _____		
Email: taylor.huffman@lightstonegen.com		WO #: _____		Analysis Requested		
Project Name: Federal CCR Wells - App III		Project #: 24019633		Due Date Requested: _____		
Site: <i>Gavin Plant</i>		SSOW#: _____		TAT Requested (days): _____		
Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=other)	Preservation Code: (1=Thiourea, A=As)	Special Instructions/Note:
BAC-16-F-20230227-01	2-27-23	1005	G	W		
DIP-02-F-BAC-16-F-20230227-01	2-27-23	1005	G	W		
BAC-14-F-20230227-01	2-27-23	1146	G	W		
BAC-12-F-20230227-01	2-27-23	1229	G	W		
BAC-10-F-20230227-01	2-27-23	1322	G	W		
EB-001-F-20230227-01	2-27-23	1410	G	W		
<p>Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify) _____</p>						
<p>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months</p>						
<p>Special Instructions/QC Requirements:</p>						
<p>Empty Kit Relinquished by: _____ Date: _____</p>						
<p>Relinquished by: _____ Date: _____</p>						
<p>Relinquished by: _____ Date: _____</p>						
<p>Custody Seals Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>						
<p>Custody Seal No.: _____ Cooler Temperature(s) °C and Other Remarks: _____</p>						



Eurofins - Canton Sample Receipt Form/Narrative
Barberton Facility

Login # : _____

Client Lightstone Site Name _____
Cooler Received on 3-1-23 Opened on 3-1-23
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off Eurofins Courier Other

Cooler unpacked by:
Rachelle Haidet

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 # IR-13 (CF -0.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
IR GUN # IR-16 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
IR GUN # IR-17 (CF -0.3 °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

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

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# HC203864
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: _____

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-16-F-20230227-01	240-181143-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-002-BAC-16-F-20230227-01	240-181143-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-14-F-20230227-01	240-181143-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-12-F-20230227-01	240-181143-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-10-F-20230227-01	240-181143-C-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230227-01	240-181143-C-6	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____

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ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 4/3/2023 5:17:53 PM

JOB DESCRIPTION

Federal CCR Wells - App IV

JOB NUMBER

240-181146-1

Eurofins Canton

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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
4/3/2023 5:17:53 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Job ID: 240-181146-1

Laboratory: Eurofins Canton

Narrative

Job Narrative 240-181146-1

Comments

No additional comments.

Receipt

The samples were received on 3/1/2023 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 0.2° C, 1.1° C, 2.3° C and 13.6° C.

RAD

Methods 9315: Radium-226 batch 602806: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-16-F-20230227-01 (240-181146-1), DUP-002-BAC-16-F-20230227-01 (240-181146-2), (LCS 160-602806/2-A), (MB 160-602806/1-A)

Methods 9315: Prep batch 160-603170: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-14-F-20230227-01 (240-181146-3), BAC-12-F-20230227-01 (240-181146-4), BAC-10-F-20230227-01 (240-181146-5), (LCS 160-603170/2-A), (LCSD 160-603170/3-A) and (MB 160-603170/1-A)

Methods 9315: Prep batch 160-602810: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. EB-001-F-20230227-01 (240-181146-6), (LCS 160-602810/2-A), (LCSD 160-602810/3-A) and (MB 160-602810/1-A)

Methods 9320: Radium-228 batch 602808: The detection goal was not met for the following sample(s). Samples were prepped at a reduced volume due to the presence of matrix interferences: BAC-16-F-20230227-01 (240-181146-1) and DUP-002-BAC-16-F-20230227-01 (240-181146-2). Analytical results are reported with the detection limit achieved.

Methods 9320: Radium-228 batch 602808: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-16-F-20230227-01 (240-181146-1), DUP-002-BAC-16-F-20230227-01 (240-181146-2), (LCS 160-602808/2-A), (MB 160-602808/1-A)

Methods 9320: Radium-228 batch 602812: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. EB-001-F-20230227-01 (240-181146-6), (LCS 160-602812/2-A), (LCSD 160-602812/3-A) and (MB 160-602812/1-A)

Methods 9320: Radium-228 batch 603171: The LCS recovered at (127%). 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 (62-148%) per method requirements. The LCS passes, no further action is required. (LCSD 160-603171/3-A)

Methods 9320: Radium-228 batch 603171: The detection goal was not met for the following sample(s). Samples were prepped at a reduced volume due to the presence of matrix interferences: BAC-14-F-20230227-01 (240-181146-3), BAC-12-F-20230227-01 (240-181146-4) and BAC-10-F-20230227-01 (240-181146-5). Analytical results are reported with the detection limit achieved.

Methods 9320: Radium-228 batch 603171: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-14-F-20230227-01 (240-181146-3), BAC-12-F-20230227-01 (240-181146-4), BAC-10-F-20230227-01 (240-181146-5), (LCS 160-603171/2-A), (LCSD 160-603171/3-A) and (MB 160-603171/1-A)

Method PrecSep_0: Radium-228 Prep Batch 160-602812: The following samples were prepared at a reduced aliquot due to Matrix:

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Job ID: 240-181146-1 (Continued)

Laboratory: Eurofins Canton (Continued)

BAC-12-F-20230227-01 (240-181146-4) and BAC-10-F-20230227-01 (240-181146-5). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep_0: Radium-228 Prep Batch 160-602812: Insufficient sample volume was available to perform a sample duplicate for the following samples: EB-001-F-20230227-01 (240-181146-6). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep_0: Radium 228 Prep Batch 160-603171: The following samples were prepared at a reduced aliquot due to Matrix: BAC-14-F-20230227-01 (240-181146-3), BAC-12-F-20230227-01 (240-181146-4) and BAC-10-F-20230227-01 (240-181146-5). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep-21: Radium-226 Prep Batch 160-602810: The following samples were prepared at a reduced aliquot due to Matrix: BAC-12-F-20230227-01 (240-181146-4) and BAC-10-F-20230227-01 (240-181146-5). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep-21: Radium-226 Prep Batch 160-602810: Insufficient sample volume was available to perform a sample duplicate for the following samples: EB-001-F-20230227-01 (240-181146-6). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Radium 226 Prep Batch 160-603170: The following samples were prepared at a reduced aliquot due to Matrix: BAC-14-F-20230227-01 (240-181146-3), BAC-12-F-20230227-01 (240-181146-4) and BAC-10-F-20230227-01 (240-181146-5). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

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

Metals

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

General Chemistry

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CAN
7470A	Mercury (CVAA)	SW846	EET CAN
2320B-1997	Alkalinity, Total	SM	EET CAN
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CAN
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 CAN
7470A	Preparation, Mercury	SW846	EET CAN
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 CAN = Eurofins Canton, 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 - App IV

Job ID: 240-181146-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-181146-1	BAC-16-F-20230227-01	Water	02/27/23 10:05	03/01/23 08:00
240-181146-2	DUP-002-BAC-16-F-20230227-01	Water	02/27/23 10:05	03/01/23 08:00
240-181146-3	BAC-14-F-20230227-01	Water	02/27/23 11:46	03/01/23 08:00
240-181146-4	BAC-12-F-20230227-01	Water	02/27/23 12:29	03/01/23 08:00
240-181146-5	BAC-10-F-20230227-01	Water	02/27/23 13:22	03/01/23 08:00
240-181146-6	EB-001-F-20230227-01	Water	02/27/23 14:10	03/01/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: BAC-16-F-20230227-01

Lab Sample ID: 240-181146-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.5	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	82		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	6.0		5.0	2.5	ug/L	1		6020B	Total Recoverable
Cobalt	4.8		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	3.7		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	8.8		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	23000		1000	200	ug/L	1		6020B	Total Recoverable
Molybdenum	1.3	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.071		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: DUP-002-BAC-16-F-20230227-01

Lab Sample ID: 240-181146-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.5	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	84		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	6.0		5.0	2.5	ug/L	1		6020B	Total Recoverable
Cobalt	4.6		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	3.6		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	8.1		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	200	ug/L	1		6020B	Total Recoverable
Molybdenum	1.2	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	150		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	150		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.066		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-14-F-20230227-01

Lab Sample ID: 240-181146-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	4.5	J	5.0	0.75	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: BAC-14-F-20230227-01 (Continued)

Lab Sample ID: 240-181146-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	110		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	2.5	J	5.0	2.5	ug/L	1		6020B	Total Recoverable
Cobalt	2.3		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	2.0		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	7.0	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	200	ug/L	1		6020B	Total Recoverable
Molybdenum	1.1	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	1800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	23000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	64		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	64		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.073		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-12-F-20230227-01

Lab Sample ID: 240-181146-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	15		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	200		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.21	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Chromium	7.4		5.0	2.5	ug/L	1		6020B	Total Recoverable
Cobalt	20		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	14		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	11		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	17000		1000	200	ug/L	1		6020B	Total Recoverable
Molybdenum	2.1	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	3300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	28000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	92		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	92		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.095		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-10-F-20230227-01

Lab Sample ID: 240-181146-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.0	J	5.0	0.75	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: BAC-10-F-20230227-01 (Continued)

Lab Sample ID: 240-181146-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	57		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.59	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Chromium	3.3	J	5.0	2.5	ug/L	1		6020B	Total Recoverable
Cobalt	3.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	2.4		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	3.9	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	28000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	2300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	54000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.14		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: EB-001-F-20230227-01

Lab Sample ID: 240-181146-6

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: BAC-16-F-20230227-01

Lab Sample ID: 240-181146-1

Date Collected: 02/27/23 10:05

Matrix: Water

Date Received: 03/01/23 08:00

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		03/02/23 14:00	03/03/23 17:46	1
Arsenic	3.5	J	5.0	0.75	ug/L		03/02/23 14:00	03/03/23 17:46	1
Barium	82		5.0	2.2	ug/L		03/02/23 14:00	03/03/23 17:46	1
Beryllium	ND		1.0	0.62	ug/L		03/02/23 14:00	03/03/23 17:46	1
Cadmium	ND		1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:46	1
Chromium	6.0		5.0	2.5	ug/L		03/02/23 14:00	03/03/23 17:46	1
Cobalt	4.8		1.0	0.19	ug/L		03/02/23 14:00	03/03/23 17:46	1
Lead	3.7		1.0	0.45	ug/L		03/02/23 14:00	03/03/23 17:46	1
Lithium	8.8		8.0	1.7	ug/L		03/02/23 14:00	03/03/23 17:46	1
Magnesium	23000		1000	200	ug/L		03/02/23 14:00	03/03/23 17:46	1
Molybdenum	1.3	J	5.0	1.1	ug/L		03/02/23 14:00	03/03/23 17:46	1
Potassium	2400		1000	220	ug/L		03/02/23 14:00	03/03/23 17:46	1
Selenium	ND		5.0	0.89	ug/L		03/02/23 14:00	03/03/23 17:46	1
Sodium	15000		1000	330	ug/L		03/02/23 14:00	03/03/23 17:46	1
Thallium	ND		1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:46	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		03/02/23 14:00	03/03/23 14:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	160		5.0	2.6	mg/L			03/06/23 16:05	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	160		5.0	2.6	mg/L			03/06/23 16:05	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 16:05	1
Fluoride (EPA 300.0-1993 R2.1)	0.071		0.050	0.024	mg/L			03/27/23 16:08	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	0.123	U	0.156	0.156	1.00	0.257	pCi/L	03/08/23 09:38	03/30/23 07:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	60.7		30 - 110					03/08/23 09:38	03/30/23 07:26	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	1.68	G	1.01	1.02	1.00	1.45	pCi/L	03/08/23 10:00	03/20/23 12:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	60.7		30 - 110					03/08/23 10:00	03/20/23 12:02	1
Y Carrier	83.7		30 - 110					03/08/23 10:00	03/20/23 12:02	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: BAC-16-F-20230227-01

Lab Sample ID: 240-181146-1

Date Collected: 02/27/23 10:05

Matrix: Water

Date Received: 03/01/23 08:00

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	1.80		1.02	1.03	5.00	1.45	pCi/L		03/30/23 15:45	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: DUP-002-BAC-16-F-20230227-01

Lab Sample ID: 240-181146-2

Date Collected: 02/27/23 10:05

Matrix: Water

Date Received: 03/01/23 08:00

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		03/02/23 14:00	03/03/23 17:48	1
Arsenic	3.5	J	5.0	0.75	ug/L		03/02/23 14:00	03/03/23 17:48	1
Barium	84		5.0	2.2	ug/L		03/02/23 14:00	03/03/23 17:48	1
Beryllium	ND		1.0	0.62	ug/L		03/02/23 14:00	03/03/23 17:48	1
Cadmium	ND		1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:48	1
Chromium	6.0		5.0	2.5	ug/L		03/02/23 14:00	03/03/23 17:48	1
Cobalt	4.6		1.0	0.19	ug/L		03/02/23 14:00	03/03/23 17:48	1
Lead	3.6		1.0	0.45	ug/L		03/02/23 14:00	03/03/23 17:48	1
Lithium	8.1		8.0	1.7	ug/L		03/02/23 14:00	03/03/23 17:48	1
Magnesium	22000		1000	200	ug/L		03/02/23 14:00	03/03/23 17:48	1
Molybdenum	1.2	J	5.0	1.1	ug/L		03/02/23 14:00	03/03/23 17:48	1
Potassium	2300		1000	220	ug/L		03/02/23 14:00	03/03/23 17:48	1
Selenium	ND		5.0	0.89	ug/L		03/02/23 14:00	03/03/23 17:48	1
Sodium	15000		1000	330	ug/L		03/02/23 14:00	03/03/23 17:48	1
Thallium	ND		1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:48	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		03/02/23 14:00	03/03/23 14:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	150		5.0	2.6	mg/L			03/06/23 16:09	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	150		5.0	2.6	mg/L			03/06/23 16:09	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 16:09	1
Fluoride (EPA 300.0-1993 R2.1)	0.066		0.050	0.024	mg/L			03/27/23 17:08	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.213	U	0.178	0.179	1.00	0.267	pCi/L	03/08/23 09:38	03/30/23 07:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.1		30 - 110					03/08/23 09:38	03/30/23 07:26	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	1.69	G	0.848	0.862	1.00	1.16	pCi/L	03/08/23 10:00	03/20/23 12:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.1		30 - 110					03/08/23 10:00	03/20/23 12:02	1
Y Carrier	85.2		30 - 110					03/08/23 10:00	03/20/23 12:02	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: DUP-002-BAC-16-F-20230227-01

Lab Sample ID: 240-181146-2

Date Collected: 02/27/23 10:05

Matrix: Water

Date Received: 03/01/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2 σ +/-)	Total Uncert. (2 σ +/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.91		0.866	0.880	5.00	1.16	pCi/L		03/30/23 15:45	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: BAC-14-F-20230227-01

Lab Sample ID: 240-181146-3

Date Collected: 02/27/23 11:46

Matrix: Water

Date Received: 03/01/23 08:00

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		03/02/23 14:00	03/03/23 17:51	1
Arsenic	4.5	J	5.0	0.75	ug/L		03/02/23 14:00	03/03/23 17:51	1
Barium	110		5.0	2.2	ug/L		03/02/23 14:00	03/03/23 17:51	1
Beryllium	ND		1.0	0.62	ug/L		03/02/23 14:00	03/03/23 17:51	1
Cadmium	ND		1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:51	1
Chromium	2.5	J	5.0	2.5	ug/L		03/02/23 14:00	03/03/23 17:51	1
Cobalt	2.3		1.0	0.19	ug/L		03/02/23 14:00	03/03/23 17:51	1
Lead	2.0		1.0	0.45	ug/L		03/02/23 14:00	03/03/23 17:51	1
Lithium	7.0	J	8.0	1.7	ug/L		03/02/23 14:00	03/03/23 17:51	1
Magnesium	21000		1000	200	ug/L		03/02/23 14:00	03/03/23 17:51	1
Molybdenum	1.1	J	5.0	1.1	ug/L		03/02/23 14:00	03/03/23 17:51	1
Potassium	1800		1000	220	ug/L		03/02/23 14:00	03/03/23 17:51	1
Selenium	ND		5.0	0.89	ug/L		03/02/23 14:00	03/03/23 17:51	1
Sodium	23000		1000	330	ug/L		03/02/23 14:00	03/03/23 17:51	1
Thallium	ND		1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:51	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		03/02/23 14:00	03/03/23 14:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	64		5.0	2.6	mg/L			03/06/23 16:13	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	64		5.0	2.6	mg/L			03/06/23 16:13	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 16:13	1
Fluoride (EPA 300.0-1993 R2.1)	0.073		0.050	0.024	mg/L			03/27/23 17:28	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	0.121	U	0.231	0.232	1.00	0.414	pCi/L	03/10/23 09:30	04/03/23 10:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		30 - 110					03/10/23 09:30	04/03/23 10:02	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	1.48	U G	1.34	1.34	1.00	2.11	pCi/L	03/10/23 09:56	03/24/23 12:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		30 - 110					03/10/23 09:56	03/24/23 12:16	1
Y Carrier	82.6		30 - 110					03/10/23 09:56	03/24/23 12:16	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: BAC-14-F-20230227-01

Lab Sample ID: 240-181146-3

Date Collected: 02/27/23 11:46

Matrix: Water

Date Received: 03/01/23 08:00

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	1.61	U	1.36	1.36	5.00	2.11	pCi/L		04/03/23 15:19	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: BAC-12-F-20230227-01

Lab Sample ID: 240-181146-4

Date Collected: 02/27/23 12:29

Matrix: Water

Date Received: 03/01/23 08:00

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		03/02/23 14:00	03/03/23 17:53	1
Arsenic	15		5.0	0.75	ug/L		03/02/23 14:00	03/03/23 17:53	1
Barium	200		5.0	2.2	ug/L		03/02/23 14:00	03/03/23 17:53	1
Beryllium	ND		1.0	0.62	ug/L		03/02/23 14:00	03/03/23 17:53	1
Cadmium	0.21	J	1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:53	1
Chromium	7.4		5.0	2.5	ug/L		03/02/23 14:00	03/03/23 17:53	1
Cobalt	20		1.0	0.19	ug/L		03/02/23 14:00	03/03/23 17:53	1
Lead	14		1.0	0.45	ug/L		03/02/23 14:00	03/03/23 17:53	1
Lithium	11		8.0	1.7	ug/L		03/02/23 14:00	03/03/23 17:53	1
Magnesium	17000		1000	200	ug/L		03/02/23 14:00	03/03/23 17:53	1
Molybdenum	2.1	J	5.0	1.1	ug/L		03/02/23 14:00	03/03/23 17:53	1
Potassium	3300		1000	220	ug/L		03/02/23 14:00	03/03/23 17:53	1
Selenium	ND		5.0	0.89	ug/L		03/02/23 14:00	03/03/23 17:53	1
Sodium	28000		1000	330	ug/L		03/02/23 14:00	03/03/23 17:53	1
Thallium	ND		1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:53	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		03/02/23 14:00	03/03/23 14:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	92		5.0	2.6	mg/L			03/06/23 16:17	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	92		5.0	2.6	mg/L			03/06/23 16:17	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 16:17	1
Fluoride (EPA 300.0-1993 R2.1)	0.095		0.050	0.024	mg/L			03/27/23 17:48	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	0.700		0.405	0.410	1.00	0.476	pCi/L	03/10/23 09:30	04/03/23 10:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	58.8		30 - 110					03/10/23 09:30	04/03/23 10:03	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	2.69	U G	1.95	1.97	1.00	2.93	pCi/L	03/10/23 09:56	03/24/23 12:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	58.8		30 - 110					03/10/23 09:56	03/24/23 12:17	1
Y Carrier	85.2		30 - 110					03/10/23 09:56	03/24/23 12:17	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: BAC-12-F-20230227-01

Lab Sample ID: 240-181146-4

Date Collected: 02/27/23 12:29

Matrix: Water

Date Received: 03/01/23 08:00

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	3.39		1.99	2.01	5.00	2.93	pCi/L		04/03/23 15:19	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: BAC-10-F-20230227-01

Lab Sample ID: 240-181146-5

Date Collected: 02/27/23 13:22

Matrix: Water

Date Received: 03/01/23 08:00

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		03/02/23 14:00	03/03/23 17:56	1
Arsenic	3.0	J	5.0	0.75	ug/L		03/02/23 14:00	03/03/23 17:56	1
Barium	57		5.0	2.2	ug/L		03/02/23 14:00	03/03/23 17:56	1
Beryllium	ND		1.0	0.62	ug/L		03/02/23 14:00	03/03/23 17:56	1
Cadmium	0.59	J	1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:56	1
Chromium	3.3	J	5.0	2.5	ug/L		03/02/23 14:00	03/03/23 17:56	1
Cobalt	3.1		1.0	0.19	ug/L		03/02/23 14:00	03/03/23 17:56	1
Lead	2.4		1.0	0.45	ug/L		03/02/23 14:00	03/03/23 17:56	1
Lithium	3.9	J	8.0	1.7	ug/L		03/02/23 14:00	03/03/23 17:56	1
Magnesium	28000		1000	200	ug/L		03/02/23 14:00	03/03/23 17:56	1
Molybdenum	ND		5.0	1.1	ug/L		03/02/23 14:00	03/03/23 17:56	1
Potassium	2300		1000	220	ug/L		03/02/23 14:00	03/03/23 17:56	1
Selenium	ND		5.0	0.89	ug/L		03/02/23 14:00	03/03/23 17:56	1
Sodium	54000		1000	330	ug/L		03/02/23 14:00	03/03/23 17:56	1
Thallium	ND		1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:56	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		03/02/23 14:00	03/03/23 14:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 16:21	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 16:21	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 16:21	1
Fluoride (EPA 300.0-1993 R2.1)	0.14		0.050	0.024	mg/L			03/27/23 18:08	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	0.155	U	0.263	0.264	1.00	0.460	pCi/L	03/10/23 09:30	04/03/23 09:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.9		30 - 110					03/10/23 09:30	04/03/23 09:55	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	U G	1.39	1.40	1.00	2.13	pCi/L	03/10/23 09:56	03/24/23 12:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.9		30 - 110					03/10/23 09:56	03/24/23 12:17	1
Y Carrier	81.5		30 - 110					03/10/23 09:56	03/24/23 12:17	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: BAC-10-F-20230227-01

Lab Sample ID: 240-181146-5

Date Collected: 02/27/23 13:22

Matrix: Water

Date Received: 03/01/23 08:00

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	1.93	U	1.41	1.42	5.00	2.13	pCi/L		04/03/23 15:19	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: EB-001-F-20230227-01

Lab Sample ID: 240-181146-6

Date Collected: 02/27/23 14:10

Matrix: Water

Date Received: 03/01/23 08:00

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		03/02/23 14:00	03/03/23 17:59	1
Arsenic	ND		5.0	0.75	ug/L		03/02/23 14:00	03/03/23 17:59	1
Barium	ND		5.0	2.2	ug/L		03/02/23 14:00	03/03/23 17:59	1
Beryllium	ND		1.0	0.62	ug/L		03/02/23 14:00	03/03/23 17:59	1
Cadmium	ND		1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:59	1
Chromium	ND		5.0	2.5	ug/L		03/02/23 14:00	03/03/23 17:59	1
Cobalt	ND		1.0	0.19	ug/L		03/02/23 14:00	03/03/23 17:59	1
Lead	ND		1.0	0.45	ug/L		03/02/23 14:00	03/03/23 17:59	1
Lithium	ND		8.0	1.7	ug/L		03/02/23 14:00	03/03/23 17:59	1
Magnesium	ND		1000	200	ug/L		03/02/23 14:00	03/03/23 17:59	1
Molybdenum	ND		5.0	1.1	ug/L		03/02/23 14:00	03/03/23 17:59	1
Potassium	ND		1000	220	ug/L		03/02/23 14:00	03/03/23 17:59	1
Selenium	ND		5.0	0.89	ug/L		03/02/23 14:00	03/03/23 17:59	1
Sodium	ND		1000	330	ug/L		03/02/23 14:00	03/03/23 17:59	1
Thallium	ND		1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:59	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		03/02/23 14:00	03/03/23 14:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 16:25	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 16:25	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 16:25	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			03/27/23 19:29	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0397	U	0.0717	0.0718	1.00	0.126	pCi/L	03/08/23 10:10	03/30/23 21:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.7		30 - 110					03/08/23 10:10	03/30/23 21:19	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	-0.124	U	0.257	0.257	1.00	0.528	pCi/L	03/08/23 10:36	03/21/23 12:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.7		30 - 110					03/08/23 10:36	03/21/23 12:52	1
Y Carrier	88.6		30 - 110					03/08/23 10:36	03/21/23 12:52	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: EB-001-F-20230227-01

Lab Sample ID: 240-181146-6

Date Collected: 02/27/23 14:10

Matrix: Water

Date Received: 03/01/23 08:00

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	-0.0841	U	0.267	0.267	5.00	0.528	pCi/L		04/03/23 15:19	1

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Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (30-110)	
240-181146-1	BAC-16-F-20230227-01	60.7	
240-181146-2	DUP-002-BAC-16-F-20230227-01	75.1	
240-181146-3	BAC-14-F-20230227-01	91.2	
240-181146-4	BAC-12-F-20230227-01	58.8	
240-181146-5	BAC-10-F-20230227-01	85.9	
240-181146-6	EB-001-F-20230227-01	79.7	
LCS 160-602806/2-A	Lab Control Sample	93.8	
LCS 160-602810/2-A	Lab Control Sample	89.3	
LCS 160-603170/2-A	Lab Control Sample	95.2	
LCSD 160-602810/3-A	Lab Control Sample Dup	88.7	
LCSD 160-603170/3-A	Lab Control Sample Dup	88.7	
MB 160-602806/1-A	Method Blank	89.5	
MB 160-602810/1-A	Method Blank	88.1	
MB 160-603170/1-A	Method Blank	90.1	

Tracer/Carrier Legend
 Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (30-110)	Y (30-110)
240-181146-1	BAC-16-F-20230227-01	60.7	83.7
240-181146-2	DUP-002-BAC-16-F-20230227-01	75.1	85.2
240-181146-3	BAC-14-F-20230227-01	91.2	82.6
240-181146-4	BAC-12-F-20230227-01	58.8	85.2
240-181146-5	BAC-10-F-20230227-01	85.9	81.5
240-181146-6	EB-001-F-20230227-01	79.7	88.6
LCS 160-602808/2-A	Lab Control Sample	93.8	81.1
LCS 160-602812/2-A	Lab Control Sample	89.3	83.4
LCS 160-603171/2-A	Lab Control Sample	95.2	81.1
LCSD 160-602812/3-A	Lab Control Sample Dup	88.7	83.7
LCSD 160-603171/3-A	Lab Control Sample Dup	88.7	80.7
MB 160-602808/1-A	Method Blank	89.5	81.9
MB 160-602812/1-A	Method Blank	88.1	84.9
MB 160-603171/1-A	Method Blank	90.1	80.7

Tracer/Carrier Legend
 Ba = Ba Carrier
 Y = Y Carrier

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-564030/1-A
Matrix: Water
Analysis Batch: 564223

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 564030

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/02/23 14:00	03/03/23 17:09	1
Arsenic	ND		5.0	0.75	ug/L		03/02/23 14:00	03/03/23 17:09	1
Barium	ND		5.0	2.2	ug/L		03/02/23 14:00	03/03/23 17:09	1
Beryllium	ND		1.0	0.62	ug/L		03/02/23 14:00	03/03/23 17:09	1
Cadmium	ND		1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:09	1
Chromium	ND		5.0	2.5	ug/L		03/02/23 14:00	03/03/23 17:09	1
Cobalt	ND		1.0	0.19	ug/L		03/02/23 14:00	03/03/23 17:09	1
Lead	ND		1.0	0.45	ug/L		03/02/23 14:00	03/03/23 17:09	1
Lithium	ND		8.0	1.7	ug/L		03/02/23 14:00	03/03/23 17:09	1
Magnesium	ND		1000	200	ug/L		03/02/23 14:00	03/03/23 17:09	1
Molybdenum	ND		5.0	1.1	ug/L		03/02/23 14:00	03/03/23 17:09	1
Potassium	ND		1000	220	ug/L		03/02/23 14:00	03/03/23 17:09	1
Selenium	ND		5.0	0.89	ug/L		03/02/23 14:00	03/03/23 17:09	1
Sodium	ND		1000	330	ug/L		03/02/23 14:00	03/03/23 17:09	1
Thallium	ND		1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:09	1

Lab Sample ID: LCS 240-564030/2-A
Matrix: Water
Analysis Batch: 564223

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 564030

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	104		ug/L		104	80 - 120
Arsenic	1000	926		ug/L		93	80 - 120
Barium	1000	917		ug/L		92	80 - 120
Beryllium	500	475		ug/L		95	80 - 120
Cadmium	500	460		ug/L		92	80 - 120
Chromium	500	474		ug/L		95	80 - 120
Cobalt	500	465		ug/L		93	80 - 120
Lead	500	484		ug/L		97	80 - 120
Lithium	500	489		ug/L		98	80 - 120
Magnesium	25000	23800		ug/L		95	80 - 120
Molybdenum	500	461		ug/L		92	80 - 120
Potassium	25000	24100		ug/L		96	80 - 120
Selenium	1000	931		ug/L		93	80 - 120
Sodium	25000	23700		ug/L		95	80 - 120
Thallium	1000	958		ug/L		96	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-564032/1-A
Matrix: Water
Analysis Batch: 564191

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 564032

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/02/23 14:00	03/03/23 14:11	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-564032/2-A
 Matrix: Water
 Analysis Batch: 564191

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 564032

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.06		ug/L		101	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-564459/30
 Matrix: Water
 Analysis Batch: 564459

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			03/06/23 13:08	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 13:08	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 13:08	1

Lab Sample ID: MB 240-564459/56
 Matrix: Water
 Analysis Batch: 564459

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			03/06/23 14:59	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 14:59	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 14:59	1

Lab Sample ID: LCS 240-564459/55
 Matrix: Water
 Analysis Batch: 564459

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	138		mg/L		95	86 - 123

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-566919/3
 Matrix: Water
 Analysis Batch: 566919

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			03/27/23 14:30	1

Lab Sample ID: LCS 240-566919/4
 Matrix: Water
 Analysis Batch: 566919

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.56		mg/L		103	90 - 110

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-181146-1 MS
 Matrix: Water
 Analysis Batch: 566919

Client Sample ID: BAC-16-F-20230227-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.071		2.50	2.82		mg/L		110	80 - 120

Lab Sample ID: 240-181146-1 MSD
 Matrix: Water
 Analysis Batch: 566919

Client Sample ID: BAC-16-F-20230227-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.071		2.50	2.85		mg/L		111	80 - 120	1	15

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-602806/1-A
 Matrix: Water
 Analysis Batch: 605623

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 602806

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.03881	U	0.0511	0.0513	1.00	0.0853	pCi/L	03/08/23 09:38	03/30/23 07:20	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.5		30 - 110					03/08/23 09:38	03/30/23 07:20	1

Lab Sample ID: LCS 160-602806/2-A
 Matrix: Water
 Analysis Batch: 605623

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 602806

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	11.3	11.79		1.21	1.00	0.0733	pCi/L	104	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	93.8		30 - 110						

Lab Sample ID: MB 160-602810/1-A
 Matrix: Water
 Analysis Batch: 605624

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 602810

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.02387	U	0.0631	0.0632	1.00	0.136	pCi/L	03/08/23 10:10	03/30/23 21:14	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.1		30 - 110					03/08/23 10:10	03/30/23 21:14	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: LCS 160-602810/2-A
Matrix: Water
Analysis Batch: 605624

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602810

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	
									75	125
Radium-226	11.3	13.03		1.33	1.00	0.101	pCi/L	115	75 - 125	
Carrier		LCS %Yield	LCS Qualifier	Limits						
Ba Carrier		89.3		30 - 110						

Lab Sample ID: LCSD 160-602810/3-A
Matrix: Water
Analysis Batch: 605622

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 602810

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		RER	RER Limit
									75	125	0.1	1
Radium-226	11.3	12.77		1.29	1.00	0.107	pCi/L	113	75 - 125	0.1	1	
Carrier		LCSD %Yield	LCSD Qualifier	Limits								
Ba Carrier		88.7		30 - 110								

Lab Sample ID: MB 160-603170/1-A
Matrix: Water
Analysis Batch: 605833

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 603170

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Carrier		MB %Yield	MB Qualifier	Limits	Prepared		Analyzed		Dil Fac	
Ba Carrier		90.1		30 - 110	03/10/23 09:30		04/03/23 10:00		1	

Lab Sample ID: LCS 160-603170/2-A
Matrix: Water
Analysis Batch: 605833

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 603170

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	
									75	125
Radium-226	11.3	11.43		1.17	1.00	0.0835	pCi/L	101	75 - 125	
Carrier		LCS %Yield	LCS Qualifier	Limits						
Ba Carrier		95.2		30 - 110						

Lab Sample ID: LCSD 160-603170/3-A
Matrix: Water
Analysis Batch: 605833

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 603170

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		RER	RER Limit
									75	125	0.01	1
Radium-226	11.3	11.45		1.18	1.00	0.0895	pCi/L	101	75 - 125	0.01	1	

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: LCSD 160-603170/3-A
Matrix: Water
Analysis Batch: 605833

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 603170

	LCS D	LCS D	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	88.7		30 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-602808/1-A
Matrix: Water
Analysis Batch: 604349

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602808

Analyte	MB MB		Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-228	0.1947	U	0.271	0.272	1.00	0.457	pCi/L	03/08/23 10:00	03/20/23 11:54	1
Carrier	%Yield	Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	89.5		30 - 110		03/08/23 10:00	03/20/23 11:54	1			
Y Carrier	81.9		30 - 110		03/08/23 10:00	03/20/23 11:54	1			

Lab Sample ID: LCS 160-602808/2-A
Matrix: Water
Analysis Batch: 604349

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602808

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	8.10	8.889		1.21	1.00	0.478	pCi/L	110	75 - 125
Carrier	%Yield	Qualifier	Limits						
Ba Carrier	93.8		30 - 110						
Y Carrier	81.1		30 - 110						

Lab Sample ID: MB 160-602812/1-A
Matrix: Water
Analysis Batch: 604464

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602812

Analyte	MB MB		Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-228	0.4307	U	0.338	0.340	1.00	0.520	pCi/L	03/08/23 10:36	03/21/23 12:52	1
Carrier	%Yield	Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	88.1		30 - 110		03/08/23 10:36	03/21/23 12:52	1			
Y Carrier	84.9		30 - 110		03/08/23 10:36	03/21/23 12:52	1			

Lab Sample ID: LCS 160-602812/2-A
Matrix: Water
Analysis Batch: 604464

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602812

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	8.10	9.785		1.32	1.00	0.481	pCi/L	121	75 - 125

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

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

Lab Sample ID: LCS 160-602812/2-A
Matrix: Water
Analysis Batch: 604464

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602812

	LCS	LCS	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	89.3		30 - 110
Y Carrier	83.4		30 - 110

Lab Sample ID: LCSD 160-602812/3-A
Matrix: Water
Analysis Batch: 604464

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 602812

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec		RER	Limit
									Limits	RER		
Radium-228	8.10	9.896		1.34	1.00	0.564	pCi/L	122	75 - 125	0.04		1

	LCSD	LCSD	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	88.7		30 - 110
Y Carrier	83.7		30 - 110

Lab Sample ID: MB 160-603171/1-A
Matrix: Water
Analysis Batch: 604973

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 603171

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared		Analyzed		Dil Fac
								Prepared	Analyzed	Prepared	Analyzed	
Radium-228	0.6538		0.361	0.366	1.00	0.504	pCi/L	03/10/23 09:56	03/24/23 12:15	03/24/23 12:15		1

	MB	MB		Prepared		Analyzed		Dil Fac
Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Prepared	Analyzed	
Ba Carrier	90.1		30 - 110	03/10/23 09:56	03/24/23 12:15	03/10/23 09:56	03/24/23 12:15	1
Y Carrier	80.7		30 - 110	03/10/23 09:56	03/24/23 12:15	03/10/23 09:56	03/24/23 12:15	1

Lab Sample ID: LCS 160-603171/2-A
Matrix: Water
Analysis Batch: 604973

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 603171

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec		RER	Limit
									Limits	RER		
Radium-228	8.09	9.575		1.29	1.00	0.463	pCi/L	118	75 - 125			

	LCS	LCS	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	95.2		30 - 110
Y Carrier	81.1		30 - 110

Lab Sample ID: LCSD 160-603171/3-A
Matrix: Water
Analysis Batch: 604973

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 603171

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec		RER	Limit
									Limits	RER		
Radium-228	8.09	10.24		1.40	1.00	0.592	pCi/L	127	75 - 125	0.25		1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

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

Lab Sample ID: LCSD 160-603171/3-A
Matrix: Water
Analysis Batch: 604973

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 603171

Carrier	LCSD		Limits
	%Yield	Qualifier	
Ba Carrier	88.7		30 - 110
Y Carrier	80.7		30 - 110

- 1
- 2
- 3
- 4
- 5
- 6
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- 8
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- 14
- 15

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Metals

Prep Batch: 564030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-1	BAC-16-F-20230227-01	Total Recoverable	Water	3005A	
240-181146-2	DUP-002-BAC-16-F-20230227-01	Total Recoverable	Water	3005A	
240-181146-3	BAC-14-F-20230227-01	Total Recoverable	Water	3005A	
240-181146-4	BAC-12-F-20230227-01	Total Recoverable	Water	3005A	
240-181146-5	BAC-10-F-20230227-01	Total Recoverable	Water	3005A	
240-181146-6	EB-001-F-20230227-01	Total Recoverable	Water	3005A	
MB 240-564030/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-564030/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 564032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-1	BAC-16-F-20230227-01	Total/NA	Water	7470A	
240-181146-2	DUP-002-BAC-16-F-20230227-01	Total/NA	Water	7470A	
240-181146-3	BAC-14-F-20230227-01	Total/NA	Water	7470A	
240-181146-4	BAC-12-F-20230227-01	Total/NA	Water	7470A	
240-181146-5	BAC-10-F-20230227-01	Total/NA	Water	7470A	
240-181146-6	EB-001-F-20230227-01	Total/NA	Water	7470A	
MB 240-564032/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-564032/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 564191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-1	BAC-16-F-20230227-01	Total/NA	Water	7470A	564032
240-181146-2	DUP-002-BAC-16-F-20230227-01	Total/NA	Water	7470A	564032
240-181146-3	BAC-14-F-20230227-01	Total/NA	Water	7470A	564032
240-181146-4	BAC-12-F-20230227-01	Total/NA	Water	7470A	564032
240-181146-5	BAC-10-F-20230227-01	Total/NA	Water	7470A	564032
240-181146-6	EB-001-F-20230227-01	Total/NA	Water	7470A	564032
MB 240-564032/1-A	Method Blank	Total/NA	Water	7470A	564032
LCS 240-564032/2-A	Lab Control Sample	Total/NA	Water	7470A	564032

Analysis Batch: 564223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-1	BAC-16-F-20230227-01	Total Recoverable	Water	6020B	564030
240-181146-2	DUP-002-BAC-16-F-20230227-01	Total Recoverable	Water	6020B	564030
240-181146-3	BAC-14-F-20230227-01	Total Recoverable	Water	6020B	564030
240-181146-4	BAC-12-F-20230227-01	Total Recoverable	Water	6020B	564030
240-181146-5	BAC-10-F-20230227-01	Total Recoverable	Water	6020B	564030
240-181146-6	EB-001-F-20230227-01	Total Recoverable	Water	6020B	564030
MB 240-564030/1-A	Method Blank	Total Recoverable	Water	6020B	564030
LCS 240-564030/2-A	Lab Control Sample	Total Recoverable	Water	6020B	564030

General Chemistry

Analysis Batch: 564459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-1	BAC-16-F-20230227-01	Total/NA	Water	2320B-1997	
240-181146-2	DUP-002-BAC-16-F-20230227-01	Total/NA	Water	2320B-1997	
240-181146-3	BAC-14-F-20230227-01	Total/NA	Water	2320B-1997	
240-181146-4	BAC-12-F-20230227-01	Total/NA	Water	2320B-1997	
240-181146-5	BAC-10-F-20230227-01	Total/NA	Water	2320B-1997	

Eurofins Canton

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

General Chemistry (Continued)

Analysis Batch: 564459 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-6	EB-001-F-20230227-01	Total/NA	Water	2320B-1997	
MB 240-564459/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-564459/56	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-564459/55	Lab Control Sample	Total/NA	Water	2320B-1997	

Analysis Batch: 566919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-1	BAC-16-F-20230227-01	Total/NA	Water	300.0-1993 R2.1	
240-181146-2	DUP-002-BAC-16-F-20230227-01	Total/NA	Water	300.0-1993 R2.1	
240-181146-3	BAC-14-F-20230227-01	Total/NA	Water	300.0-1993 R2.1	
240-181146-4	BAC-12-F-20230227-01	Total/NA	Water	300.0-1993 R2.1	
240-181146-5	BAC-10-F-20230227-01	Total/NA	Water	300.0-1993 R2.1	
240-181146-6	EB-001-F-20230227-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-566919/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-566919/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-181146-1 MS	BAC-16-F-20230227-01	Total/NA	Water	300.0-1993 R2.1	
240-181146-1 MSD	BAC-16-F-20230227-01	Total/NA	Water	300.0-1993 R2.1	

Rad

Prep Batch: 602806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-1	BAC-16-F-20230227-01	Total/NA	Water	PrecSep-21	
240-181146-2	DUP-002-BAC-16-F-20230227-01	Total/NA	Water	PrecSep-21	
MB 160-602806/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-602806/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 602808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-1	BAC-16-F-20230227-01	Total/NA	Water	PrecSep_0	
240-181146-2	DUP-002-BAC-16-F-20230227-01	Total/NA	Water	PrecSep_0	
MB 160-602808/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-602808/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Prep Batch: 602810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-6	EB-001-F-20230227-01	Total/NA	Water	PrecSep-21	
MB 160-602810/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-602810/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-602810/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 602812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-6	EB-001-F-20230227-01	Total/NA	Water	PrecSep_0	
MB 160-602812/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-602812/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-602812/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Prep Batch: 603170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-3	BAC-14-F-20230227-01	Total/NA	Water	PrecSep-21	

Eurofins Canton

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Rad (Continued)

Prep Batch: 603170 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-4	BAC-12-F-20230227-01	Total/NA	Water	PrecSep-21	
240-181146-5	BAC-10-F-20230227-01	Total/NA	Water	PrecSep-21	
MB 160-603170/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-603170/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-603170/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 603171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-3	BAC-14-F-20230227-01	Total/NA	Water	PrecSep_0	
240-181146-4	BAC-12-F-20230227-01	Total/NA	Water	PrecSep_0	
240-181146-5	BAC-10-F-20230227-01	Total/NA	Water	PrecSep_0	
MB 160-603171/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-603171/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-603171/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: BAC-16-F-20230227-01

Lab Sample ID: 240-181146-1

Date Collected: 02/27/23 10:05

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564030	AJC	EET CAN	03/02/23 14:00
Total Recoverable	Analysis	6020B		1	564223	DSH	EET CAN	03/03/23 17:46
Total/NA	Prep	7470A			564032	AJC	EET CAN	03/02/23 14:00
Total/NA	Analysis	7470A		1	564191	MRL	EET CAN	03/03/23 14:36
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 16:05
Total/NA	Analysis	300.0-1993 R2.1		1	566919	JWW	EET CAN	03/27/23 16:08
Total/NA	Prep	PrecSep-21			602806	DJP	EET SL	03/08/23 09:38
Total/NA	Analysis	9315		1	605624	FLC	EET SL	03/30/23 07:26
Total/NA	Prep	PrecSep_0			602808	DJP	EET SL	03/08/23 10:00
Total/NA	Analysis	9320		1	604352	FLC	EET SL	03/20/23 12:02
Total/NA	Analysis	Ra226_Ra228		1	605725	EMH	EET SL	03/30/23 15:45

Client Sample ID: DUP-002-BAC-16-F-20230227-01

Lab Sample ID: 240-181146-2

Date Collected: 02/27/23 10:05

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564030	AJC	EET CAN	03/02/23 14:00
Total Recoverable	Analysis	6020B		1	564223	DSH	EET CAN	03/03/23 17:48
Total/NA	Prep	7470A			564032	AJC	EET CAN	03/02/23 14:00
Total/NA	Analysis	7470A		1	564191	MRL	EET CAN	03/03/23 14:43
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 16:09
Total/NA	Analysis	300.0-1993 R2.1		1	566919	JWW	EET CAN	03/27/23 17:08
Total/NA	Prep	PrecSep-21			602806	DJP	EET SL	03/08/23 09:38
Total/NA	Analysis	9315		1	605624	FLC	EET SL	03/30/23 07:26
Total/NA	Prep	PrecSep_0			602808	DJP	EET SL	03/08/23 10:00
Total/NA	Analysis	9320		1	604352	FLC	EET SL	03/20/23 12:02
Total/NA	Analysis	Ra226_Ra228		1	605725	EMH	EET SL	03/30/23 15:45

Client Sample ID: BAC-14-F-20230227-01

Lab Sample ID: 240-181146-3

Date Collected: 02/27/23 11:46

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564030	AJC	EET CAN	03/02/23 14:00
Total Recoverable	Analysis	6020B		1	564223	DSH	EET CAN	03/03/23 17:51
Total/NA	Prep	7470A			564032	AJC	EET CAN	03/02/23 14:00
Total/NA	Analysis	7470A		1	564191	MRL	EET CAN	03/03/23 14:45
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 16:13
Total/NA	Analysis	300.0-1993 R2.1		1	566919	JWW	EET CAN	03/27/23 17:28
Total/NA	Prep	PrecSep-21			603170	DJP	EET SL	03/10/23 09:30
Total/NA	Analysis	9315		1	605833	EMH	EET SL	04/03/23 10:02
Total/NA	Prep	PrecSep_0			603171	DJP	EET SL	03/10/23 09:56
Total/NA	Analysis	9320		1	604973	FLC	EET SL	03/24/23 12:16

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: BAC-14-F-20230227-01

Lab Sample ID: 240-181146-3

Date Collected: 02/27/23 11:46

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228		1	605947	CAH	EET SL	04/03/23 15:19

Client Sample ID: BAC-12-F-20230227-01

Lab Sample ID: 240-181146-4

Date Collected: 02/27/23 12:29

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564030	AJC	EET CAN	03/02/23 14:00
Total Recoverable	Analysis	6020B		1	564223	DSH	EET CAN	03/03/23 17:53
Total/NA	Prep	7470A			564032	AJC	EET CAN	03/02/23 14:00
Total/NA	Analysis	7470A		1	564191	MRL	EET CAN	03/03/23 14:47
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 16:17
Total/NA	Analysis	300.0-1993 R2.1		1	566919	JWW	EET CAN	03/27/23 17:48
Total/NA	Prep	PrecSep-21			603170	DJP	EET SL	03/10/23 09:30
Total/NA	Analysis	9315		1	605833	EMH	EET SL	04/03/23 10:03
Total/NA	Prep	PrecSep_0			603171	DJP	EET SL	03/10/23 09:56
Total/NA	Analysis	9320		1	604973	FLC	EET SL	03/24/23 12:17
Total/NA	Analysis	Ra226_Ra228		1	605947	CAH	EET SL	04/03/23 15:19

Client Sample ID: BAC-10-F-20230227-01

Lab Sample ID: 240-181146-5

Date Collected: 02/27/23 13:22

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564030	AJC	EET CAN	03/02/23 14:00
Total Recoverable	Analysis	6020B		1	564223	DSH	EET CAN	03/03/23 17:56
Total/NA	Prep	7470A			564032	AJC	EET CAN	03/02/23 14:00
Total/NA	Analysis	7470A		1	564191	MRL	EET CAN	03/03/23 14:49
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 16:21
Total/NA	Analysis	300.0-1993 R2.1		1	566919	JWW	EET CAN	03/27/23 18:08
Total/NA	Prep	PrecSep-21			603170	DJP	EET SL	03/10/23 09:30
Total/NA	Analysis	9315		1	605835	EMH	EET SL	04/03/23 09:55
Total/NA	Prep	PrecSep_0			603171	DJP	EET SL	03/10/23 09:56
Total/NA	Analysis	9320		1	604973	FLC	EET SL	03/24/23 12:17
Total/NA	Analysis	Ra226_Ra228		1	605947	CAH	EET SL	04/03/23 15:19

Client Sample ID: EB-001-F-20230227-01

Lab Sample ID: 240-181146-6

Date Collected: 02/27/23 14:10

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564030	AJC	EET CAN	03/02/23 14:00
Total Recoverable	Analysis	6020B		1	564223	DSH	EET CAN	03/03/23 17:59
Total/NA	Prep	7470A			564032	AJC	EET CAN	03/02/23 14:00
Total/NA	Analysis	7470A		1	564191	MRL	EET CAN	03/03/23 14:51

Eurofins Canton

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: EB-001-F-20230227-01

Lab Sample ID: 240-181146-6

Date Collected: 02/27/23 14:10

Matrix: Water

Date Received: 03/01/23 08:00

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 16:25
Total/NA	Analysis	300.0-1993 R2.1		1	566919	JWW	EET CAN	03/27/23 19:29
Total/NA	Prep	PrecSep-21			602810	DJP	EET SL	03/08/23 10:10
Total/NA	Analysis	9315		1	605622	FLC	EET SL	03/30/23 21:19
Total/NA	Prep	PrecSep_0			602812	DJP	EET SL	03/08/23 10:36
Total/NA	Analysis	9320		1	604464	FLC	EET SL	03/21/23 12:52
Total/NA	Analysis	Ra226_Ra228		1	605947	CAH	EET SL	04/03/23 15:19

Laboratory References:

EET CAN = Eurofins Canton, 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
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23 *
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-28-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23 *
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-23 *
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	03-29-23
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	03-27-23
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-23
Florida	NELAP	E87689	06-30-23
HI - RadChem Recognition	State	n/a	06-30-23
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana (All)	NELAP	04080	06-30-23
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-23
MI - RadChem Recognition	State	9005	06-30-23
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-23
New Jersey	NELAP	MO002	06-30-23
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-23
North Dakota	State	R-207	06-30-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Canton

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

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
Oklahoma	NELAP	9997	08-31-23
Oregon	NELAP	4157	09-01-23
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23
Texas	NELAP	T104704193	07-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00028	06-11-23
Utah	NELAP	MO000542021-14	07-31-23
Virginia	NELAP	10310	06-14-24
Washington	State	C592	08-30-23
West Virginia DEP	State	381	10-31-23

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: Federal CCR Wells - App IV Site: Gavin Pknt		Lab PM: Cisneros, Roxanne E-Mail: roxanne.cisneros@Eurofinsel.com PWSID:		Camer Tracking No(s): State of Origin:		COC No: 240-93466-34578.1 Page: Page 1 of 1 Job #:			
Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: 2935505 WO #:		Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> 6020, 7470A 300.0, 28D - Fluoride 2320B - Alkalinity 9315, R4226, 9320, R4228, R4226R4228, GPPC		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 Other:		Special Instructions/Note: Total Number of containers:	
Sample Date 2-27-23 2-27-23 2-27-23 2-27-23 2-27-23 2-27-23		Sample Time 1005 1005 1146 1229 1322 1410		Sample Type (C=comp, G=grab) 6 6 6 6 6 6		Matrix (Water, Preserved, On-site) Water Water Water Water Water W		Preservation Code: N N N N N N	
Sample Identification BAC-16-F-20230227-01 DUP002-BAC-16-F-20230227-01 BAC-14-F-20230227-01 BAC-12-F-20230227-01 BAC-10-F-20230227-01 EB-001-F-20230227-01		Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		240-181146 Chain of Custody		Special Instructions/QC Requirements:	
Relinquished by:		Date/Time: 2-28-23 945		Received by:		Date/Time: 2-28-23 1200		Company: E7A	
Relinquished by:		Date/Time: 2-28-23 1700		Received by:		Date/Time: 3-1-23 800		Company: BBTK	
Relinquished by:		Date/Time:		Received by:		Date/Time:		Company:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Method of Shipment:		Company:	



Barberton Facility

Client Lightsone Site Name _____

Cooler unpacked by:

Cooler Received on 3-1-23

Opened on 3-1-23

Rachelle Haider

FedEx: 1st Grd Exp UPS FAS Clipper 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 # IR-13 (CF -0.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 - IR GUN # IR-16 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 - IR GUN # IR-17 (CF -0.3 °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

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

- 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# HC203864
- 14. Were VOAs on the COC? Yes No
- 15. Were air bubbles >6 mm in any VOA vials? Yes 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: _____

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
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Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container		Preservative	
			pH	Temp	Added (mls)	Lot #
BAC-16-F-20230227-01	240-181146-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-16-F-20230227-01	240-181146-D-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-16-F-20230227-01	240-181146-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-002-BAC-16-F-20230227-01	240-181146-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-002-BAC-16-F-20230227-01	240-181146-D-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-002-BAC-16-F-20230227-01	240-181146-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-14-F-20230227-01	240-181146-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-14-F-20230227-01	240-181146-D-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-14-F-20230227-01	240-181146-E-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-12-F-20230227-01	240-181146-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-12-F-20230227-01	240-181146-D-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-12-F-20230227-01	240-181146-E-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-10-F-20230227-01	240-181146-C-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-10-F-20230227-01	240-181146-D-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-10-F-20230227-01	240-181146-E-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230227-01	240-181146-C-6	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230227-01	240-181146-D-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230227-01	240-181146-E-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

Eurofins - Canton Sample Receipt Multiple Cooler Form

Cooler Description (Circle)				IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)		
EC	Client	Box	Other	IR-13 IR-16 IR-17	13.7	13.6	Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17	0.3	0.2	Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17	2.4	2.3	Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17	1.2	1.1	Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR-13 IR-16 IR-17			Wet Ice	Blue Ice	Dry Ice

See Temperature Excursion Form

Chain of Custody Record



Client Information (Sub Contract Lab)		Lab PM: Cisneros, Roxanne	Camper Tracking No(s): 240-164518.1	
Client Contact: Shipping/Receiving		E-Mail: roxanne.cisneros@et.eurofins.com	Page: Page 1 of 1	
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):	Job #: 240-181146-1	
Address: 13715 Ridler Trail North, Earth City, MO, 63045		Due Date Requested: 4/1/2023	Analysis Requested 9315_Ra226/PreSep_21 Radium-226 (GFC) <input checked="" type="checkbox"/> Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> 9320_Ra228/PreSep_0 Radium-228 (GFC) <input checked="" type="checkbox"/> Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> R226Ra228_GFC/ Combined Radium-226 and Radium-228 <input checked="" type="checkbox"/> Total Number of Containers	
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		TAT Requested (days):		
Email:		PO #:	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)	
Project Name: Federal CCR Wells - App IV		WO #:		
Site:		Project #: 24019633		
Sample Identification - Client ID (Lab ID)		SSOW#:		
BAC-16-F-20230227-01 (240-181146-1)	Sample Date: 2/27/23	Sample Time: 10:05 Eastern		Preservation Code: Water
DUP-002-BAC-16-F-20230227-01 (240-181146-2)	Sample Date: 2/27/23	Sample Time: 10:05 Eastern		Preservation Code: Water
BAC-14-F-20230227-01 (240-181146-3)	Sample Date: 2/27/23	Sample Time: 11:46 Eastern		Preservation Code: Water
BAC-12-F-20230227-01 (240-181146-4)	Sample Date: 2/27/23	Sample Time: 12:29 Eastern		Preservation Code: Water
BAC-10-F-20230227-01 (240-181146-5)	Sample Date: 2/27/23	Sample Time: 13:22 Eastern		Preservation Code: Water
EB-001-F-20230227-01 (240-181146-6)	Sample Date: 2/27/23	Sample Time: 14:10 Eastern		Preservation Code: Water
Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/Note: 2. Recount of TAR after 21 day ingrowth if > action limit; save planchet 2. Recount of TAR after 21 day ingrowth if > action limit; save planchet 2. Recount of TAR after 21 day ingrowth if > action limit; save planchet 2. Recount of TAR after 21 day ingrowth if > action limit; save planchet 2. Recount of TAR after 21 day ingrowth if > action limit; save planchet 2. Recount of TAR after 21 day ingrowth if > action limit; save planchet		
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:		Method of Shipment: Date/Time:		
Empty Kti Relinquished by:		Date:		
Relinquished by:		Date/Time:		
Relinquished by:		Date/Time:		
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks:		



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-181146-1

Login Number: 181146

List Number: 2

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

List Creation: 03/03/23 01:07 PM

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





ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 4/5/2023 11:53:53 AM

JOB DESCRIPTION

Federal CCR Wells - App IV

JOB NUMBER

240-181275-1

Eurofins Canton

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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
4/5/2023 11:53:53 AM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Qualifiers

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.

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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Job ID: 240-181275-1

Laboratory: Eurofins Canton

Narrative

Job Narrative 240-181275-1

Comments

No additional comments.

Receipt

The samples were received on 3/3/2023 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 5 coolers at receipt time were 1.7° C, 2.3° C, 2.5° C, 2.7° C and 14.5° C.

RAD

Methods 9315: Radium-226 batch 602828: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-01-F-20230301-01 (240-181275-1), MW-6-F-20230301-01 (240-181275-2), BAC-23-F-20230301-01 (240-181275-3), BAC-08-F-20230301-01 (240-181275-4), EB-001-F-20230301-01 (240-181275-5), (LCS 160-602828/2-A), (LCSD 160-602828/3-A) and (MB 160-602828/1-A)

Methods 9320: Radium-228 batch 602829: The LCS recovered at (139%). 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 (62-148%) per method requirements. The LCS passes, no further action is required. (LCSD 160-602829/3-A)

Methods 9320: Radium-228 batch 602829: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-01-F-20230301-01 (240-181275-1), MW-6-F-20230301-01 (240-181275-2), BAC-23-F-20230301-01 (240-181275-3), BAC-08-F-20230301-01 (240-181275-4), EB-001-F-20230301-01 (240-181275-5), (LCS 160-602829/2-A), (LCSD 160-602829/3-A) and (MB 160-602829/1-A)

Method PrecSep_0: Radium-228 Prep Batch 602829: The following sample was prepared at a reduced aliquot due to Matrix: BAC-01-F-20230301-01 (240-181275-1). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep_0: Radium-228 Prep Batch 602829: Insufficient sample volume was available to perform a sample duplicate for the following samples: MW-6-F-20230301-01 (240-181275-2), BAC-23-F-20230301-01 (240-181275-3), BAC-08-F-20230301-01 (240-181275-4) and EB-001-F-20230301-01 (240-181275-5). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Radium-226 Prep Batch 160-602828: The following sample was prepared at a reduced aliquot due to Matrix: BAC-01-F-20230301-01 (240-181275-1). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep-21: Radium-226 Prep Batch 160-602828: Insufficient sample volume was available to perform a sample duplicate for the following samples: MW-6-F-20230301-01 (240-181275-2), BAC-23-F-20230301-01 (240-181275-3), BAC-08-F-20230301-01 (240-181275-4) and EB-001-F-20230301-01 (240-181275-5). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

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

Metals

Method 6020B: The continuing calibration verification (CCV) associated with batch 240-564732 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: BAC-01-F-20230301-01 (240-181275-1), MW-6-F-20230301-01 (240-181275-2), BAC-23-F-20230301-01 (240-181275-3), BAC-08-F-20230301-01 (240-181275-4) and EB-001-F-20230301-01 (240-181275-5).

Method 6020B: The continuing calibration verification (CCV) associated with batch 240-564732 recovered above the upper control limit for

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Job ID: 240-181275-1 (Continued)

Laboratory: Eurofins Canton (Continued)

Lithium. 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: BAC-01-F-20230301-01 (240-181275-1), MW-6-F-20230301-01 (240-181275-2), BAC-08-F-20230301-01 (240-181275-4) and EB-001-F-20230301-01 (240-181275-5).

Methods 6020B: The continuing calibration verification (CCV) associated with batch 240-564732 recovered above the upper control limit for Chromium. 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: BAC-23-F-20230301-01 (240-181275-3), BAC-08-F-20230301-01 (240-181275-4) and EB-001-F-20230301-01 (240-181275-5).

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

General Chemistry

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



Method Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CAN
7470A	Mercury (CVAA)	SW846	EET CAN
2320B-1997	Alkalinity, Total	SM	EET CAN
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CAN
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 CAN
7470A	Preparation, Mercury	SW846	EET CAN
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 CAN = Eurofins Canton, 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 - App IV

Job ID: 240-181275-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-181275-1	BAC-01-F-20230301-01	Water	03/01/23 12:35	03/03/23 08:00
240-181275-2	MW-6-F-20230301-01	Water	03/01/23 13:21	03/03/23 08:00
240-181275-3	BAC-23-F-20230301-01	Water	03/01/23 14:02	03/03/23 08:00
240-181275-4	BAC-08-F-20230301-01	Water	03/01/23 14:53	03/03/23 08:00
240-181275-5	EB-001-F-20230301-01	Water	03/01/23 15:15	03/03/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: BAC-01-F-20230301-01

Lab Sample ID: 240-181275-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.6	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	90		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	2.3		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	5.2	J ^+	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	13000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	12000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.87	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.13		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: MW-6-F-20230301-01

Lab Sample ID: 240-181275-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	140		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.53	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	6.1	J ^+	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	14000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.28	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.094		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-23-F-20230301-01

Lab Sample ID: 240-181275-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.8	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	140		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	2.6	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	16000		1000	200	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: BAC-23-F-20230301-01 (Continued)

Lab Sample ID: 240-181275-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	2000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	19000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.14		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-08-F-20230301-01

Lab Sample ID: 240-181275-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	4.1	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	160		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.5		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	4.5	J ^+	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	12000		1000	200	ug/L	1		6020B	Total Recoverable
Molybdenum	2.0	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	13000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.15		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: EB-001-F-20230301-01

Lab Sample ID: 240-181275-5

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: BAC-01-F-20230301-01

Lab Sample ID: 240-181275-1

Date Collected: 03/01/23 12:35

Matrix: Water

Date Received: 03/03/23 08:00

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		03/05/23 14:00	03/08/23 17:10	1
Arsenic	3.6	J	5.0	0.75	ug/L		03/05/23 14:00	03/08/23 17:10	1
Barium	90		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 17:10	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 17:10	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:10	1
Chromium	ND		5.0	2.5	ug/L		03/05/23 14:00	03/08/23 17:10	1
Cobalt	2.1		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 17:10	1
Lead	2.3		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 17:10	1
Lithium	5.2	J ^+	8.0	1.7	ug/L		03/05/23 14:00	03/08/23 17:10	1
Magnesium	13000		1000	200	ug/L		03/05/23 14:00	03/08/23 17:10	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 17:10	1
Potassium	1700		1000	220	ug/L		03/05/23 14:00	03/08/23 17:10	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 17:10	1
Sodium	12000		1000	330	ug/L		03/05/23 14:00	03/08/23 17:10	1
Thallium	0.87	J	1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:10	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		03/06/23 10:00	03/07/23 20:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	200		5.0	2.6	mg/L			03/06/23 17:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	200		5.0	2.6	mg/L			03/06/23 17:31	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 17:31	1
Fluoride (EPA 300.0-1993 R2.1)	0.13		0.050	0.024	mg/L			03/27/23 20:09	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	0.123	U	0.0919	0.0925	1.00	0.130	pCi/L	03/08/23 11:39	04/04/23 19:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.7		30 - 110					03/08/23 11:39	04/04/23 19:57	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	0.853	U	0.587	0.592	1.00	0.896	pCi/L	03/08/23 12:03	03/22/23 12:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.7		30 - 110					03/08/23 12:03	03/22/23 12:40	1
Y Carrier	82.6		30 - 110					03/08/23 12:03	03/22/23 12:40	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: BAC-01-F-20230301-01

Lab Sample ID: 240-181275-1

Date Collected: 03/01/23 12:35

Matrix: Water

Date Received: 03/03/23 08:00

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	0.976		0.594	0.599	5.00	0.896	pCi/L		04/05/23 12:45	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: MW-6-F-20230301-01

Lab Sample ID: 240-181275-2

Date Collected: 03/01/23 13:21

Matrix: Water

Date Received: 03/03/23 08:00

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		03/05/23 14:00	03/08/23 17:14	1
Arsenic	ND		5.0	0.75	ug/L		03/05/23 14:00	03/08/23 17:14	1
Barium	140		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 17:14	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 17:14	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:14	1
Chromium	ND		5.0	2.5	ug/L		03/05/23 14:00	03/08/23 17:14	1
Cobalt	0.53	J	1.0	0.19	ug/L		03/05/23 14:00	03/08/23 17:14	1
Lead	ND		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 17:14	1
Lithium	6.1	J ^+	8.0	1.7	ug/L		03/05/23 14:00	03/08/23 17:14	1
Magnesium	14000		1000	200	ug/L		03/05/23 14:00	03/08/23 17:14	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 17:14	1
Potassium	1800		1000	220	ug/L		03/05/23 14:00	03/08/23 17:14	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 17:14	1
Sodium	15000		1000	330	ug/L		03/05/23 14:00	03/08/23 17:14	1
Thallium	0.28	J	1.0	0.20	ug/L		03/05/23 14:00	03/08/23 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		03/06/23 10:00	03/07/23 20:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 17:40	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 17:40	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 17:40	1
Fluoride (EPA 300.0-1993 R2.1)	0.094		0.050	0.024	mg/L			03/27/23 20:29	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	0.0353	U	0.0561	0.0562	1.00	0.0974	pCi/L	03/08/23 11:39	04/04/23 19:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.7		30 - 110					03/08/23 11:39	04/04/23 19:57	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	0.156	U	0.353	0.353	1.00	0.617	pCi/L	03/08/23 12:03	03/22/23 12:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.7		30 - 110					03/08/23 12:03	03/22/23 12:40	1
Y Carrier	78.1		30 - 110					03/08/23 12:03	03/22/23 12:40	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: MW-6-F-20230301-01

Lab Sample ID: 240-181275-2

Date Collected: 03/01/23 13:21

Matrix: Water

Date Received: 03/03/23 08:00

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	0.191	U	0.357	0.357	5.00	0.617	pCi/L		04/05/23 12:45	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: BAC-23-F-20230301-01

Lab Sample ID: 240-181275-3

Date Collected: 03/01/23 14:02

Matrix: Water

Date Received: 03/03/23 08:00

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		03/05/23 14:00	03/08/23 18:43	1
Arsenic	1.8	J	5.0	0.75	ug/L		03/05/23 14:00	03/08/23 18:43	1
Barium	140		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 18:43	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 18:43	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 18:43	1
Chromium	ND	^+	5.0	2.5	ug/L		03/05/23 14:00	03/08/23 18:43	1
Cobalt	1.1		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 18:43	1
Lead	ND		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 18:43	1
Lithium	2.6	J	8.0	1.7	ug/L		03/05/23 14:00	03/08/23 18:43	1
Magnesium	16000		1000	200	ug/L		03/05/23 14:00	03/08/23 18:43	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 18:43	1
Potassium	2000		1000	220	ug/L		03/05/23 14:00	03/08/23 18:43	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 18:43	1
Sodium	19000		1000	330	ug/L		03/05/23 14:00	03/08/23 18:43	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 18:43	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		03/06/23 10:00	03/07/23 20:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 17:44	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 17:44	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 17:44	1
Fluoride (EPA 300.0-1993 R2.1)	0.14		0.050	0.024	mg/L			03/27/23 20:50	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.141		0.0722	0.0733	1.00	0.0765	pCi/L	03/08/23 11:39	04/04/23 19:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.2		30 - 110					03/08/23 11:39	04/04/23 19:57	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.455	U	0.372	0.374	1.00	0.578	pCi/L	03/08/23 12:03	03/22/23 12:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.2		30 - 110					03/08/23 12:03	03/22/23 12:40	1
Y Carrier	85.6		30 - 110					03/08/23 12:03	03/22/23 12:40	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: BAC-23-F-20230301-01

Lab Sample ID: 240-181275-3

Date Collected: 03/01/23 14:02

Matrix: Water

Date Received: 03/03/23 08:00

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	0.596		0.379	0.381	5.00	0.578	pCi/L		04/05/23 12:45	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: BAC-08-F-20230301-01

Lab Sample ID: 240-181275-4

Date Collected: 03/01/23 14:53

Matrix: Water

Date Received: 03/03/23 08:00

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		03/05/23 14:00	03/08/23 17:28	1
Arsenic	4.1	J	5.0	0.75	ug/L		03/05/23 14:00	03/08/23 17:28	1
Barium	160		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 17:28	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 17:28	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:28	1
Chromium	ND	^+	5.0	2.5	ug/L		03/05/23 14:00	03/08/23 17:28	1
Cobalt	2.5		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 17:28	1
Lead	ND		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 17:28	1
Lithium	4.5	J ^+	8.0	1.7	ug/L		03/05/23 14:00	03/08/23 17:28	1
Magnesium	12000		1000	200	ug/L		03/05/23 14:00	03/08/23 17:28	1
Molybdenum	2.0	J	5.0	1.1	ug/L		03/05/23 14:00	03/08/23 17:28	1
Potassium	1400		1000	220	ug/L		03/05/23 14:00	03/08/23 17:28	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 17:28	1
Sodium	13000		1000	330	ug/L		03/05/23 14:00	03/08/23 17:28	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:28	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		03/06/23 10:00	03/07/23 20:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	190		5.0	2.6	mg/L			03/06/23 17:48	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	190		5.0	2.6	mg/L			03/06/23 17:48	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 17:48	1
Fluoride (EPA 300.0-1993 R2.1)	0.15		0.050	0.024	mg/L			03/27/23 21:10	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.161		0.0786	0.0800	1.00	0.0905	pCi/L	03/08/23 11:39	04/04/23 19:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.1		30 - 110					03/08/23 11:39	04/04/23 19:58	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	-0.0363	U	0.274	0.274	1.00	0.528	pCi/L	03/08/23 12:03	03/22/23 12:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.1		30 - 110					03/08/23 12:03	03/22/23 12:41	1
Y Carrier	83.4		30 - 110					03/08/23 12:03	03/22/23 12:41	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: BAC-08-F-20230301-01

Lab Sample ID: 240-181275-4

Date Collected: 03/01/23 14:53

Matrix: Water

Date Received: 03/03/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.125	U	0.285	0.285	5.00	0.528	pCi/L		04/05/23 12:45	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: EB-001-F-20230301-01

Lab Sample ID: 240-181275-5

Date Collected: 03/01/23 15:15

Matrix: Water

Date Received: 03/03/23 08:00

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		03/05/23 14:00	03/08/23 17:32	1
Arsenic	ND		5.0	0.75	ug/L		03/05/23 14:00	03/08/23 17:32	1
Barium	ND		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 17:32	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 17:32	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:32	1
Chromium	ND	^+	5.0	2.5	ug/L		03/05/23 14:00	03/08/23 17:32	1
Cobalt	ND		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 17:32	1
Lead	ND		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 17:32	1
Lithium	ND	^+	8.0	1.7	ug/L		03/05/23 14:00	03/08/23 17:32	1
Magnesium	ND		1000	200	ug/L		03/05/23 14:00	03/08/23 17:32	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 17:32	1
Potassium	ND		1000	220	ug/L		03/05/23 14:00	03/08/23 17:32	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 17:32	1
Sodium	ND		1000	330	ug/L		03/05/23 14:00	03/08/23 17:32	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:32	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		03/06/23 10:00	03/07/23 20:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 17:54	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 17:54	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 17:54	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			03/27/23 22:10	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0145	U	0.0411	0.0411	1.00	0.0792	pCi/L	03/08/23 11:39	04/04/23 19:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.8		30 - 110					03/08/23 11:39	04/04/23 19:58	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.249	U	0.304	0.305	1.00	0.503	pCi/L	03/08/23 12:03	03/22/23 12:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.8		30 - 110					03/08/23 12:03	03/22/23 12:41	1
Y Carrier	89.0		30 - 110					03/08/23 12:03	03/22/23 12:41	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: EB-001-F-20230301-01

Lab Sample ID: 240-181275-5

Date Collected: 03/01/23 15:15

Matrix: Water

Date Received: 03/03/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.264	U	0.307	0.308	5.00	0.503	pCi/L		04/05/23 12:45	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
240-181275-1	BAC-01-F-20230301-01	84.7	
240-181275-2	MW-6-F-20230301-01	88.7	
240-181275-3	BAC-23-F-20230301-01	82.2	
240-181275-4	BAC-08-F-20230301-01	88.1	
240-181275-5	EB-001-F-20230301-01	91.8	
LCS 160-602828/2-A	Lab Control Sample	85.3	
LCSD 160-602828/3-A	Lab Control Sample Dup	80.8	
MB 160-602828/1-A	Method Blank	85.9	
Tracer/Carrier Legend			
Ba = Ba Carrier			

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-181275-1	BAC-01-F-20230301-01	84.7	82.6
240-181275-2	MW-6-F-20230301-01	88.7	78.1
240-181275-3	BAC-23-F-20230301-01	82.2	85.6
240-181275-4	BAC-08-F-20230301-01	88.1	83.4
240-181275-5	EB-001-F-20230301-01	91.8	89.0
LCS 160-602829/2-A	Lab Control Sample	85.3	85.2
LCSD 160-602829/3-A	Lab Control Sample Dup	80.8	81.1
MB 160-602829/1-A	Method Blank	85.9	84.1
Tracer/Carrier Legend			
Ba = Ba Carrier			
Y = Y Carrier			

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-564268/1-A
Matrix: Water
Analysis Batch: 564732

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 564268

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	ND		2.0	0.57	ug/L		03/05/23 14:00	03/08/23 16:39	1
Arsenic	ND		5.0	0.75	ug/L		03/05/23 14:00	03/08/23 16:39	1
Barium	ND		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 16:39	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 16:39	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 16:39	1
Chromium	ND		5.0	2.5	ug/L		03/05/23 14:00	03/08/23 16:39	1
Cobalt	ND		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 16:39	1
Lead	ND		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 16:39	1
Lithium	ND	^+	8.0	1.7	ug/L		03/05/23 14:00	03/08/23 16:39	1
Magnesium	ND		1000	200	ug/L		03/05/23 14:00	03/08/23 16:39	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 16:39	1
Potassium	ND		1000	220	ug/L		03/05/23 14:00	03/08/23 16:39	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 16:39	1
Sodium	ND		1000	330	ug/L		03/05/23 14:00	03/08/23 16:39	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 16:39	1

Lab Sample ID: LCS 240-564268/2-A
Matrix: Water
Analysis Batch: 564732

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 564268

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec
		Result	Qualifier				
Antimony	100	101		ug/L		101	80 - 120
Arsenic	1000	908		ug/L		91	80 - 120
Barium	1000	962		ug/L		96	80 - 120
Beryllium	500	485	^+	ug/L		97	80 - 120
Cadmium	500	480		ug/L		96	80 - 120
Chromium	500	514		ug/L		103	80 - 120
Cobalt	500	462		ug/L		92	80 - 120
Lead	500	501		ug/L		100	80 - 120
Lithium	500	476	^+	ug/L		95	80 - 120
Magnesium	25000	24900		ug/L		99	80 - 120
Molybdenum	500	467		ug/L		93	80 - 120
Potassium	25000	24000		ug/L		96	80 - 120
Selenium	1000	915		ug/L		91	80 - 120
Sodium	25000	24900		ug/L		100	80 - 120
Thallium	1000	968		ug/L		97	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-564269/1-A
Matrix: Water
Analysis Batch: 564598

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 564269

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.20	0.13	ug/L		03/06/23 10:00	03/07/23 19:58	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-564269/2-A
 Matrix: Water
 Analysis Batch: 564598

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 564269

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.19		ug/L		104	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-564459/56
 Matrix: Water
 Analysis Batch: 564459

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			03/06/23 14:59	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 14:59	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 14:59	1

Lab Sample ID: MB 240-564459/83
 Matrix: Water
 Analysis Batch: 564459

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			03/06/23 16:43	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 16:43	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 16:43	1

Lab Sample ID: LCS 240-564459/82
 Matrix: Water
 Analysis Batch: 564459

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	145		mg/L		99	86 - 123

Lab Sample ID: 240-181275-1 DU
 Matrix: Water
 Analysis Batch: 564459

Client Sample ID: BAC-01-F-20230301-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Alkalinity	200		202		mg/L		0.7	20
Bicarbonate Alkalinity as CaCO3	200		202		mg/L		0.7	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-566919/3
 Matrix: Water
 Analysis Batch: 566919

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			03/27/23 14:30	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 240-566919/4
Matrix: Water
Analysis Batch: 566919

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.56		mg/L		103	90 - 110

Lab Sample ID: 240-181275-4 MS
Matrix: Water
Analysis Batch: 566919

Client Sample ID: BAC-08-F-20230301-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.15		2.50	2.90		mg/L		110	80 - 120

Lab Sample ID: 240-181275-4 MSD
Matrix: Water
Analysis Batch: 566919

Client Sample ID: BAC-08-F-20230301-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.15		2.50	2.96		mg/L		112	80 - 120	2	15

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-602828/1-A
Matrix: Water
Analysis Batch: 605835

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602828

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.03913	U	0.0688	0.0689	1.00	0.121	pCi/L	03/08/23 11:39	04/03/23 21:42	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.9		30 - 110					03/08/23 11:39	04/03/23 21:42	1

Lab Sample ID: LCS 160-602828/2-A
Matrix: Water
Analysis Batch: 605835

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602828

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	11.3	11.96		1.23	1.00	0.0945	pCi/L	106	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	85.3		30 - 110						

Lab Sample ID: LCSD 160-602828/3-A
Matrix: Water
Analysis Batch: 605835

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 602828

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-226	11.3	12.07		1.24	1.00	0.0956	pCi/L	106	75 - 125	0.04	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: LCSD 160-602828/3-A
 Matrix: Water
 Analysis Batch: 605835

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 602828

Carrier	LCS D %Yield	LCS D Qualifier	Limits
Ba Carrier	80.8		30 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-602829/1-A
 Matrix: Water
 Analysis Batch: 604715

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 602829

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.4492	U	0.362	0.365	1.00	0.562	pCi/L	03/08/23 12:03	03/22/23 12:35	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	85.9		30 - 110	03/08/23 12:03	03/22/23 12:35	1
Y Carrier	84.1		30 - 110	03/08/23 12:03	03/22/23 12:35	1

Lab Sample ID: LCS 160-602829/2-A
 Matrix: Water
 Analysis Batch: 604715

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 602829

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-228	8.10	9.897		1.37	1.00	0.649	pCi/L	122	75 - 125

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	85.3		30 - 110
Y Carrier	85.2		30 - 110

Lab Sample ID: LCSD 160-602829/3-A
 Matrix: Water
 Analysis Batch: 604715

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 602829

Analyte	Spike Added	LCSD Result	LCSD Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER
				Uncert. (2σ+/-)							Limit
Radium-228	8.10	11.22		1.52	1.00	0.594	pCi/L	139	75 - 125	0.46	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	80.8		30 - 110
Y Carrier	81.1		30 - 110

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Metals

Prep Batch: 564268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181275-1	BAC-01-F-20230301-01	Total Recoverable	Water	3005A	
240-181275-2	MW-6-F-20230301-01	Total Recoverable	Water	3005A	
240-181275-3	BAC-23-F-20230301-01	Total Recoverable	Water	3005A	
240-181275-4	BAC-08-F-20230301-01	Total Recoverable	Water	3005A	
240-181275-5	EB-001-F-20230301-01	Total Recoverable	Water	3005A	
MB 240-564268/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-564268/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 564269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181275-1	BAC-01-F-20230301-01	Total/NA	Water	7470A	
240-181275-2	MW-6-F-20230301-01	Total/NA	Water	7470A	
240-181275-3	BAC-23-F-20230301-01	Total/NA	Water	7470A	
240-181275-4	BAC-08-F-20230301-01	Total/NA	Water	7470A	
240-181275-5	EB-001-F-20230301-01	Total/NA	Water	7470A	
MB 240-564269/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-564269/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 564598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181275-1	BAC-01-F-20230301-01	Total/NA	Water	7470A	564269
240-181275-2	MW-6-F-20230301-01	Total/NA	Water	7470A	564269
240-181275-3	BAC-23-F-20230301-01	Total/NA	Water	7470A	564269
240-181275-4	BAC-08-F-20230301-01	Total/NA	Water	7470A	564269
240-181275-5	EB-001-F-20230301-01	Total/NA	Water	7470A	564269
MB 240-564269/1-A	Method Blank	Total/NA	Water	7470A	564269
LCS 240-564269/2-A	Lab Control Sample	Total/NA	Water	7470A	564269

Analysis Batch: 564732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181275-1	BAC-01-F-20230301-01	Total Recoverable	Water	6020B	564268
240-181275-2	MW-6-F-20230301-01	Total Recoverable	Water	6020B	564268
240-181275-3	BAC-23-F-20230301-01	Total Recoverable	Water	6020B	564268
240-181275-4	BAC-08-F-20230301-01	Total Recoverable	Water	6020B	564268
240-181275-5	EB-001-F-20230301-01	Total Recoverable	Water	6020B	564268
MB 240-564268/1-A	Method Blank	Total Recoverable	Water	6020B	564268
LCS 240-564268/2-A	Lab Control Sample	Total Recoverable	Water	6020B	564268

General Chemistry

Analysis Batch: 564459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181275-1	BAC-01-F-20230301-01	Total/NA	Water	2320B-1997	
240-181275-2	MW-6-F-20230301-01	Total/NA	Water	2320B-1997	
240-181275-3	BAC-23-F-20230301-01	Total/NA	Water	2320B-1997	
240-181275-4	BAC-08-F-20230301-01	Total/NA	Water	2320B-1997	
240-181275-5	EB-001-F-20230301-01	Total/NA	Water	2320B-1997	
MB 240-564459/56	Method Blank	Total/NA	Water	2320B-1997	
MB 240-564459/83	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-564459/82	Lab Control Sample	Total/NA	Water	2320B-1997	
240-181275-1 DU	BAC-01-F-20230301-01	Total/NA	Water	2320B-1997	

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

General Chemistry

Analysis Batch: 566919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181275-1	BAC-01-F-20230301-01	Total/NA	Water	300.0-1993 R2.1	
240-181275-2	MW-6-F-20230301-01	Total/NA	Water	300.0-1993 R2.1	
240-181275-3	BAC-23-F-20230301-01	Total/NA	Water	300.0-1993 R2.1	
240-181275-4	BAC-08-F-20230301-01	Total/NA	Water	300.0-1993 R2.1	
240-181275-5	EB-001-F-20230301-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-566919/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-566919/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-181275-4 MS	BAC-08-F-20230301-01	Total/NA	Water	300.0-1993 R2.1	
240-181275-4 MSD	BAC-08-F-20230301-01	Total/NA	Water	300.0-1993 R2.1	

Rad

Prep Batch: 602828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181275-1	BAC-01-F-20230301-01	Total/NA	Water	PrecSep-21	
240-181275-2	MW-6-F-20230301-01	Total/NA	Water	PrecSep-21	
240-181275-3	BAC-23-F-20230301-01	Total/NA	Water	PrecSep-21	
240-181275-4	BAC-08-F-20230301-01	Total/NA	Water	PrecSep-21	
240-181275-5	EB-001-F-20230301-01	Total/NA	Water	PrecSep-21	
MB 160-602828/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-602828/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-602828/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 602829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181275-1	BAC-01-F-20230301-01	Total/NA	Water	PrecSep_0	
240-181275-2	MW-6-F-20230301-01	Total/NA	Water	PrecSep_0	
240-181275-3	BAC-23-F-20230301-01	Total/NA	Water	PrecSep_0	
240-181275-4	BAC-08-F-20230301-01	Total/NA	Water	PrecSep_0	
240-181275-5	EB-001-F-20230301-01	Total/NA	Water	PrecSep_0	
MB 160-602829/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-602829/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-602829/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: BAC-01-F-20230301-01

Lab Sample ID: 240-181275-1

Date Collected: 03/01/23 12:35

Matrix: Water

Date Received: 03/03/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 17:10
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:10
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 17:31
Total/NA	Analysis	300.0-1993 R2.1		1	566919	JWW	EET CAN	03/27/23 20:09
Total/NA	Prep	PrecSep-21			602828	DJP	EET SL	03/08/23 11:39
Total/NA	Analysis	9315		1	606125	FLC	EET SL	04/04/23 19:57
Total/NA	Prep	PrecSep_0			602829	DJP	EET SL	03/08/23 12:03
Total/NA	Analysis	9320		1	604718	FLC	EET SL	03/22/23 12:40
Total/NA	Analysis	Ra226_Ra228		1	606185	SCB	EET SL	04/05/23 12:45

Client Sample ID: MW-6-F-20230301-01

Lab Sample ID: 240-181275-2

Date Collected: 03/01/23 13:21

Matrix: Water

Date Received: 03/03/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 17:14
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:12
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 17:40
Total/NA	Analysis	300.0-1993 R2.1		1	566919	JWW	EET CAN	03/27/23 20:29
Total/NA	Prep	PrecSep-21			602828	DJP	EET SL	03/08/23 11:39
Total/NA	Analysis	9315		1	606125	FLC	EET SL	04/04/23 19:57
Total/NA	Prep	PrecSep_0			602829	DJP	EET SL	03/08/23 12:03
Total/NA	Analysis	9320		1	604718	FLC	EET SL	03/22/23 12:40
Total/NA	Analysis	Ra226_Ra228		1	606185	SCB	EET SL	04/05/23 12:45

Client Sample ID: BAC-23-F-20230301-01

Lab Sample ID: 240-181275-3

Date Collected: 03/01/23 14:02

Matrix: Water

Date Received: 03/03/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 18:43
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:54
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 17:44
Total/NA	Analysis	300.0-1993 R2.1		1	566919	JWW	EET CAN	03/27/23 20:50
Total/NA	Prep	PrecSep-21			602828	DJP	EET SL	03/08/23 11:39
Total/NA	Analysis	9315		1	606125	FLC	EET SL	04/04/23 19:57
Total/NA	Prep	PrecSep_0			602829	DJP	EET SL	03/08/23 12:03
Total/NA	Analysis	9320		1	604718	FLC	EET SL	03/22/23 12:40

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: BAC-23-F-20230301-01

Lab Sample ID: 240-181275-3

Date Collected: 03/01/23 14:02

Matrix: Water

Date Received: 03/03/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228		1	606185	SCB	EET SL	04/05/23 12:45

Client Sample ID: BAC-08-F-20230301-01

Lab Sample ID: 240-181275-4

Date Collected: 03/01/23 14:53

Matrix: Water

Date Received: 03/03/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 17:28
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:14
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 17:48
Total/NA	Analysis	300.0-1993 R2.1		1	566919	JWW	EET CAN	03/27/23 21:10
Total/NA	Prep	PrecSep-21			602828	DJP	EET SL	03/08/23 11:39
Total/NA	Analysis	9315		1	606125	FLC	EET SL	04/04/23 19:58
Total/NA	Prep	PrecSep_0			602829	DJP	EET SL	03/08/23 12:03
Total/NA	Analysis	9320		1	604718	FLC	EET SL	03/22/23 12:41
Total/NA	Analysis	Ra226_Ra228		1	606185	SCB	EET SL	04/05/23 12:45

Client Sample ID: EB-001-F-20230301-01

Lab Sample ID: 240-181275-5

Date Collected: 03/01/23 15:15

Matrix: Water

Date Received: 03/03/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 17:32
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:21
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 17:54
Total/NA	Analysis	300.0-1993 R2.1		1	566919	JWW	EET CAN	03/27/23 22:10
Total/NA	Prep	PrecSep-21			602828	DJP	EET SL	03/08/23 11:39
Total/NA	Analysis	9315		1	606125	FLC	EET SL	04/04/23 19:58
Total/NA	Prep	PrecSep_0			602829	DJP	EET SL	03/08/23 12:03
Total/NA	Analysis	9320		1	604718	FLC	EET SL	03/22/23 12:41
Total/NA	Analysis	Ra226_Ra228		1	606185	SCB	EET SL	04/05/23 12:45

Laboratory References:

EET CAN = Eurofins Canton, 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
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23 *
Connecticut	State	PH-0590	06-29-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-28-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23 *
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-23 *
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	03-29-23
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	03-27-23
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-23
Florida	NELAP	E87689	06-30-23
HI - RadChem Recognition	State	n/a	06-30-23
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana (All)	NELAP	04080	06-30-23
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-23
MI - RadChem Recognition	State	9005	06-30-23
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-23
New Jersey	NELAP	MO002	06-30-23
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-23
North Dakota	State	R-207	06-30-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1


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
Oklahoma	NELAP	9997	08-31-23
Oregon	NELAP	4157	09-01-23
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23
Texas	NELAP	T104704193	07-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00028	06-11-23
Utah	NELAP	MO000542021-14	07-31-23
Virginia	NELAP	10310	06-14-23
Washington	State	C592	08-30-23
West Virginia DEP	State	381	10-31-23

Client Information		Lab PM: Cisneros, Roxanne		Carrier Tracking No(s): 240-93466-34576.1	
Client Contact: Taylor Huffman		E-Mail: roxanne.cisneros@Eurofinsnet.com		State of Origin:	
Company: Lightstone Generation Gavin Power LLC		PWSID:		Job #:	
Address: 7397 OH-7		City: Cheshire		Preservation Codes:	
State, Zip: OH, 45620		Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		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)	
Phone: 740-925-3171(Tel)		PO #: 2935505		Other:	
Email: taylor.huffman@lightstonegen.com		WO #:		Total Number of Containers: <input checked="" type="checkbox"/>	
Project Name: Federal CCR Wells - App IV		Project #: 24019633		Special Instructions/Note:	
Site:		SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Soil, Sludge, Other)	Field Filtered Sample (Yes or No)	Perform MS/MS (Yes or No)	6020, 7470A		300.0, 28D - Fluoride		2220B - Alkalinity		9315_Ra226, 9320_Ra228, Ra226Ra228_GFCP	Special Instructions/Note:
							D	N	D	N	D	N		
BAG-01-F-20230301-01	3-1-23	1235	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
MW-6-F-20230301-01	3-1-23	1321	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
BAG-23-F-20230301-01	3-1-23	1402	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
BAG-08-F-20230301-01	3-1-23	1453	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
EB-01-F-20230301-01	3-1-23	1515	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		



240-181275 Chain of Custody

<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Empty Kit Relinquished by: <i>Bobby Cate</i> Date: 3-2-23 / 0930		Method of Shipment: _____	
Relinquished by: <i>Gemma Rivera</i> Date/Time: 3-2-23 1700		Received by: <i>Kenley Rivera</i> Date/Time: 3-2-23 11:00	
Relinquished by: _____ Date/Time: _____		Received by: <i>Michelle Harold</i> Date/Time: 3-3-23 800	
Relinquished by: _____ Date/Time: _____		Received by: _____ Date/Time: _____	

Custody Seals Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:	



Eurofins - Canton Sample Receipt Form/Narrative

Login # : _____

Barberton Facility

Client Lightstone

Site Name _____

Cooler unpacked by:

Cooler Received on 3-3-23

Opened on 3-3-23

Rachelle Haidet

FedEx: 1st Grd Exp UPS FAS Clipper 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 Elastic Bag None Other _____


COOLANT: Wet Ice Blue Ice _____ Dry Ice _____ Water _____ None _____

- 1. Cooler temperature upon receipt See Multiple Cooler Form
 - IR GUN # IR-13 (CF -0.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 - IR GUN # IR-16 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 - IR GUN # IR-17 (CF -0.3 °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
 - Were the seals on the outside of the cooler(s) signed & dated? Yes No
 - Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No NA
 - 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# HC293086
- 14. Were VOAs on the COC? Yes No
- 15. Were air bubbles >6 mm in any VOA vials? Yes No NA  ← Larger than this.
- 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: _____

Temperature readings:

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-01-F-20230301-01	240-181275-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-01-F-20230301-01	240-181275-D-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-01-F-20230301-01	240-181275-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
MW-6-F-20230301-01	240-181275-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
MW-6-F-20230301-01	240-181275-D-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
MW-6-F-20230301-01	240-181275-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-23-F-20230301-01	240-181275-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-23-F-20230301-01	240-181275-D-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-23-F-20230301-01	240-181275-E-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-08-F-20230301-01	240-181275-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-08-F-20230301-01	240-181275-D-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-08-F-20230301-01	240-181275-E-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230301-01	240-181275-C-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230301-01	240-181275-D-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230301-01	240-181275-E-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

Eurofins Canton
 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:	Lab PM:	Carrier Tracking No(s):		COC No:	
Client Contact: Shipping/Receiving		Phone:	Cisneros, Roxanne	State of Origin:		240-164595.1	
Company: TestAmerica Laboratories, Inc.		E-Mail:	roxanne.cisneros@et.eurofins.com	Ohio		Page: 1 of 1	
Address: 13715 Rider Trail North, City: Earth City State, Zip: MO, 63045 Phone: 314-298-8566(Tel) 314-298-8757(Fax) Email:		Accreditations Required (See note):		Job #:		240-181275-1	
Project Name: Federal CCR Wells - App IV Site:		Due Date Requested: 4/3/2023 TAT Requested (days):	Analysis Requested		Preservation Codes: M - Hexane N - None O - AsNaO2 P - NaZOS Q - NaZSO3 R - NaHSO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - NCAAA W - pH 4-5 Y - Tnzma L - EDA Z - other (specify) Other:		
PO #:		Matrix (W=water, S=solid, O=soil, B=leachate, A=air)		Total Number of Containers		Special Instructions/Note: Recount of TAR after 21 day ingrowth if > action limit, save planchet Recount of TAR after 21 day ingrowth if > action limit, save planchet Recount of TAR after 21 day ingrowth if > action limit, save planchet Recount of TAR after 21 day ingrowth if > action limit, save planchet Recount of TAR after 21 day ingrowth if > action limit, save planchet Recount of TAR after 21 day ingrowth if > action limit, save planchet	
WO #:		Sample Type (C=Comp, G=grab)		9315, Ra226/Presep, 21 Radium-226 (GFC)			2
Project #: 24019633		Sample Time		9320, Ra226/Presep, 0 Radium-226 (GFC)			2
SSOW#:		Sample Date		Radium-228			2
Sample ID (Lab ID)		Preservation Code:		Form Filtered Sample (Yes or No)			2
BAC-01-F-20230301-01 (240-181275-1)	3/1/23	12:35 Eastern	Water	Form Filtered Sample (Yes or No)			2
MW-6-F-20230301-01 (240-181275-2)	3/1/23	13:21 Eastern	Water	Form Filtered Sample (Yes or No)			2
BAC-23-F-20230301-01 (240-181275-3)	3/1/23	14:02 Eastern	Water	Form Filtered Sample (Yes or No)		2	
BAC-08-F-20230301-01 (240-181275-4)	3/1/23	14:53 Eastern	Water	Form Filtered Sample (Yes or No)		2	
EB-001-F-20230301-01 (240-181275-5)	3/1/23	15:15 Eastern	Water	Form Filtered Sample (Yes or No)		2	
<p>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.</p>							
<p>Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2 Empty Kit Relinquished by: Relinquished by: <i>FEDEX</i> Relinquished by: Relinquished by: Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Custody Seal No.:</p>							
<p>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:</p>							
<p>Received by: <i>Barbara Shanbrey-Haggard</i> Date/Time: <i>3/6/23 0900</i> Company: <i>ETA</i></p>							



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-181275-1

Login Number: 181275

List Number: 2

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

List Creation: 03/06/23 01:59 PM

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





ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 3/14/2023 8:47:48 PM

JOB DESCRIPTION

Federal CCR Wells - App III

JOB NUMBER

240-181277-1

Eurofins Canton

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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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3/14/2023 8:47:48 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

Job ID: 240-181277-1

Laboratory: Eurofins Canton

Narrative

Job Narrative
240-181277-1

Receipt

The samples were received on 3/3/2023 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.

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Method Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CAN
6020B	Metals (ICP/MS)	SW846	EET CAN
2320B-1997	Alkalinity, Total	SM	EET CAN
300.0	Anions, Ion Chromatography	EPA	EET CAN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CAN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CAN

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 CAN = Eurofins Canton, 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 - App III

Job ID: 240-181277-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-181277-1	BAC-23-F-20230301-01	Water	03/01/23 14:02	03/03/23 08:00
240-181277-2	BAC-08-F-20230301-01	Water	03/01/23 14:53	03/03/23 08:00
240-181277-3	EB-001-F-20230301-01	Water	03/01/23 15:15	03/03/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

Client Sample ID: BAC-23-F-20230301-01

Lab Sample ID: 240-181277-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	280		100	57	ug/L	1		6010D	Total Recoverable
Calcium	130000		1000	580	ug/L	1		6020B	Total Recoverable
Magnesium	16000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	2000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	20000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	46		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	150		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	500		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-08-F-20230301-01

Lab Sample ID: 240-181277-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	120		100	57	ug/L	1		6010D	Total Recoverable
Calcium	91000		1000	580	ug/L	1		6020B	Total Recoverable
Magnesium	13000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	13000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	21		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	83		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	350		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-001-F-20230301-01

Lab Sample ID: 240-181277-3

No Detections.

This Detection Summary does not include radiochemical test results.

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

Client Sample ID: BAC-23-F-20230301-01

Lab Sample ID: 240-181277-1

Date Collected: 03/01/23 14:02

Matrix: Water

Date Received: 03/03/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	280		100	57	ug/L		03/06/23 14:00	03/07/23 22:09	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130000		1000	580	ug/L		03/06/23 14:00	03/07/23 19:50	1
Magnesium	16000		1000	200	ug/L		03/06/23 14:00	03/07/23 19:50	1
Potassium	2000		1000	220	ug/L		03/06/23 14:00	03/07/23 19:50	1
Sodium	20000		1000	330	ug/L		03/06/23 14:00	03/07/23 19:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 17:58	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 17:58	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 17:58	1
Chloride (EPA 300.0)	46		1.0	0.13	mg/L			03/13/23 20:07	1
Fluoride (EPA 300.0)	0.11		0.050	0.024	mg/L			03/13/23 20:07	1
Sulfate (EPA 300.0)	150		1.0	0.35	mg/L			03/13/23 20:07	1
Total Dissolved Solids (SM 2540C)	500		10	7.8	mg/L			03/08/23 10:14	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

Client Sample ID: BAC-08-F-20230301-01

Lab Sample ID: 240-181277-2

Date Collected: 03/01/23 14:53

Matrix: Water

Date Received: 03/03/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	120		100	57	ug/L		03/06/23 14:00	03/07/23 22:25	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	91000		1000	580	ug/L		03/06/23 14:00	03/07/23 19:52	1
Magnesium	13000		1000	200	ug/L		03/06/23 14:00	03/07/23 19:52	1
Potassium	1400		1000	220	ug/L		03/06/23 14:00	03/07/23 19:52	1
Sodium	13000		1000	330	ug/L		03/06/23 14:00	03/07/23 19:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	200		5.0	2.6	mg/L			03/06/23 18:03	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	200		5.0	2.6	mg/L			03/06/23 18:03	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 18:03	1
Chloride (EPA 300.0)	21		1.0	0.13	mg/L			03/13/23 20:47	1
Fluoride (EPA 300.0)	0.12		0.050	0.024	mg/L			03/13/23 20:47	1
Sulfate (EPA 300.0)	83		1.0	0.35	mg/L			03/13/23 20:47	1
Total Dissolved Solids (SM 2540C)	350		10	7.8	mg/L			03/08/23 10:14	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

Client Sample ID: EB-001-F-20230301-01

Lab Sample ID: 240-181277-3

Date Collected: 03/01/23 15:15

Matrix: Water

Date Received: 03/03/23 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		03/06/23 14:00	03/07/23 22:29	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	580	ug/L		03/06/23 14:00	03/07/23 20:05	1
Magnesium	ND		1000	200	ug/L		03/06/23 14:00	03/07/23 20:05	1
Potassium	ND		1000	220	ug/L		03/06/23 14:00	03/07/23 20:05	1
Sodium	ND		1000	330	ug/L		03/06/23 14:00	03/07/23 20:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 18:07	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 18:07	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 18:07	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			03/13/23 21:07	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			03/13/23 21:07	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			03/13/23 21:07	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			03/08/23 10:14	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-564412/1-A
Matrix: Water
Analysis Batch: 564578

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 564412

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		03/06/23 14:00	03/07/23 22:01	1

Lab Sample ID: LCS 240-564412/2-A
Matrix: Water
Analysis Batch: 564578

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 564412

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1050		ug/L		105	80 - 120

Lab Sample ID: 240-181277-1 MS
Matrix: Water
Analysis Batch: 564578

Client Sample ID: BAC-23-F-20230301-01
Prep Type: Total Recoverable
Prep Batch: 564412

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	280		1000	1370		ug/L		109	75 - 125

Lab Sample ID: 240-181277-1 MSD
Matrix: Water
Analysis Batch: 564578

Client Sample ID: BAC-23-F-20230301-01
Prep Type: Total Recoverable
Prep Batch: 564412

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	280		1000	1380		ug/L		110	75 - 125	1	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-564412/1-A
Matrix: Water
Analysis Batch: 564592

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 564412

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	580	ug/L		03/06/23 14:00	03/07/23 19:45	1
Magnesium	ND		1000	200	ug/L		03/06/23 14:00	03/07/23 19:45	1
Potassium	ND		1000	220	ug/L		03/06/23 14:00	03/07/23 19:45	1
Sodium	ND		1000	330	ug/L		03/06/23 14:00	03/07/23 19:45	1

Lab Sample ID: LCS 240-564412/3-A
Matrix: Water
Analysis Batch: 564592

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 564412

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	24200		ug/L		97	80 - 120
Magnesium	25000	25000		ug/L		100	80 - 120
Potassium	25000	24600		ug/L		98	80 - 120
Sodium	25000	24800		ug/L		99	80 - 120

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

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

Lab Sample ID: 240-181277-2 MS
 Matrix: Water
 Analysis Batch: 564592

Client Sample ID: BAC-08-F-20230301-01
 Prep Type: Total Recoverable
 Prep Batch: 564412

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier				Limits	
Calcium	91000		25000	117000		ug/L		101	80 - 120	
Magnesium	13000		25000	38500		ug/L		102	80 - 120	
Potassium	1400		25000	26700		ug/L		101	80 - 120	
Sodium	13000		25000	39200		ug/L		103	80 - 120	

Lab Sample ID: 240-181277-2 MSD
 Matrix: Water
 Analysis Batch: 564592

Client Sample ID: BAC-08-F-20230301-01
 Prep Type: Total Recoverable
 Prep Batch: 564412

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec		RPD
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit
Calcium	91000		25000	116000		ug/L		98	80 - 120		0
Magnesium	13000		25000	37500		ug/L		98	80 - 120		3
Potassium	1400		25000	25800		ug/L		98	80 - 120		3
Sodium	13000		25000	38000		ug/L		99	80 - 120		3

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-564459/56
 Matrix: Water
 Analysis Batch: 564459

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			03/06/23 14:59	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 14:59	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 14:59	1

Lab Sample ID: MB 240-564459/83
 Matrix: Water
 Analysis Batch: 564459

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			03/06/23 16:43	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 16:43	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 16:43	1

Lab Sample ID: LCS 240-564459/82
 Matrix: Water
 Analysis Batch: 564459

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec	
		Result	Qualifier				Limits	
Total Alkalinity	146	145		mg/L		99	86 - 123	

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-565216/3
 Matrix: Water
 Analysis Batch: 565216

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	ND		1.0	0.13	mg/L			03/13/23 12:16	1

Eurofins Canton

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 240-565216/3
 Matrix: Water
 Analysis Batch: 565216

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Fluoride	ND		0.050	0.024	mg/L			03/13/23 12:16	1
Sulfate	ND		1.0	0.35	mg/L			03/13/23 12:16	1

Lab Sample ID: LCS 240-565216/4
 Matrix: Water
 Analysis Batch: 565216

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.54		mg/L		102	90 - 110
Sulfate	50.0	51.8		mg/L		104	90 - 110

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

Lab Sample ID: MB 240-564631/1
 Matrix: Water
 Analysis Batch: 564631

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Dissolved Solids	ND		10	7.8	mg/L			03/08/23 10:14	1

Lab Sample ID: LCS 240-564631/2
 Matrix: Water
 Analysis Batch: 564631

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

Metals

Prep Batch: 564412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181277-1	BAC-23-F-20230301-01	Total Recoverable	Water	3005A	
240-181277-2	BAC-08-F-20230301-01	Total Recoverable	Water	3005A	
240-181277-3	EB-001-F-20230301-01	Total Recoverable	Water	3005A	
MB 240-564412/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-564412/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-564412/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-181277-1 MS	BAC-23-F-20230301-01	Total Recoverable	Water	3005A	
240-181277-1 MSD	BAC-23-F-20230301-01	Total Recoverable	Water	3005A	
240-181277-2 MS	BAC-08-F-20230301-01	Total Recoverable	Water	3005A	
240-181277-2 MSD	BAC-08-F-20230301-01	Total Recoverable	Water	3005A	

Analysis Batch: 564578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181277-1	BAC-23-F-20230301-01	Total Recoverable	Water	6010D	564412
240-181277-2	BAC-08-F-20230301-01	Total Recoverable	Water	6010D	564412
240-181277-3	EB-001-F-20230301-01	Total Recoverable	Water	6010D	564412
MB 240-564412/1-A	Method Blank	Total Recoverable	Water	6010D	564412
LCS 240-564412/2-A	Lab Control Sample	Total Recoverable	Water	6010D	564412
240-181277-1 MS	BAC-23-F-20230301-01	Total Recoverable	Water	6010D	564412
240-181277-1 MSD	BAC-23-F-20230301-01	Total Recoverable	Water	6010D	564412

Analysis Batch: 564592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181277-1	BAC-23-F-20230301-01	Total Recoverable	Water	6020B	564412
240-181277-2	BAC-08-F-20230301-01	Total Recoverable	Water	6020B	564412
240-181277-3	EB-001-F-20230301-01	Total Recoverable	Water	6020B	564412
MB 240-564412/1-A	Method Blank	Total Recoverable	Water	6020B	564412
LCS 240-564412/3-A	Lab Control Sample	Total Recoverable	Water	6020B	564412
240-181277-2 MS	BAC-08-F-20230301-01	Total Recoverable	Water	6020B	564412
240-181277-2 MSD	BAC-08-F-20230301-01	Total Recoverable	Water	6020B	564412

General Chemistry

Analysis Batch: 564459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181277-1	BAC-23-F-20230301-01	Total/NA	Water	2320B-1997	
240-181277-2	BAC-08-F-20230301-01	Total/NA	Water	2320B-1997	
240-181277-3	EB-001-F-20230301-01	Total/NA	Water	2320B-1997	
MB 240-564459/56	Method Blank	Total/NA	Water	2320B-1997	
MB 240-564459/83	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-564459/82	Lab Control Sample	Total/NA	Water	2320B-1997	

Analysis Batch: 564631

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181277-1	BAC-23-F-20230301-01	Total/NA	Water	SM 2540C	
240-181277-2	BAC-08-F-20230301-01	Total/NA	Water	SM 2540C	
240-181277-3	EB-001-F-20230301-01	Total/NA	Water	SM 2540C	
MB 240-564631/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-564631/2	Lab Control Sample	Total/NA	Water	SM 2540C	

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

General Chemistry

Analysis Batch: 565216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181277-1	BAC-23-F-20230301-01	Total/NA	Water	300.0	
240-181277-2	BAC-08-F-20230301-01	Total/NA	Water	300.0	
240-181277-3	EB-001-F-20230301-01	Total/NA	Water	300.0	
MB 240-565216/3	Method Blank	Total/NA	Water	300.0	
LCS 240-565216/4	Lab Control Sample	Total/NA	Water	300.0	

- 1
- 2
- 3
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- 13

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

Client Sample ID: BAC-23-F-20230301-01

Lab Sample ID: 240-181277-1

Date Collected: 03/01/23 14:02

Matrix: Water

Date Received: 03/03/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6010D		1	564578	KLC	EET CAN	03/07/23 22:09
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6020B		1	564592	AJC	EET CAN	03/07/23 19:50
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 17:58
Total/NA	Analysis	300.0		1	565216	JWW	EET CAN	03/13/23 20:07
Total/NA	Analysis	SM 2540C		1	564631	GH	EET CAN	03/08/23 10:14

Client Sample ID: BAC-08-F-20230301-01

Lab Sample ID: 240-181277-2

Date Collected: 03/01/23 14:53

Matrix: Water

Date Received: 03/03/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6010D		1	564578	KLC	EET CAN	03/07/23 22:25
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6020B		1	564592	AJC	EET CAN	03/07/23 19:52
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 18:03
Total/NA	Analysis	300.0		1	565216	JWW	EET CAN	03/13/23 20:47
Total/NA	Analysis	SM 2540C		1	564631	GH	EET CAN	03/08/23 10:14

Client Sample ID: EB-001-F-20230301-01

Lab Sample ID: 240-181277-3

Date Collected: 03/01/23 15:15

Matrix: Water

Date Received: 03/03/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6010D		1	564578	KLC	EET CAN	03/07/23 22:29
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6020B		1	564592	AJC	EET CAN	03/07/23 20:05
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 18:07
Total/NA	Analysis	300.0		1	565216	JWW	EET CAN	03/13/23 21:07
Total/NA	Analysis	SM 2540C		1	564631	GH	EET CAN	03/08/23 10:14

Laboratory References:

EET CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23 *
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-27-23 *
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23 *
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-23 *
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-27-23 *
Ohio VAP	State	CL0024	02-27-23 *
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.



Eurofins - Canton Sample Receipt Form/Narrative
Barberton Facility

Login # : _____

Client Lightstone Site Name _____
 Cooler Received on 3-3-23 Opened on 3-3-23
 FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off Eurofins Courier Other _____

Cooler unpacked by:
Rachelle Haidet


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

Eurofins Cooler # EC Foam Box _____ Client Cooler _____ Box _____ Other _____
 Packing material used: Bubble Wrap Foam Elastic Bag None _____ Other _____
 COOLANT: Wet Ice Blue Ice _____ Dry Ice _____ Water _____ None _____

1. Cooler temperature upon receipt See Multiple Cooler Form
 IR GUN # IR-13 (CF -0.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN # IR-16 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN # IR-17 (CF -0.3 °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# HC293086
 14. Were VOAs on the COC? Yes No
 15. Were air bubbles >6 mm in any VOA vials? Yes No NA  ← Larger than this.
 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: _____

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-23-F-20230301-01	240-181277-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-08-F-20230301-01	240-181277-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230301-01	240-181277-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____



ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 4/5/2023 2:09:36 PM

JOB DESCRIPTION

Federal CCR Wells - App IV

JOB NUMBER

240-181314-1

Eurofins Canton

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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
4/5/2023 2:09:36 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

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.

Rad

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
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.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Job ID: 240-181314-1

Laboratory: Eurofins Canton

Narrative

Job Narrative 240-181314-1

Comments

No additional comments.

Receipt

The samples were received on 3/3/2023 2:35 PM. 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 0.4° C, 1.0° C and 2.3° C.

RAD

Methods 9315: Radium-226 prep batch 160-602832: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. DUP-003-BAC-07-F-20230302-01 (240-181314-2), BAC-18-F-20230302-01 (240-181314-4), BAC-06-F-20230302-01 (240-181314-5), BAC-04-F-20230302-01 (240-181314-7), EB-001-F-20230302-01 (240-181314-8), (LCS 160-602832/2-A), (LCSD 160-602832/25-A) and (MB 160-602832/1-A)

Methods 9315: Radium-226 batch 602828: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-07-F-20230302-01 (240-181314-1), (LCS 160-602828/2-A), (LCSD 160-602828/3-A) and (MB 160-602828/1-A)

Methods 9315: Radium-226 batch 603346: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-02-F-20230302-01 (240-181314-3), BAC-05-F-20230302-01 (240-181314-6), BAC-05-F-20230302-01 (240-181314-6[MS]), BAC-05-F-20230302-01 (240-181314-6[MSD]), (LCS 160-603346/2-A), (LCSD 160-603346/3-A) and (MB 160-603346/1-A)

Methods 9320: Radium-228 batch 602829: The LCS recovered at (139%). 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 (62-148%) per method requirements. The LCS passes, no further action is required. (LCSD 160-602829/3-A)

Methods 9320: Radium-228 batch 602829: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-07-F-20230302-01 (240-181314-1), (LCS 160-602829/2-A), (LCSD 160-602829/3-A) and (MB 160-602829/1-A)

Methods 9320: Radium-228 batch 602838: The LCS/LCSD recovered at (143% / 130%). 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/LCSD are not from this agency and are therefore held to our in-house statistical limits of (62-148%) per method requirements. The LCS/LCSD pass, no further action is required. (LCS 160-602838/2-A) and (LCSD 160-602838/25-A)

Method 9320: Radium-228 batch 602838: The detection goal was not met for the following sample(s). Samples were prepped at a reduced volume due to the presence of matrix interferences: BAC-18-F-20230302-01 (240-181314-4) and BAC-04-F-20230302-01 (240-181314-7). Analytical results are reported with the detection limit achieved.

Methods 9320: Radium-228 batch 602838: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. DUP-003-BAC-07-F-20230302-01 (240-181314-2), BAC-18-F-20230302-01 (240-181314-4), BAC-06-F-20230302-01 (240-181314-5), BAC-04-F-20230302-01 (240-181314-7), EB-001-F-20230302-01 (240-181314-8), (LCS 160-602838/2-A), (LCSD 160-602838/25-A) and (MB 160-602838/1-A)

Methods 9320: Radium-228 batch 603347: The LCS recovered at (132%). 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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Job ID: 240-181314-1 (Continued)

Laboratory: Eurofins Canton (Continued)

from this agency and are therefore held to our in-house statistical limits of (62-148%) per method requirements. The LCS passes, no further action is required. (LCS 160-603347/2-A)

Methods 9320: Radium-228 batch 603347: The matrix spike (MS) recovery was outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. BAC-05-F-20230302-01 (240-181314-6[MS])

Methods 9320: Radium-228 batch 603347: The detection goal was not met for the following sample(s). Samples were prepped at a reduced volume due to the presence of matrix interferences: BAC-02-F-20230302-01 (240-181314-3) and BAC-05-F-20230302-01 (240-181314-6). Analytical results are reported with the detection limit achieved.

Methods 9320: Radium-228 batch 603347: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-02-F-20230302-01 (240-181314-3), BAC-05-F-20230302-01 (240-181314-6), BAC-05-F-20230302-01 (240-181314-6[MS]), BAC-05-F-20230302-01 (240-181314-6[MSD]), (LCS 160-603347/2-A), (LCSD 160-603347/3-A) and (MB 160-603347/1-A)

Method PrecSep_0: Radium-228 Prep Batch 602829: Insufficient sample volume was available to perform a sample duplicate for the following samples: BAC-07-F-20230302-01 (240-181314-1). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep_0: The following samples did not form an efficient amount of pellet after the first precipitation during the into ingrowth process.

Method PrecSep-21: Radium-226 Prep Batch 160-602828: Insufficient sample volume was available to perform a sample duplicate for the following samples: BAC-07-F-20230302-01 (240-181314-1). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

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

Metals

Method 6020B: The continuing calibration verification (CCV) associated with batch 240-564732 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: BAC-07-F-20230302-01 (240-181314-1), DUP-003-BAC-07-F-20230302-01 (240-181314-2), BAC-02-F-20230302-01 (240-181314-3), BAC-18-F-20230302-01 (240-181314-4), BAC-06-F-20230302-01 (240-181314-5), BAC-05-F-20230302-01 (240-181314-6), BAC-04-F-20230302-01 (240-181314-7) and EB-001-F-20230302-01 (240-181314-8).

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

General Chemistry

Method SM 2320B: Sample duplicate was not analyzed due to instrument failure. BAC-18-F-20230302-01 (240-181314-4)

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 - App IV

Job ID: 240-181314-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CAN
7470A	Mercury (CVAA)	SW846	EET CAN
2320B-1997	Alkalinity, Total	SM	EET CAN
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CAN
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 CAN
7470A	Preparation, Mercury	SW846	EET CAN
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 CAN = Eurofins Canton, 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 - App IV

Job ID: 240-181314-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-181314-1	BAC-07-F-20230302-01	Water	03/02/23 11:26	03/03/23 14:35
240-181314-2	DUP-003-BAC-07-F-20230302-01	Water	03/02/23 11:26	03/03/23 14:35
240-181314-3	BAC-02-F-20230302-01	Water	03/02/23 12:37	03/03/23 14:35
240-181314-4	BAC-18-F-20230302-01	Water	03/02/23 13:33	03/03/23 14:35
240-181314-5	BAC-06-F-20230302-01	Water	03/02/23 14:16	03/03/23 14:35
240-181314-6	BAC-05-F-20230302-01	Water	03/02/23 15:30	03/03/23 14:35
240-181314-7	BAC-04-F-20230302-01	Water	03/02/23 16:26	03/03/23 14:35
240-181314-8	EB-001-F-20230302-01	Water	03/02/23 16:45	03/03/23 14:35

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-07-F-20230302-01

Lab Sample ID: 240-181314-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	48		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.5		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	6.2	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	130		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	130		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.080		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: DUP-003-BAC-07-F-20230302-01

Lab Sample ID: 240-181314-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	47		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.5		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	6.2	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	130		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	130		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.081		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-02-F-20230302-01

Lab Sample ID: 240-181314-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	8.0		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	170		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.79	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Chromium	13		5.0	2.5	ug/L	1		6020B	Total Recoverable
Cobalt	6.3		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	9.5		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	8.2		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	40000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	3700		1000	220	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-02-F-20230302-01 (Continued)

Lab Sample ID: 240-181314-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	70000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	260		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	260		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.17		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-18-F-20230302-01

Lab Sample ID: 240-181314-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.5	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	39		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	3.4		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.4		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.6	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	14000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	100		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	100		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.063		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-06-F-20230302-01

Lab Sample ID: 240-181314-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	90		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	3.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	5.3	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	25000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.098		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-05-F-20230302-01

Lab Sample ID: 240-181314-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.0	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	45		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.48	J	1.0	0.20	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-05-F-20230302-01 (Continued)

Lab Sample ID: 240-181314-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	8.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.5		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	10		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	23000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	28000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.69	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	57		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	57		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.11		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-04-F-20230302-01

Lab Sample ID: 240-181314-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.3	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	42		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.2		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.98	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	5.9	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	19000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	26000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	100		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	100		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.083		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: EB-001-F-20230302-01

Lab Sample ID: 240-181314-8

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-07-F-20230302-01

Lab Sample ID: 240-181314-1

Date Collected: 03/02/23 11:26

Matrix: Water

Date Received: 03/03/23 14:35

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		03/05/23 14:00	03/08/23 17:37	1
Arsenic	ND		5.0	0.75	ug/L		03/05/23 14:00	03/08/23 17:37	1
Barium	48		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 17:37	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 17:37	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:37	1
Chromium	ND		5.0	2.5	ug/L		03/05/23 14:00	03/09/23 14:39	1
Cobalt	1.5		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 17:37	1
Lead	ND		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 17:37	1
Lithium	6.2 J		8.0	1.7	ug/L		03/05/23 14:00	03/09/23 14:39	1
Magnesium	21000		1000	200	ug/L		03/05/23 14:00	03/08/23 17:37	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 17:37	1
Potassium	1400		1000	220	ug/L		03/05/23 14:00	03/08/23 17:37	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 17:37	1
Sodium	16000		1000	330	ug/L		03/05/23 14:00	03/08/23 17:37	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:37	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		03/06/23 10:00	03/07/23 20:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	130		5.0	2.6	mg/L			03/14/23 14:41	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	130		5.0	2.6	mg/L			03/14/23 14:41	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/14/23 14:41	1
Fluoride (EPA 300.0-1993 R2.1)	0.080		0.050	0.024	mg/L			03/28/23 08:15	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0841	U	0.0619	0.0624	1.00	0.0857	pCi/L	03/08/23 11:39	04/04/23 19:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.1		30 - 110					03/08/23 11:39	04/04/23 19:58	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.414	U	0.328	0.330	1.00	0.506	pCi/L	03/08/23 12:03	03/22/23 12:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.1		30 - 110					03/08/23 12:03	03/22/23 12:41	1
Y Carrier	87.5		30 - 110					03/08/23 12:03	03/22/23 12:41	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-07-F-20230302-01

Lab Sample ID: 240-181314-1

Date Collected: 03/02/23 11:26

Matrix: Water

Date Received: 03/03/23 14:35

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	0.498	U	0.334	0.336	5.00	0.506	pCi/L		04/05/23 12:45	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: DUP-003-BAC-07-F-20230302-01

Lab Sample ID: 240-181314-2

Date Collected: 03/02/23 11:26

Matrix: Water

Date Received: 03/03/23 14:35

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		03/05/23 14:00	03/08/23 17:41	1
Arsenic	ND		5.0	0.75	ug/L		03/05/23 14:00	03/08/23 17:41	1
Barium	47		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 17:41	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 17:41	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:41	1
Chromium	ND		5.0	2.5	ug/L		03/05/23 14:00	03/09/23 14:47	1
Cobalt	1.5		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 17:41	1
Lead	ND		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 17:41	1
Lithium	6.2 J		8.0	1.7	ug/L		03/05/23 14:00	03/09/23 14:47	1
Magnesium	21000		1000	200	ug/L		03/05/23 14:00	03/08/23 17:41	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 17:41	1
Potassium	1400		1000	220	ug/L		03/05/23 14:00	03/08/23 17:41	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 17:41	1
Sodium	16000		1000	330	ug/L		03/05/23 14:00	03/08/23 17:41	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:41	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		03/06/23 10:00	03/07/23 20:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	130		5.0	2.6	mg/L			03/06/23 19:53	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	130		5.0	2.6	mg/L			03/06/23 19:53	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 19:53	1
Fluoride (EPA 300.0-1993 R2.1)	0.081		0.050	0.024	mg/L			03/28/23 08:35	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	0.124		0.0688	0.0697	1.00	0.0824	pCi/L	03/08/23 12:16	04/03/23 15:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.4		30 - 110					03/08/23 12:16	04/03/23 15:04	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	0.992		0.373	0.384	1.00	0.450	pCi/L	03/08/23 13:13	03/23/23 11:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.4		30 - 110					03/08/23 13:13	03/23/23 11:56	1
Y Carrier	82.2		30 - 110					03/08/23 13:13	03/23/23 11:56	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: DUP-003-BAC-07-F-20230302-01

Lab Sample ID: 240-181314-2

Date Collected: 03/02/23 11:26

Matrix: Water

Date Received: 03/03/23 14:35

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	1.12		0.379	0.390	5.00	0.450	pCi/L		04/03/23 17:14	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-02-F-20230302-01

Lab Sample ID: 240-181314-3

Date Collected: 03/02/23 12:37

Matrix: Water

Date Received: 03/03/23 14:35

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		03/05/23 14:00	03/08/23 17:46	1
Arsenic	8.0		5.0	0.75	ug/L		03/05/23 14:00	03/08/23 17:46	1
Barium	170		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 17:46	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 17:46	1
Cadmium	0.79	J	1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:46	1
Chromium	13		5.0	2.5	ug/L		03/05/23 14:00	03/09/23 14:50	1
Cobalt	6.3		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 17:46	1
Lead	9.5		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 17:46	1
Lithium	8.2		8.0	1.7	ug/L		03/05/23 14:00	03/09/23 14:50	1
Magnesium	40000		1000	200	ug/L		03/05/23 14:00	03/08/23 17:46	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 17:46	1
Potassium	3700		1000	220	ug/L		03/05/23 14:00	03/08/23 17:46	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 17:46	1
Sodium	70000		1000	330	ug/L		03/05/23 14:00	03/08/23 17:46	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:46	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		03/06/23 10:00	03/07/23 20:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	260		5.0	2.6	mg/L			03/06/23 19:57	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	260		5.0	2.6	mg/L			03/06/23 19:57	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 19:57	1
Fluoride (EPA 300.0-1993 R2.1)	0.17		0.050	0.024	mg/L			03/28/23 08:55	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.613	U	0.476	0.479	1.00	0.697	pCi/L	03/13/23 09:56	04/04/23 15:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	58.2		30 - 110					03/13/23 09:56	04/04/23 15:13	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	3.51	G	2.21	2.23	1.00	3.21	pCi/L	03/13/23 10:14	03/27/23 12:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	58.2		30 - 110					03/13/23 10:14	03/27/23 12:12	1
Y Carrier	83.0		30 - 110					03/13/23 10:14	03/27/23 12:12	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-02-F-20230302-01

Lab Sample ID: 240-181314-3

Date Collected: 03/02/23 12:37

Matrix: Water

Date Received: 03/03/23 14:35

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	4.12		2.26	2.28	5.00	3.21	pCi/L		04/05/23 13:07	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-18-F-20230302-01

Lab Sample ID: 240-181314-4

Date Collected: 03/02/23 13:33

Matrix: Water

Date Received: 03/03/23 14:35

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		03/05/23 14:00	03/08/23 17:50	1
Arsenic	1.5	J	5.0	0.75	ug/L		03/05/23 14:00	03/08/23 17:50	1
Barium	39		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 17:50	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 17:50	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:50	1
Chromium	ND		5.0	2.5	ug/L		03/05/23 14:00	03/09/23 14:53	1
Cobalt	3.4		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 17:50	1
Lead	1.4		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 17:50	1
Lithium	6.6	J	8.0	1.7	ug/L		03/05/23 14:00	03/09/23 14:53	1
Magnesium	20000		1000	200	ug/L		03/05/23 14:00	03/08/23 17:50	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 17:50	1
Potassium	1400		1000	220	ug/L		03/05/23 14:00	03/08/23 17:50	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 17:50	1
Sodium	14000		1000	330	ug/L		03/05/23 14:00	03/08/23 17:50	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:50	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		03/06/23 10:00	03/07/23 20:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	100		5.0	2.6	mg/L			03/16/23 16:07	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	100		5.0	2.6	mg/L			03/16/23 16:07	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/16/23 16:07	1
Fluoride (EPA 300.0-1993 R2.1)	0.063		0.050	0.024	mg/L			03/28/23 10:56	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	0.0983	U	0.0995	0.0999	1.00	0.154	pCi/L	03/08/23 12:16	04/03/23 15:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	63.8		30 - 110					03/08/23 12:16	04/03/23 15:04	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	0.693	U G	0.658	0.661	1.00	1.05	pCi/L	03/08/23 13:13	03/23/23 11:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	63.8		30 - 110					03/08/23 13:13	03/23/23 11:57	1
Y Carrier	82.6		30 - 110					03/08/23 13:13	03/23/23 11:57	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-18-F-20230302-01

Lab Sample ID: 240-181314-4

Date Collected: 03/02/23 13:33

Matrix: Water

Date Received: 03/03/23 14:35

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	0.791	U	0.665	0.669	5.00	1.05	pCi/L		04/03/23 17:14	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-06-F-20230302-01

Lab Sample ID: 240-181314-5

Date Collected: 03/02/23 14:16

Matrix: Water

Date Received: 03/03/23 14:35

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		03/05/23 14:00	03/08/23 17:54	1
Arsenic	ND		5.0	0.75	ug/L		03/05/23 14:00	03/08/23 17:54	1
Barium	90		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 17:54	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 17:54	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:54	1
Chromium	ND		5.0	2.5	ug/L		03/05/23 14:00	03/09/23 14:55	1
Cobalt	3.1		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 17:54	1
Lead	ND		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 17:54	1
Lithium	5.3	J	8.0	1.7	ug/L		03/05/23 14:00	03/09/23 14:55	1
Magnesium	25000		1000	200	ug/L		03/05/23 14:00	03/08/23 17:54	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 17:54	1
Potassium	1400		1000	220	ug/L		03/05/23 14:00	03/08/23 17:54	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 17:54	1
Sodium	15000		1000	330	ug/L		03/05/23 14:00	03/08/23 17:54	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:54	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		03/06/23 10:00	03/07/23 20:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	190		5.0	2.6	mg/L			03/06/23 20:16	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	190		5.0	2.6	mg/L			03/06/23 20:16	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 20:16	1
Fluoride (EPA 300.0-1993 R2.1)	0.098		0.050	0.024	mg/L			03/28/23 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	0.142		0.0832	0.0842	1.00	0.104	pCi/L	03/08/23 12:16	04/03/23 15:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	74.0		30 - 110					03/08/23 12:16	04/03/23 15:04	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	0.875		0.432	0.439	1.00	0.587	pCi/L	03/08/23 13:13	03/23/23 11:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	74.0		30 - 110					03/08/23 13:13	03/23/23 11:57	1
Y Carrier	84.9		30 - 110					03/08/23 13:13	03/23/23 11:57	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-06-F-20230302-01

Lab Sample ID: 240-181314-5

Date Collected: 03/02/23 14:16

Matrix: Water

Date Received: 03/03/23 14:35

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2 σ +/-)	Total Uncert. (2 σ +/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.02		0.440	0.447	5.00	0.587	pCi/L		04/03/23 17:14	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-05-F-20230302-01

Lab Sample ID: 240-181314-6

Date Collected: 03/02/23 15:30

Matrix: Water

Date Received: 03/03/23 14:35

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		03/05/23 14:00	03/08/23 16:48	1
Arsenic	1.0	J	5.0	0.75	ug/L		03/05/23 14:00	03/08/23 16:48	1
Barium	45		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 16:48	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 16:48	1
Cadmium	0.48	J	1.0	0.20	ug/L		03/05/23 14:00	03/08/23 16:48	1
Chromium	ND		5.0	2.5	ug/L		03/05/23 14:00	03/09/23 14:22	1
Cobalt	8.1		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 16:48	1
Lead	1.5		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 16:48	1
Lithium	10		8.0	1.7	ug/L		03/05/23 14:00	03/09/23 14:22	1
Magnesium	23000		1000	200	ug/L		03/05/23 14:00	03/08/23 16:48	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 16:48	1
Potassium	1700		1000	220	ug/L		03/05/23 14:00	03/08/23 16:48	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 16:48	1
Sodium	28000		1000	330	ug/L		03/05/23 14:00	03/08/23 16:48	1
Thallium	0.69	J	1.0	0.20	ug/L		03/05/23 14:00	03/08/23 16:48	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		03/06/23 10:00	03/07/23 20:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	57		5.0	2.6	mg/L			03/06/23 20:20	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	57		5.0	2.6	mg/L			03/06/23 20:20	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 20:20	1
Fluoride (EPA 300.0-1993 R2.1)	0.11		0.050	0.024	mg/L			03/28/23 09:15	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.234	U	0.336	0.337	1.00	0.571	pCi/L	03/13/23 09:56	04/04/23 15:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.2		30 - 110					03/13/23 09:56	04/04/23 15:13	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	-1.10	U G	0.974	0.979	1.00	2.32	pCi/L	03/13/23 10:14	03/27/23 12:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.2		30 - 110					03/13/23 10:14	03/27/23 12:12	1
Y Carrier	81.9		30 - 110					03/13/23 10:14	03/27/23 12:12	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-05-F-20230302-01

Lab Sample ID: 240-181314-6

Date Collected: 03/02/23 15:30

Matrix: Water

Date Received: 03/03/23 14:35

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	-0.862	U	1.03	1.04	5.00	2.32	pCi/L		04/05/23 13:07	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-04-F-20230302-01

Lab Sample ID: 240-181314-7

Date Collected: 03/02/23 16:26

Matrix: Water

Date Received: 03/03/23 14:35

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		03/05/23 14:00	03/08/23 17:59	1
Arsenic	1.3	J	5.0	0.75	ug/L		03/05/23 14:00	03/08/23 17:59	1
Barium	42		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 17:59	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 17:59	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:59	1
Chromium	ND		5.0	2.5	ug/L		03/05/23 14:00	03/09/23 14:58	1
Cobalt	2.2		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 17:59	1
Lead	0.98	J	1.0	0.45	ug/L		03/05/23 14:00	03/08/23 17:59	1
Lithium	5.9	J	8.0	1.7	ug/L		03/05/23 14:00	03/09/23 14:58	1
Magnesium	19000		1000	200	ug/L		03/05/23 14:00	03/08/23 17:59	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 17:59	1
Potassium	1900		1000	220	ug/L		03/05/23 14:00	03/08/23 17:59	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 17:59	1
Sodium	26000		1000	330	ug/L		03/05/23 14:00	03/08/23 17:59	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:59	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		03/06/23 10:00	03/07/23 20:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	100		5.0	2.6	mg/L			03/06/23 20:28	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	100		5.0	2.6	mg/L			03/06/23 20:28	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 20:28	1
Fluoride (EPA 300.0-1993 R2.1)	0.083		0.050	0.024	mg/L			03/28/23 11:36	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.144	U	0.122	0.122	1.00	0.180	pCi/L	03/08/23 12:16	04/03/23 15:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	60.7		30 - 110					03/08/23 12:16	04/03/23 15:04	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.497	U G	0.613	0.615	1.00	1.02	pCi/L	03/08/23 13:13	03/23/23 11:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	60.7		30 - 110					03/08/23 13:13	03/23/23 11:57	1
Y Carrier	81.9		30 - 110					03/08/23 13:13	03/23/23 11:57	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-04-F-20230302-01

Lab Sample ID: 240-181314-7

Date Collected: 03/02/23 16:26

Matrix: Water

Date Received: 03/03/23 14:35

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	0.641	U	0.625	0.627	5.00	1.02	pCi/L		04/03/23 17:14	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: EB-001-F-20230302-01

Lab Sample ID: 240-181314-8

Date Collected: 03/02/23 16:45

Matrix: Water

Date Received: 03/03/23 14:35

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		03/05/23 14:00	03/08/23 18:03	1
Arsenic	ND		5.0	0.75	ug/L		03/05/23 14:00	03/08/23 18:03	1
Barium	ND		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 18:03	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 18:03	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 18:03	1
Chromium	ND		5.0	2.5	ug/L		03/05/23 14:00	03/09/23 15:01	1
Cobalt	ND		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 18:03	1
Lead	ND		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 18:03	1
Lithium	ND		8.0	1.7	ug/L		03/05/23 14:00	03/09/23 15:01	1
Magnesium	ND		1000	200	ug/L		03/05/23 14:00	03/08/23 18:03	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 18:03	1
Potassium	ND		1000	220	ug/L		03/05/23 14:00	03/08/23 18:03	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 18:03	1
Sodium	ND		1000	330	ug/L		03/05/23 14:00	03/08/23 18:03	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 18:03	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		03/06/23 10:00	03/07/23 20:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 20:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 20:31	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 20:31	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			03/28/23 11:56	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	0.00823	U	0.0496	0.0496	1.00	0.0983	pCi/L	03/08/23 12:16	04/03/23 15:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.5		30 - 110					03/08/23 12:16	04/03/23 15:04	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	0.723		0.354	0.360	1.00	0.474	pCi/L	03/08/23 13:13	03/23/23 11:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.5		30 - 110					03/08/23 13:13	03/23/23 11:59	1
Y Carrier	80.4		30 - 110					03/08/23 13:13	03/23/23 11:59	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: EB-001-F-20230302-01

Lab Sample ID: 240-181314-8

Date Collected: 03/02/23 16:45

Matrix: Water

Date Received: 03/03/23 14:35

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	0.731		0.357	0.363	5.00	0.474	pCi/L		04/03/23 17:14	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (30-110)	Y (30-110)
240-181314-1	BAC-07-F-20230302-01	92.1	87.5
240-181314-2	DUP-003-BAC-07-F-20230302-01	92.4	82.2
240-181314-3	BAC-02-F-20230302-01	58.2	83.0
240-181314-4	BAC-18-F-20230302-01	63.8	82.6
240-181314-5	BAC-06-F-20230302-01	74.0	84.9
240-181314-6	BAC-05-F-20230302-01	73.2	81.9
240-181314-6 MS	BAC-05-F-20230302-01	76.3	79.6
240-181314-6 MSD	BAC-05-F-20230302-01	83.9	80.7
240-181314-7	BAC-04-F-20230302-01	60.7	81.9
240-181314-8	EB-001-F-20230302-01	91.5	80.4
LCS 160-602828/2-A	Lab Control Sample	85.3	85.2
LCS 160-602832/2-A	Lab Control Sample	92.4	82.6
LCS 160-603346/2-A	Lab Control Sample	89.3	79.3
LCSD 160-602828/3-A	Lab Control Sample Dup	80.8	81.1
LCSD 160-602832/25-A	Lab Control Sample Dup	93.8	80.7
LCSD 160-603346/3-A	Lab Control Sample Dup	85.6	79.3
MB 160-602828/1-A	Method Blank	85.9	84.1
MB 160-602832/1-A	Method Blank	97.2	83.0
MB 160-603346/1-A	Method Blank	89.5	79.6

Tracer/Carrier Legend
 Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (30-110)	Y (30-110)
240-181314-1	BAC-07-F-20230302-01	92.1	87.5
240-181314-2	DUP-003-BAC-07-F-20230302-01	92.4	82.2
240-181314-3	BAC-02-F-20230302-01	58.2	83.0
240-181314-4	BAC-18-F-20230302-01	63.8	82.6
240-181314-5	BAC-06-F-20230302-01	74.0	84.9
240-181314-6	BAC-05-F-20230302-01	73.2	81.9
240-181314-6 MS	BAC-05-F-20230302-01	76.3	79.6
240-181314-6 MSD	BAC-05-F-20230302-01	83.9	80.7
240-181314-7	BAC-04-F-20230302-01	60.7	81.9
240-181314-8	EB-001-F-20230302-01	91.5	80.4
LCS 160-602829/2-A	Lab Control Sample	85.3	85.2
LCS 160-602838/2-A	Lab Control Sample	92.4	82.6
LCS 160-603347/2-A	Lab Control Sample	89.3	79.3
LCSD 160-602829/3-A	Lab Control Sample Dup	80.8	81.1
LCSD 160-602838/25-A	Lab Control Sample Dup	93.8	80.7
LCSD 160-603347/3-A	Lab Control Sample Dup	85.6	79.3
MB 160-602829/1-A	Method Blank	85.9	84.1
MB 160-602838/1-A	Method Blank	97.2	83.0
MB 160-603347/1-A	Method Blank	89.5	79.6

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-564268/1-A
Matrix: Water
Analysis Batch: 564732

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 564268

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	ND		2.0	0.57	ug/L		03/05/23 14:00	03/08/23 16:39	1
Arsenic	ND		5.0	0.75	ug/L		03/05/23 14:00	03/08/23 16:39	1
Barium	ND		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 16:39	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 16:39	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 16:39	1
Cobalt	ND		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 16:39	1
Lead	ND		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 16:39	1
Magnesium	ND		1000	200	ug/L		03/05/23 14:00	03/08/23 16:39	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 16:39	1
Potassium	ND		1000	220	ug/L		03/05/23 14:00	03/08/23 16:39	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 16:39	1
Sodium	ND		1000	330	ug/L		03/05/23 14:00	03/08/23 16:39	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 16:39	1

Lab Sample ID: MB 240-564268/1-A
Matrix: Water
Analysis Batch: 564901

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 564268

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chromium	ND		5.0	2.5	ug/L		03/05/23 14:00	03/09/23 14:16	1
Lithium	ND		8.0	1.7	ug/L		03/05/23 14:00	03/09/23 14:16	1

Lab Sample ID: LCS 240-564268/2-A
Matrix: Water
Analysis Batch: 564732

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 564268

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1000	908		ug/L		91	80 - 120
Barium	1000	962		ug/L		96	80 - 120
Beryllium	500	485	^+	ug/L		97	80 - 120
Cadmium	500	480		ug/L		96	80 - 120
Cobalt	500	462		ug/L		92	80 - 120
Lead	500	501		ug/L		100	80 - 120
Magnesium	25000	24900		ug/L		99	80 - 120
Molybdenum	500	467		ug/L		93	80 - 120
Potassium	25000	24000		ug/L		96	80 - 120
Selenium	1000	915		ug/L		91	80 - 120
Sodium	25000	24900		ug/L		100	80 - 120
Thallium	1000	968		ug/L		97	80 - 120

Lab Sample ID: LCS 240-564268/2-A
Matrix: Water
Analysis Batch: 564901

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 564268

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lithium	500	479		ug/L		96	80 - 120

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

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

Lab Sample ID: 240-181314-6 MS
Matrix: Water
Analysis Batch: 564732

Client Sample ID: BAC-05-F-20230302-01
Prep Type: Total Recoverable
Prep Batch: 564268

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier				Limits	
Antimony	ND		100	104		ug/L		104	80 - 120	
Arsenic	1.0	J	1000	904		ug/L		90	80 - 120	
Barium	45		1000	1030		ug/L		98	80 - 120	
Beryllium	ND	^+	500	486	^+	ug/L		97	80 - 120	
Cadmium	0.48	J	500	469		ug/L		94	80 - 120	
Cobalt	8.1		500	469		ug/L		92	80 - 120	
Lead	1.5		500	489		ug/L		98	80 - 120	
Magnesium	23000		25000	46200		ug/L		92	80 - 120	
Molybdenum	ND		500	471		ug/L		94	80 - 120	
Potassium	1700		25000	25200		ug/L		94	80 - 120	
Selenium	ND		1000	888		ug/L		89	80 - 120	
Sodium	28000		25000	51000		ug/L		91	80 - 120	
Thallium	0.69	J	1000	947		ug/L		95	80 - 120	

Lab Sample ID: 240-181314-6 MS
Matrix: Water
Analysis Batch: 564901

Client Sample ID: BAC-05-F-20230302-01
Prep Type: Total Recoverable
Prep Batch: 564268

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier				Limits	
Chromium	ND		500	476		ug/L		95	80 - 120	
Lithium	10		500	475		ug/L		93	80 - 120	

Lab Sample ID: 240-181314-6 MSD
Matrix: Water
Analysis Batch: 564732

Client Sample ID: BAC-05-F-20230302-01
Prep Type: Total Recoverable
Prep Batch: 564268

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec		RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit	
Antimony	ND		100	106		ug/L		106	80 - 120		3	20
Arsenic	1.0	J	1000	884		ug/L		88	80 - 120		2	20
Barium	45		1000	1040		ug/L		100	80 - 120		1	20
Beryllium	ND	^+	500	494	^+	ug/L		99	80 - 120		2	20
Cadmium	0.48	J	500	461		ug/L		92	80 - 120		2	20
Cobalt	8.1		500	460		ug/L		90	80 - 120		2	20
Lead	1.5		500	503		ug/L		100	80 - 120		3	20
Magnesium	23000		25000	46500		ug/L		93	80 - 120		1	20
Molybdenum	ND		500	460		ug/L		92	80 - 120		2	20
Potassium	1700		25000	25300		ug/L		94	80 - 120		0	20
Selenium	ND		1000	868		ug/L		87	80 - 120		2	20
Sodium	28000		25000	50800		ug/L		90	80 - 120		0	20
Thallium	0.69	J	1000	967		ug/L		97	80 - 120		2	20

Lab Sample ID: 240-181314-6 MSD
Matrix: Water
Analysis Batch: 564901

Client Sample ID: BAC-05-F-20230302-01
Prep Type: Total Recoverable
Prep Batch: 564268

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec		RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit	
Chromium	ND		500	485		ug/L		97	80 - 120		2	20
Lithium	10		500	493		ug/L		97	80 - 120		4	20

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-564269/1-A
Matrix: Water
Analysis Batch: 564598

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 564269

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/06/23 10:00	03/07/23 19:58	1

Lab Sample ID: LCS 240-564269/2-A
Matrix: Water
Analysis Batch: 564598

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 564269

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.19		ug/L		104	80 - 120

Lab Sample ID: 240-181314-6 MS
Matrix: Water
Analysis Batch: 564598

Client Sample ID: BAC-05-F-20230302-01
Prep Type: Total/NA
Prep Batch: 564269

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		1.00	1.01		ug/L		101	80 - 120

Lab Sample ID: 240-181314-6 MSD
Matrix: Water
Analysis Batch: 564598

Client Sample ID: BAC-05-F-20230302-01
Prep Type: Total/NA
Prep Batch: 564269

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		1.00	0.935		ug/L		93	80 - 120	7	20

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-564459/109
Matrix: Water
Analysis Batch: 564459

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			03/06/23 18:23	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 18:23	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 18:23	1

Lab Sample ID: MB 240-564459/136
Matrix: Water
Analysis Batch: 564459

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			03/06/23 20:12	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 20:12	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 20:12	1

Lab Sample ID: MB 240-564459/83
Matrix: Water
Analysis Batch: 564459

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			03/06/23 16:43	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 16:43	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Method: 2320B-1997 - Alkalinity, Total (Continued)

Lab Sample ID: MB 240-564459/83
Matrix: Water
Analysis Batch: 564459

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 16:43	1

Lab Sample ID: LCS 240-564459/108
Matrix: Water
Analysis Batch: 564459

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	141		mg/L		97	86 - 123

Lab Sample ID: LCS 240-564459/135
Matrix: Water
Analysis Batch: 564459

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	139		mg/L		95	86 - 123

Lab Sample ID: 240-181314-6 DU
Matrix: Water
Analysis Batch: 564459

Client Sample ID: BAC-05-F-20230302-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	57		67.0		mg/L		17	20
Bicarbonate Alkalinity as CaCO3	57		67.0		mg/L		17	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Lab Sample ID: MB 240-565385/28
Matrix: Water
Analysis Batch: 565385

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			03/14/23 15:35	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/14/23 15:35	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/14/23 15:35	1

Lab Sample ID: LCS 240-565385/27
Matrix: Water
Analysis Batch: 565385

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	139		mg/L		95	86 - 123

Lab Sample ID: 240-181314-7 DU
Matrix: Water
Analysis Batch: 565385

Client Sample ID: BAC-04-F-20230302-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	96		96.8		mg/L		1	20
Bicarbonate Alkalinity as CaCO3	96		96.8		mg/L		1	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Method: 2320B-1997 - Alkalinity, Total (Continued)

Lab Sample ID: MB 240-566226/4
 Matrix: Water
 Analysis Batch: 566226

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			03/16/23 16:03	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/16/23 16:03	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/16/23 16:03	1

Lab Sample ID: LCS 240-566226/3
 Matrix: Water
 Analysis Batch: 566226

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	142		mg/L		97	86 - 123

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-566932/3
 Matrix: Water
 Analysis Batch: 566932

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			03/28/23 02:32	1

Lab Sample ID: LCS 240-566932/4
 Matrix: Water
 Analysis Batch: 566932

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.58		mg/L		103	90 - 110

Lab Sample ID: 240-181314-6 MS
 Matrix: Water
 Analysis Batch: 566932

Client Sample ID: BAC-05-F-20230302-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.11		2.50	2.84		mg/L		109	80 - 120

Lab Sample ID: 240-181314-6 MSD
 Matrix: Water
 Analysis Batch: 566932

Client Sample ID: BAC-05-F-20230302-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.11		2.50	2.87		mg/L		111	80 - 120	1	15

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-602828/1-A
 Matrix: Water
 Analysis Batch: 605835

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 602828

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.03913	U	0.0688	0.0689	1.00	0.121	pCi/L	03/08/23 11:39	04/03/23 21:42	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: MB 160-602828/1-A
Matrix: Water
Analysis Batch: 605835

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602828

Carrier	<i>MB</i> %Yield	<i>MB</i> Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	85.9		30 - 110	03/08/23 11:39	04/03/23 21:42	1

Lab Sample ID: LCS 160-602828/2-A
Matrix: Water
Analysis Batch: 605835

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602828

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	11.3	11.96		1.23	1.00	0.0945	pCi/L	106	75 - 125

Carrier	<i>LCS</i> %Yield	<i>LCS</i> Qualifier	Limits
Ba Carrier	85.3		30 - 110

Lab Sample ID: LCSD 160-602828/3-A
Matrix: Water
Analysis Batch: 605835

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 602828

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-226	11.3	12.07		1.24	1.00	0.0956	pCi/L	106	75 - 125	0.04	1

Carrier	<i>LCSD</i> %Yield	<i>LCSD</i> Qualifier	Limits
Ba Carrier	80.8		30 - 110

Lab Sample ID: MB 160-602832/1-A
Matrix: Water
Analysis Batch: 605833

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602832

Analyte	<i>MB</i> Result	<i>MB</i> Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.006515	U	0.0337	0.0337	1.00	0.0790	pCi/L	03/08/23 12:16	04/03/23 15:02	1

Carrier	<i>MB</i> %Yield	<i>MB</i> Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	97.2		30 - 110	03/08/23 12:16	04/03/23 15:02	1

Lab Sample ID: LCS 160-602832/2-A
Matrix: Water
Analysis Batch: 605833

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602832

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	11.3	11.49		1.18	1.00	0.124	pCi/L	101	75 - 125

Carrier	<i>LCS</i> %Yield	<i>LCS</i> Qualifier	Limits
Ba Carrier	92.4		30 - 110

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: LCSD 160-602832/25-A
Matrix: Water
Analysis Batch: 605835

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 602832

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec		RER	Limit
									Limits	RER		
Radium-226	11.3	11.17		1.15	1.00	0.0864	pCi/L	99	75 - 125	0.14		1
Carrier	%Yield	LCSD Qualifier	Limits									
Ba Carrier	93.8		30 - 110									

Lab Sample ID: MB 160-603346/1-A
Matrix: Water
Analysis Batch: 606123

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 603346

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
											Radium-226
Carrier	%Yield	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac			
Ba Carrier	89.5		30 - 110			03/13/23 09:56	04/04/23 13:18	1			

Lab Sample ID: LCS 160-603346/2-A
Matrix: Water
Analysis Batch: 606123

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 603346

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec	
									Limits	RER
Radium-226	11.3	12.08		1.26	1.00	0.154	pCi/L	107	75 - 125	
Carrier	%Yield	LCS Qualifier	Limits							
Ba Carrier	89.3		30 - 110							

Lab Sample ID: LCSD 160-603346/3-A
Matrix: Water
Analysis Batch: 606124

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 603346

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec		RER	Limit
									Limits	RER		
Radium-226	11.3	11.44		1.19	1.00	0.122	pCi/L	101	75 - 125	0.26		1
Carrier	%Yield	LCSD Qualifier	Limits									
Ba Carrier	85.6		30 - 110									

Lab Sample ID: 240-181314-6 MS
Matrix: Water
Analysis Batch: 606125

Client Sample ID: BAC-05-F-20230302-01
Prep Type: Total/NA
Prep Batch: 603346

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec	
											Limits	RER
Radium-226	0.234	U	44.7	43.00		4.57	1.00	0.412	pCi/L	96	60 - 140	

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: 240-181314-6 MS
Matrix: Water
Analysis Batch: 606125

Client Sample ID: BAC-05-F-20230302-01
Prep Type: Total/NA
Prep Batch: 603346

		MS	MS		
Carrier	%Yield	Qualifier	Limits		
Ba Carrier	76.3		30 - 110		

Lab Sample ID: 240-181314-6 MSD
Matrix: Water
Analysis Batch: 606125

Client Sample ID: BAC-05-F-20230302-01
Prep Type: Total/NA
Prep Batch: 603346

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec		RER
											Limits	RER	Limit
Radium-226	0.234	U	43.8	44.78		4.67	1.00	0.562	pCi/L	102	60 - 140	0.19	1

		MSD	MSD		
Carrier	%Yield	Qualifier	Limits		
Ba Carrier	83.9		30 - 110		

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-602829/1-A
Matrix: Water
Analysis Batch: 604715

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602829

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared		Analyzed		Dil Fac
								03/08/23 12:03	03/22/23 12:03	03/22/23 12:35	03/22/23 12:35	1
Radium-228	0.4492	U	0.362	0.365	1.00	0.562	pCi/L	03/08/23 12:03	03/22/23 12:03	03/22/23 12:35	03/22/23 12:35	1

		MB	MB			Prepared		Analyzed		Dil Fac
Carrier	%Yield	Qualifier	Limits			03/08/23 12:03	03/22/23 12:03	03/22/23 12:35	03/22/23 12:35	1
Ba Carrier	85.9		30 - 110			03/08/23 12:03	03/22/23 12:03	03/22/23 12:35	03/22/23 12:35	1
Y Carrier	84.1		30 - 110			03/08/23 12:03	03/22/23 12:03	03/22/23 12:35	03/22/23 12:35	1

Lab Sample ID: LCS 160-602829/2-A
Matrix: Water
Analysis Batch: 604715

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602829

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec	
									Limits	RER
Radium-228	8.10	9.897		1.37	1.00	0.649	pCi/L	122	75 - 125	

		LCS	LCS		
Carrier	%Yield	Qualifier	Limits		
Ba Carrier	85.3		30 - 110		
Y Carrier	85.2		30 - 110		

Lab Sample ID: LCSD 160-602829/3-A
Matrix: Water
Analysis Batch: 604715

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 602829

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec		RER
									Limits	RER	Limit
Radium-228	8.10	11.22		1.52	1.00	0.594	pCi/L	139	75 - 125	0.46	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

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

Lab Sample ID: LCSD 160-602829/3-A
Matrix: Water
Analysis Batch: 604715

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 602829

Carrier	LCSD		Limits
	%Yield	Qualifier	
Ba Carrier	80.8		30 - 110
Y Carrier	81.1		30 - 110

Lab Sample ID: MB 160-602838/1-A
Matrix: Water
Analysis Batch: 604790

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602838

Analyte	MB		Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-228	0.6552		0.342	0.347	1.00	0.477	pCi/L	03/08/23 13:13	03/23/23 11:56	1

Carrier	MB		Limits	Prepared	Analyzed	Dil Fac
	%Yield	Qualifier				
Ba Carrier	97.2		30 - 110	03/08/23 13:13	03/23/23 11:56	1
Y Carrier	83.0		30 - 110	03/08/23 13:13	03/23/23 11:56	1

Lab Sample ID: LCS 160-602838/2-A
Matrix: Water
Analysis Batch: 604790

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602838

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits

Carrier	LCS		Limits
	%Yield	Qualifier	
Ba Carrier	92.4		30 - 110
Y Carrier	82.6		30 - 110

Lab Sample ID: LCSD 160-602838/25-A
Matrix: Water
Analysis Batch: 604790

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 602838

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit

Carrier	LCSD		Limits
	%Yield	Qualifier	
Ba Carrier	93.8		30 - 110
Y Carrier	80.7		30 - 110

Lab Sample ID: MB 160-603347/1-A
Matrix: Water
Analysis Batch: 605094

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 603347

Analyte	MB		Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-228	0.2953	U	0.337	0.338	1.00	0.553	pCi/L	03/13/23 10:14	03/27/23 12:10	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

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

Lab Sample ID: MB 160-603347/1-A
Matrix: Water
Analysis Batch: 605094

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 603347

Carrier	MB MB		Limits
	%Yield	Qualifier	
Ba Carrier	89.5		30 - 110
Y Carrier	79.6		30 - 110

Prepared	Analyzed	Dil Fac
03/13/23 10:14	03/27/23 12:10	1
03/13/23 10:14	03/27/23 12:10	1

Lab Sample ID: LCS 160-603347/2-A
Matrix: Water
Analysis Batch: 605094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 603347

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	
Radium-228	8.08	10.66		1.43	1.00	0.514	pCi/L	132	75 - 125	

Carrier	LCS LCS		Limits
	%Yield	Qualifier	
Ba Carrier	89.3		30 - 110
Y Carrier	79.3		30 - 110

Lab Sample ID: LCSD 160-603347/3-A
Matrix: Water
Analysis Batch: 605094

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 603347

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		RER	Limit
Radium-228	8.08	9.947		1.37	1.00	0.523	pCi/L	123	75 - 125	0.25	1	

Carrier	LCSD LCSD		Limits
	%Yield	Qualifier	
Ba Carrier	85.6		30 - 110
Y Carrier	79.3		30 - 110

Lab Sample ID: 240-181314-6 MS
Matrix: Water
Analysis Batch: 605094

Client Sample ID: BAC-05-F-20230302-01
Prep Type: Total/NA
Prep Batch: 603347

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	
Radium-228	-1.10	U G	31.9	48.35	F1	6.52	1.00	2.52	pCi/L	152	60 - 140	

Carrier	MS MS		Limits
	%Yield	Qualifier	
Ba Carrier	76.3		30 - 110
Y Carrier	79.6		30 - 110

Lab Sample ID: 240-181314-6 MSD
Matrix: Water
Analysis Batch: 605094

Client Sample ID: BAC-05-F-20230302-01
Prep Type: Total/NA
Prep Batch: 603347

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		RER	Limit
Radium-228	-1.10	U G	31.2	42.23		5.69	1.00	2.05	pCi/L	135	60 - 140	0.50	1	

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

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

Lab Sample ID: 240-181314-6 MSD

Matrix: Water

Analysis Batch: 605094

Client Sample ID: BAC-05-F-20230302-01

Prep Type: Total/NA

Prep Batch: 603347

Carrier	MSD		Limits
	%Yield	Qualifier	
Ba Carrier	83.9		30 - 110
Y Carrier	80.7		30 - 110

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Metals

Prep Batch: 564268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-1	BAC-07-F-20230302-01	Total Recoverable	Water	3005A	
240-181314-2	DUP-003-BAC-07-F-20230302-01	Total Recoverable	Water	3005A	
240-181314-3	BAC-02-F-20230302-01	Total Recoverable	Water	3005A	
240-181314-4	BAC-18-F-20230302-01	Total Recoverable	Water	3005A	
240-181314-5	BAC-06-F-20230302-01	Total Recoverable	Water	3005A	
240-181314-6	BAC-05-F-20230302-01	Total Recoverable	Water	3005A	
240-181314-7	BAC-04-F-20230302-01	Total Recoverable	Water	3005A	
240-181314-8	EB-001-F-20230302-01	Total Recoverable	Water	3005A	
MB 240-564268/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-564268/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-181314-6 MS	BAC-05-F-20230302-01	Total Recoverable	Water	3005A	
240-181314-6 MSD	BAC-05-F-20230302-01	Total Recoverable	Water	3005A	

Prep Batch: 564269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-1	BAC-07-F-20230302-01	Total/NA	Water	7470A	
240-181314-2	DUP-003-BAC-07-F-20230302-01	Total/NA	Water	7470A	
240-181314-3	BAC-02-F-20230302-01	Total/NA	Water	7470A	
240-181314-4	BAC-18-F-20230302-01	Total/NA	Water	7470A	
240-181314-5	BAC-06-F-20230302-01	Total/NA	Water	7470A	
240-181314-6	BAC-05-F-20230302-01	Total/NA	Water	7470A	
240-181314-7	BAC-04-F-20230302-01	Total/NA	Water	7470A	
240-181314-8	EB-001-F-20230302-01	Total/NA	Water	7470A	
MB 240-564269/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-564269/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-181314-6 MS	BAC-05-F-20230302-01	Total/NA	Water	7470A	
240-181314-6 MSD	BAC-05-F-20230302-01	Total/NA	Water	7470A	

Analysis Batch: 564598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-1	BAC-07-F-20230302-01	Total/NA	Water	7470A	564269
240-181314-2	DUP-003-BAC-07-F-20230302-01	Total/NA	Water	7470A	564269
240-181314-3	BAC-02-F-20230302-01	Total/NA	Water	7470A	564269
240-181314-4	BAC-18-F-20230302-01	Total/NA	Water	7470A	564269
240-181314-5	BAC-06-F-20230302-01	Total/NA	Water	7470A	564269
240-181314-6	BAC-05-F-20230302-01	Total/NA	Water	7470A	564269
240-181314-7	BAC-04-F-20230302-01	Total/NA	Water	7470A	564269
240-181314-8	EB-001-F-20230302-01	Total/NA	Water	7470A	564269
MB 240-564269/1-A	Method Blank	Total/NA	Water	7470A	564269
LCS 240-564269/2-A	Lab Control Sample	Total/NA	Water	7470A	564269
240-181314-6 MS	BAC-05-F-20230302-01	Total/NA	Water	7470A	564269
240-181314-6 MSD	BAC-05-F-20230302-01	Total/NA	Water	7470A	564269

Analysis Batch: 564732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-1	BAC-07-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-2	DUP-003-BAC-07-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-3	BAC-02-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-4	BAC-18-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-5	BAC-06-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-6	BAC-05-F-20230302-01	Total Recoverable	Water	6020B	564268

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Metals (Continued)

Analysis Batch: 564732 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-7	BAC-04-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-8	EB-001-F-20230302-01	Total Recoverable	Water	6020B	564268
MB 240-564268/1-A	Method Blank	Total Recoverable	Water	6020B	564268
LCS 240-564268/2-A	Lab Control Sample	Total Recoverable	Water	6020B	564268
240-181314-6 MS	BAC-05-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-6 MSD	BAC-05-F-20230302-01	Total Recoverable	Water	6020B	564268

Analysis Batch: 564901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-1	BAC-07-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-2	DUP-003-BAC-07-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-3	BAC-02-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-4	BAC-18-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-5	BAC-06-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-6	BAC-05-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-7	BAC-04-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-8	EB-001-F-20230302-01	Total Recoverable	Water	6020B	564268
MB 240-564268/1-A	Method Blank	Total Recoverable	Water	6020B	564268
LCS 240-564268/2-A	Lab Control Sample	Total Recoverable	Water	6020B	564268
240-181314-6 MS	BAC-05-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-6 MSD	BAC-05-F-20230302-01	Total Recoverable	Water	6020B	564268

General Chemistry

Analysis Batch: 564459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-2	DUP-003-BAC-07-F-20230302-01	Total/NA	Water	2320B-1997	
240-181314-3	BAC-02-F-20230302-01	Total/NA	Water	2320B-1997	
240-181314-5	BAC-06-F-20230302-01	Total/NA	Water	2320B-1997	
240-181314-6	BAC-05-F-20230302-01	Total/NA	Water	2320B-1997	
240-181314-7	BAC-04-F-20230302-01	Total/NA	Water	2320B-1997	
240-181314-8	EB-001-F-20230302-01	Total/NA	Water	2320B-1997	
MB 240-564459/109	Method Blank	Total/NA	Water	2320B-1997	
MB 240-564459/136	Method Blank	Total/NA	Water	2320B-1997	
MB 240-564459/83	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-564459/108	Lab Control Sample	Total/NA	Water	2320B-1997	
LCS 240-564459/135	Lab Control Sample	Total/NA	Water	2320B-1997	
240-181314-6 DU	BAC-05-F-20230302-01	Total/NA	Water	2320B-1997	

Analysis Batch: 565385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-1	BAC-07-F-20230302-01	Total/NA	Water	2320B-1997	
MB 240-565385/28	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-565385/27	Lab Control Sample	Total/NA	Water	2320B-1997	
240-181314-7 DU	BAC-04-F-20230302-01	Total/NA	Water	2320B-1997	

Analysis Batch: 566226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-4	BAC-18-F-20230302-01	Total/NA	Water	2320B-1997	
MB 240-566226/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-566226/3	Lab Control Sample	Total/NA	Water	2320B-1997	

Eurofins Canton

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

General Chemistry

Analysis Batch: 566932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-1	BAC-07-F-20230302-01	Total/NA	Water	300.0-1993 R2.1	
240-181314-2	DUP-003-BAC-07-F-20230302-01	Total/NA	Water	300.0-1993 R2.1	
240-181314-3	BAC-02-F-20230302-01	Total/NA	Water	300.0-1993 R2.1	
240-181314-4	BAC-18-F-20230302-01	Total/NA	Water	300.0-1993 R2.1	
240-181314-5	BAC-06-F-20230302-01	Total/NA	Water	300.0-1993 R2.1	
240-181314-6	BAC-05-F-20230302-01	Total/NA	Water	300.0-1993 R2.1	
240-181314-7	BAC-04-F-20230302-01	Total/NA	Water	300.0-1993 R2.1	
240-181314-8	EB-001-F-20230302-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-566932/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-566932/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-181314-6 MS	BAC-05-F-20230302-01	Total/NA	Water	300.0-1993 R2.1	
240-181314-6 MSD	BAC-05-F-20230302-01	Total/NA	Water	300.0-1993 R2.1	

Rad

Prep Batch: 602828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-1	BAC-07-F-20230302-01	Total/NA	Water	PrecSep-21	
MB 160-602828/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-602828/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-602828/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 602829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-1	BAC-07-F-20230302-01	Total/NA	Water	PrecSep_0	
MB 160-602829/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-602829/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-602829/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Prep Batch: 602832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-2	DUP-003-BAC-07-F-20230302-01	Total/NA	Water	PrecSep-21	
240-181314-4	BAC-18-F-20230302-01	Total/NA	Water	PrecSep-21	
240-181314-5	BAC-06-F-20230302-01	Total/NA	Water	PrecSep-21	
240-181314-7	BAC-04-F-20230302-01	Total/NA	Water	PrecSep-21	
240-181314-8	EB-001-F-20230302-01	Total/NA	Water	PrecSep-21	
MB 160-602832/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-602832/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-602832/25-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 602838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-2	DUP-003-BAC-07-F-20230302-01	Total/NA	Water	PrecSep_0	
240-181314-4	BAC-18-F-20230302-01	Total/NA	Water	PrecSep_0	
240-181314-5	BAC-06-F-20230302-01	Total/NA	Water	PrecSep_0	
240-181314-7	BAC-04-F-20230302-01	Total/NA	Water	PrecSep_0	
240-181314-8	EB-001-F-20230302-01	Total/NA	Water	PrecSep_0	
MB 160-602838/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-602838/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-602838/25-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Eurofins Canton

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Rad

Prep Batch: 603346

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-3	BAC-02-F-20230302-01	Total/NA	Water	PrecSep-21	
240-181314-6	BAC-05-F-20230302-01	Total/NA	Water	PrecSep-21	
MB 160-603346/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-603346/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-603346/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	
240-181314-6 MS	BAC-05-F-20230302-01	Total/NA	Water	PrecSep-21	
240-181314-6 MSD	BAC-05-F-20230302-01	Total/NA	Water	PrecSep-21	

Prep Batch: 603347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-3	BAC-02-F-20230302-01	Total/NA	Water	PrecSep_0	
240-181314-6	BAC-05-F-20230302-01	Total/NA	Water	PrecSep_0	
MB 160-603347/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-603347/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-603347/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	
240-181314-6 MS	BAC-05-F-20230302-01	Total/NA	Water	PrecSep_0	
240-181314-6 MSD	BAC-05-F-20230302-01	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-07-F-20230302-01

Lab Sample ID: 240-181314-1

Date Collected: 03/02/23 11:26

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 17:37
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564901	AJC	EET CAN	03/09/23 14:39
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:23
Total/NA	Analysis	2320B-1997		1	565385	MED	EET CAN	03/14/23 14:41
Total/NA	Analysis	300.0-1993 R2.1		1	566932	JWW	EET CAN	03/28/23 08:15
Total/NA	Prep	PrecSep-21			602828	DJP	EET SL	03/08/23 11:39
Total/NA	Analysis	9315		1	606125	FLC	EET SL	04/04/23 19:58
Total/NA	Prep	PrecSep_0			602829	DJP	EET SL	03/08/23 12:03
Total/NA	Analysis	9320		1	604718	FLC	EET SL	03/22/23 12:41
Total/NA	Analysis	Ra226_Ra228		1	606185	SCB	EET SL	04/05/23 12:45

Client Sample ID: DUP-003-BAC-07-F-20230302-01

Lab Sample ID: 240-181314-2

Date Collected: 03/02/23 11:26

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 17:41
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564901	AJC	EET CAN	03/09/23 14:47
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:25
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 19:53
Total/NA	Analysis	300.0-1993 R2.1		1	566932	JWW	EET CAN	03/28/23 08:35
Total/NA	Prep	PrecSep-21			602832	DJP	EET SL	03/08/23 12:16
Total/NA	Analysis	9315		1	605833	EMH	EET SL	04/03/23 15:04
Total/NA	Prep	PrecSep_0			602838	DJP	EET SL	03/08/23 13:13
Total/NA	Analysis	9320		1	604790	FLC	EET SL	03/23/23 11:56
Total/NA	Analysis	Ra226_Ra228		1	605951	SCB	EET SL	04/03/23 17:14

Client Sample ID: BAC-02-F-20230302-01

Lab Sample ID: 240-181314-3

Date Collected: 03/02/23 12:37

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 17:46
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564901	AJC	EET CAN	03/09/23 14:50
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:27

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-02-F-20230302-01

Lab Sample ID: 240-181314-3

Date Collected: 03/02/23 12:37

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 19:57
Total/NA	Analysis	300.0-1993 R2.1		1	566932	JWW	EET CAN	03/28/23 08:55
Total/NA	Prep	PrecSep-21			603346	DJP	EET SL	03/13/23 09:56
Total/NA	Analysis	9315		1	606124	FLC	EET SL	04/04/23 15:13
Total/NA	Prep	PrecSep_0			603347	DJP	EET SL	03/13/23 10:14
Total/NA	Analysis	9320		1	605094	FLC	EET SL	03/27/23 12:12
Total/NA	Analysis	Ra226_Ra228		1	606190	SCB	EET SL	04/05/23 13:07

Client Sample ID: BAC-18-F-20230302-01

Lab Sample ID: 240-181314-4

Date Collected: 03/02/23 13:33

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 17:50
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564901	AJC	EET CAN	03/09/23 14:53
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:29
Total/NA	Analysis	2320B-1997		1	566226	JMB	EET CAN	03/16/23 16:07
Total/NA	Analysis	300.0-1993 R2.1		1	566932	JWW	EET CAN	03/28/23 10:56
Total/NA	Prep	PrecSep-21			602832	DJP	EET SL	03/08/23 12:16
Total/NA	Analysis	9315		1	605833	EMH	EET SL	04/03/23 15:04
Total/NA	Prep	PrecSep_0			602838	DJP	EET SL	03/08/23 13:13
Total/NA	Analysis	9320		1	604790	FLC	EET SL	03/23/23 11:57
Total/NA	Analysis	Ra226_Ra228		1	605951	SCB	EET SL	04/03/23 17:14

Client Sample ID: BAC-06-F-20230302-01

Lab Sample ID: 240-181314-5

Date Collected: 03/02/23 14:16

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 17:54
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564901	AJC	EET CAN	03/09/23 14:55
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:31
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 20:16
Total/NA	Analysis	300.0-1993 R2.1		1	566932	JWW	EET CAN	03/28/23 11:16
Total/NA	Prep	PrecSep-21			602832	DJP	EET SL	03/08/23 12:16
Total/NA	Analysis	9315		1	605833	EMH	EET SL	04/03/23 15:04
Total/NA	Prep	PrecSep_0			602838	DJP	EET SL	03/08/23 13:13
Total/NA	Analysis	9320		1	604790	FLC	EET SL	03/23/23 11:57

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-06-F-20230302-01

Lab Sample ID: 240-181314-5

Date Collected: 03/02/23 14:16

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228		1	605951	SCB	EET SL	04/03/23 17:14

Client Sample ID: BAC-05-F-20230302-01

Lab Sample ID: 240-181314-6

Date Collected: 03/02/23 15:30

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 16:48
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564901	AJC	EET CAN	03/09/23 14:22
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:02
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 20:20
Total/NA	Analysis	300.0-1993 R2.1		1	566932	JWW	EET CAN	03/28/23 09:15
Total/NA	Prep	PrecSep-21			603346	DJP	EET SL	03/13/23 09:56
Total/NA	Analysis	9315		1	606124	FLC	EET SL	04/04/23 15:13
Total/NA	Prep	PrecSep_0			603347	DJP	EET SL	03/13/23 10:14
Total/NA	Analysis	9320		1	605094	FLC	EET SL	03/27/23 12:12
Total/NA	Analysis	Ra226_Ra228		1	606190	SCB	EET SL	04/05/23 13:07

Client Sample ID: BAC-04-F-20230302-01

Lab Sample ID: 240-181314-7

Date Collected: 03/02/23 16:26

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 17:59
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564901	AJC	EET CAN	03/09/23 14:58
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:33
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 20:28
Total/NA	Analysis	300.0-1993 R2.1		1	566932	JWW	EET CAN	03/28/23 11:36
Total/NA	Prep	PrecSep-21			602832	DJP	EET SL	03/08/23 12:16
Total/NA	Analysis	9315		1	605833	EMH	EET SL	04/03/23 15:04
Total/NA	Prep	PrecSep_0			602838	DJP	EET SL	03/08/23 13:13
Total/NA	Analysis	9320		1	604790	FLC	EET SL	03/23/23 11:57
Total/NA	Analysis	Ra226_Ra228		1	605951	SCB	EET SL	04/03/23 17:14

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: EB-001-F-20230302-01

Lab Sample ID: 240-181314-8

Date Collected: 03/02/23 16:45

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 18:03
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564901	AJC	EET CAN	03/09/23 15:01
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:35
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 20:31
Total/NA	Analysis	300.0-1993 R2.1		1	566932	JWW	EET CAN	03/28/23 11:56
Total/NA	Prep	PrecSep-21			602832	DJP	EET SL	03/08/23 12:16
Total/NA	Analysis	9315		1	605833	EMH	EET SL	04/03/23 15:04
Total/NA	Prep	PrecSep_0			602838	DJP	EET SL	03/08/23 13:13
Total/NA	Analysis	9320		1	604790	FLC	EET SL	03/23/23 11:59
Total/NA	Analysis	Ra226_Ra228		1	605951	SCB	EET SL	04/03/23 17:14

Laboratory References:

EET CAN = Eurofins Canton, 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
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23 *
Connecticut	State	PH-0590	06-29-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-28-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23 *
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-23 *
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	03-29-23
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-23
Florida	NELAP	E87689	06-30-23
HI - RadChem Recognition	State	n/a	06-30-23
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana (All)	NELAP	04080	06-30-23
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-23
MI - RadChem Recognition	State	9005	06-30-23
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-23
New Jersey	NELAP	MO002	06-30-23
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-23
North Dakota	State	R-207	06-30-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Canton

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Laboratory: Eurofins St. Louis (Continued)

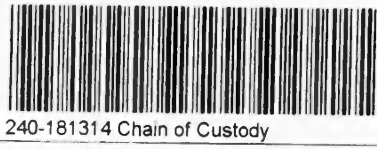
All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oklahoma	NELAP	9997	08-31-23
Oregon	NELAP	4157	09-01-23
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23
Texas	NELAP	T104704193	07-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00028	06-11-23
Utah	NELAP	MO000542021-14	07-31-23
Virginia	NELAP	10310	06-14-23
Washington	State	C592	08-30-23
West Virginia DEP	State	381	10-31-23

Chain of Custody Record



Client Information		Lab PM: Cisneros, Roxanne		Carrier Tracking No(s): 240-93466-34578-1	
Client Contact: Taylor Huffman		E-Mail: roxanne.cisneros@Eurofins.com		State of Origin:	
Company: Lightstone Generation Gavin Power LLC		PWSID:		Job #:	
Address: 7397 OH-7		City: Cheshire		TAT Requested (days):	
State: OH, Zip: 45620		Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Preservation Codes:	
Phone: 740-925-3171(Tel)		PO #: 2935505		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 - Na2OAS Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Email: taylor.huffman@lightstonegen.com		Project #: 24019633		Other:	
Federal CCR Wells - App IV		Site: Gavin Plant		Total Number of Containers: <input checked="" type="checkbox"/>	
Sample Identification		Sample Date		Sample Time	
BAC-07-F-20230302-01		3-2-23		1126	
DUP-003-BAC-07-F-20230302-01		3-2-23		1126	
BAC-02-F-20230302-01		3-2-23		1237	
BAC-18-F-20230302-01		3-2-23		1333	
BAC-06-F-20230302-01		3-2-23		1416	
BAC-05-F-20230302-01		3-2-23		1530	
BAC-05-F-20230302-MS		3-2-23		1530	
BAC-05-F-20230302-MSD		3-2-23		1530	
BAC-04-F-20230302-01		3-2-23		1626	
EB-001-F-20230302-01		3-2-23		1645	
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard		<input type="checkbox"/> Flammable	
<input type="checkbox"/> Deliverable Requested: I, II, III, IV, Other (specify)		<input type="checkbox"/> Skin Irritant		<input type="checkbox"/> Poison B	
<input type="checkbox"/> Empty Kit Relinquished by:		<input type="checkbox"/> Unknown		<input type="checkbox"/> Radiological	
Relinquished by: <i>Tom Edwards</i>		Date/Time: 3-3-23 1030		Date/Time: 3-3-23 10:45	
Relinquished by: <i>Tom Edwards</i>		Date/Time: 3-3-23 1435hrs		Date/Time: 3/3/23 1435	
Relinquished by:		Date/Time:		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:	



Eurofins - Canton Sample Receipt Form/Narrative Login # : _____
Barberton Facility

Client Lishtspne Site Name _____ Cooler unpacked by: Mandaly
Cooler Received on 3-3-23 Opened on 3-3-23
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off Eurofins Courier Other _____

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

Eurofins Cooler # atpc Foam Box _____ Client Cooler Box Other _____
Packing material used: Bubble Wrap Foam Plastic Bag None Other _____
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt See Multiple Cooler Form
IR GUN # IR-13 (CF -0.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
IR GUN # IR-16 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
IR GUN # IR-17 (CF -0.3 °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# HC293086
14. Were VOAs on the COC? Yes No
15. Were air bubbles >6 mm in any VOA vials? Yes 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: _____

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container		Preservative	
			pH	Temp	Added (mls)	Lot #
BAC-07-F-20230302-01	240-181314-C-1	Plastic 500ml - with Nitric Acid				
BAC-07-F-20230302-01	240-181314-D-1	Plastic 1 liter - Nitric Acid				
BAC-07-F-20230302-01	240-181314-E-1	Plastic 1 liter - Nitric Acid				
DUP-003-BAC-07-F-20230302-01	240-181314-C-2	Plastic 500ml - with Nitric Acid				
DUP-003-BAC-07-F-20230302-01	240-181314-D-2	Plastic 1 liter - Nitric Acid				
DUP-003-BAC-07-F-20230302-01	240-181314-E-2	Plastic 1 liter - Nitric Acid				
BAC-02-F-20230302-01	240-181314-C-3	Plastic 500ml - with Nitric Acid				
BAC-02-F-20230302-01	240-181314-D-3	Plastic 1 liter - Nitric Acid				
BAC-02-F-20230302-01	240-181314-E-3	Plastic 1 liter - Nitric Acid				
BAC-18-F-20230302-01	240-181314-C-4	Plastic 500ml - with Nitric Acid				
BAC-18-F-20230302-01	240-181314-D-4	Plastic 1 liter - Nitric Acid				
BAC-18-F-20230302-01	240-181314-E-4	Plastic 1 liter - Nitric Acid				
BAC-06-F-20230302-01	240-181314-C-5	Plastic 500ml - with Nitric Acid				
BAC-06-F-20230302-01	240-181314-D-5	Plastic 1 liter - Nitric Acid				
BAC-06-F-20230302-01	240-181314-E-5	Plastic 1 liter - Nitric Acid				
BAC-05-F-20230302-01	240-181314-D-6	Plastic 250ml - with Nitric Acid	<2			
BAC-05-F-20230302-01	240-181314-E-6	Plastic 250ml - with Nitric Acid	<2			
BAC-05-F-20230302-01	240-181314-F-6	Plastic 250ml - with Nitric Acid	<2			
BAC-05-F-20230302-01	240-181314-J-6	Plastic 1 liter - Nitric Acid	<2			
BAC-05-F-20230302-01	240-181314-K-6	Plastic 1 liter - Nitric Acid	<2			
BAC-05-F-20230302-01	240-181314-L-6	Plastic 1 liter - Nitric Acid	<2			
BAC-05-F-20230302-01	240-181314-M-6	Plastic 1 liter - Nitric Acid	<2			
BAC-05-F-20230302-01	240-181314-N-6	Plastic 1 liter - Nitric Acid	<2			
BAC-05-F-20230302-01	240-181314-O-6	Plastic 1 liter - Nitric Acid	<2			
BAC-04-F-20230302-01	240-181314-C-7	Plastic 500ml - with Nitric Acid				
BAC-04-F-20230302-01	240-181314-D-7	Plastic 1 liter - Nitric Acid				
BAC-04-F-20230302-01	240-181314-E-7	Plastic 1 liter - Nitric Acid				
EB-001-F-20230302-01	240-181314-C-8	Plastic 500ml - with Nitric Acid				
EB-001-F-20230302-01	240-181314-D-8	Plastic 1 liter - Nitric Acid				
EB-001-F-20230302-01	240-181314-E-8	Plastic 1 liter - Nitric Acid				

Chain of Custody Record

Client Information Client Contact: Bobby Casio Phone: 740-373-4308 E-Mail: roxanne.cisneros@Eurofins.com		Lab PM: Cisneros, Roxanne E-Mail: roxanne.cisneros@Eurofins.com		Carrier Tracking No(s): State of Origin:		COC No: 240-93466-34578.1 Page: Page 1 of 1 Job #:	
Company: Lightstone Generation Gavin Power LLC Address: 7397 OH-7 City: Cheshire State: OH , Zip: 45620 Phone: 740-925-3171(Tel) Email: taylor.huffman@lightstonegen.com		Project Name: Federal CCR Wells - App IV Site: Gavin Plant		Analysis Requested Total Number of Containers:		Preservation Codes: M - Heane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 L - EDTA Z - other (specify)	
Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: 2935505 W/O #:		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No)		9315_Ra226, 9320_Ra228, Ra226Ra228_GFPc 300.0_28D - Fluoride 6020, 7470A 2320B - Alkalinity		Special Instructions/Note: 240-181314 Chain of Custody	
Sample Identification Sample Date Sample Time Sample Type (C=comp, G=grab) Matrix (Water, Solid, Other) Preservation Code:		Sample Date Sample Time Sample Type (C=comp, G=grab) Matrix (Water, Solid, Other) Preservation Code:		Sample Date Sample Time Sample Type (C=comp, G=grab) Matrix (Water, Solid, Other) Preservation Code:		Sample Date Sample Time Sample Type (C=comp, G=grab) Matrix (Water, Solid, Other) Preservation Code:	
BAC-07-F-20230302-01 Dup-03-BAC-07-F-20230302-01 BAC-07-F-20230302-01 BAC-18-F-20230302-01 BAC-06-F-20230302-01 BAC-05-F-20230302-01 BAC-05-F-20230302-MS BAC-04-F-20230302-01 EIB-001-F-20230302-01		3-2-23 1126 3-2-23 1126 3-2-23 1237 3-2-23 1333 3-2-23 1416 3-2-23 1530 3-2-23 1530 3-2-23 1626 3-2-23 1645		6 6 6 6 6 6 6 6 6		W W W W W W W W W	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Deliverable Requested: <input type="checkbox"/> I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Special Instructions/QC Requirements:	
Empty Kit Relinquished by:		Date:		Method of Shipment:		Date/Time:	
Relinquished by: Bobby Casio Relinquished by: Tom Edwards Relinquished by:		Date/Time: 3-3-23 1030 Date/Time: 3-3-23 1435hrs Date/Time:		Received by: Tom Edwards Received by: M.A.A. Received by:		Date/Time: 3-3-23 10:45 Date/Time: 3/3/23 14:35 Date/Time:	
Company: Hub Optics Company: RFCS Company:		Cooler Temperature(s) °C and Other Remarks:		Custody Seal No.: <input type="checkbox"/> Yes <input type="checkbox"/> No		Ver: 01/16/2019	



Eurofins - Canton Sample Receipt Form/Narrative Login # : _____
Barberton Facility

Client Lisht Spine Site Name _____ Cooler unpacked by: Mandy
Cooler Received on 3-3-23 Opened on 3-3-23
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off Eurofins Courier Other _____

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

Eurofins Cooler # 2111 Foam Box _____ Client Cooler _____ Box _____ Other _____
Packing material used: Bubble Wrap Foam Plastic Bag None _____ Other _____
COOLANT: Wet Ice Blue Ice _____ Dry Ice _____ Water _____ None _____

1. Cooler temperature upon receipt See Multiple Cooler Form
IR GUN # IR-13 (CF -0.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
IR GUN # IR-16 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
IR GUN # IR-17 (CF -0.3 °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 NA
-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# HC293086
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: _____

Temperature readings:

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-07-F-20230302-01	240-181314-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-07-F-20230302-01	240-181314-D-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-20230302-01	240-181314-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-003-BAC-07-F-20230302-01	240-181314-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-003-BAC-07-F-20230302-01	240-181314-D-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-003-BAC-07-F-20230302-01	240-181314-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-02-F-20230302-01	240-181314-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-02-F-20230302-01	240-181314-D-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-02-F-20230302-01	240-181314-E-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-18-F-20230302-01	240-181314-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-18-F-20230302-01	240-181314-D-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-18-F-20230302-01	240-181314-E-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-20230302-01	240-181314-C-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-06-F-20230302-01	240-181314-D-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-20230302-01	240-181314-E-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-05-F-20230302-01	240-181314-G-6	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-05-F-20230302-01	240-181314-H-6	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-05-F-20230302-01	240-181314-I-6	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-05-F-20230302-01	240-181314-J-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-05-F-20230302-01	240-181314-K-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-05-F-20230302-01	240-181314-L-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-05-F-20230302-01	240-181314-M-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-05-F-20230302-01	240-181314-N-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-05-F-20230302-01	240-181314-O-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-04-F-20230302-01	240-181314-C-7	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-04-F-20230302-01	240-181314-D-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-04-F-20230302-01	240-181314-E-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230302-01	240-181314-C-8	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230302-01	240-181314-D-8	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230302-01	240-181314-E-8	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

Login # : _____

Eurofins - Canton 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	06	0.4	Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: 13	2.5	2.3	Water	None	
EC	Client	Box	Other	IR GUN #: 13	1.2	1.0	Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	

See Temperature Excursion Form



Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler:		Lab PM:		Carrier Tracking No(s):		COC No:				
Client Contact: Shipping/Receiving Company: TestAmerica Laboratories, Inc.		Phone: Address: City: State, Zip: MO, 63045 Phone: 314-298-8566(Tel) 314-298-8757(Fax) Email:		Cisneros, Roxanne E-Mail: roxanne.cisneros@et.eurofinsus.com		Page: Page 1 of 2		240-164631.1				
Due Date Requested: 4/3/2023 TAT Requested (days):		Project #: 24019633 SSOW#:		Field Filtered Sample (Yes or No)		Accreditations Required (See note):		Job #: 240-181314-1				
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Sealed, On-site to fill, BTA tissue, A&A)	Preservation Code:	Field Filtered Sample (Yes or No)	Perform MSD (Yes or No)	9315_Ra226/PreSep_21 Radium-226 (GFPC)	9320_Ra228/PreSep_0 Radium-228 (GFPC)	Ra228Ra228_GFPC/ Combined Radium-226 and	Total Number of Containers	Special Instructions/Note:
BAC-07-F-20230302-01 (240-181314-1)	3/2/23	11:26 Eastern	Water	Water		X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
DUP-003-BAC-07-F-20230302-01 (240-181314-2)	3/2/23	11:26 Eastern	Water	Water		X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-02-F-20230302-01 (240-181314-3)	3/2/23	12:37 Eastern	Water	Water		X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-18-F-20230302-01 (240-181314-4)	3/2/23	13:33 Eastern	Water	Water		X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-06-F-20230302-01 (240-181314-5)	3/2/23	14:16 Eastern	Water	Water		X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-05-F-20230302-01 (240-181314-6)	3/2/23	15:30 Eastern	Water	Water		X	X	X	X	X	6	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-05-F-20230302-01 MS (240-181314-6MS)	3/2/23	15:30 Eastern	MS	Water		X	X	X	X	X	1	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-05-F-20230302-01 MSD (240-181314-6MSD)	3/2/23	15:30 Eastern	MSD	Water		X	X	X	X	X	1	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-04-F-20230302-01 (240-181314-7)	3/2/23	16:26 Eastern	Water	Water		X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet

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/test/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
 Deliverable Requested: I, II, III, IV, Other (specify) _____
 Primary Deliverable Rank: 2

Empty Kit Relinquished by: _____ Date: _____
 Relinquished by: *Michelle Havelid* Date: *3-6-23*
 Relinquished by: *Felix* Date: *3-6-23*
 Relinquished by: _____ Date: _____
 Relinquished by: _____ Date: _____

Company: *FEEL*
 Company: *FEEL*
 Company: *FEEL*

Received by: _____ Date/Time: _____
 Received by: *Shanley - Shanley* Date/Time: *3/23 09:20*
 Received by: _____ Date/Time: _____

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
 Special Instructions/QC Requirements:

Method of Shipment: _____
 Date/Time: _____
 Date/Time: _____
 Date/Time: _____

Cooler Temperature(s) °C and Other Remarks: _____



Client Information (Sub Contract Lab)		Sampler: Lab PM: Cisneros, Roxanne		Carrier Tracking No(s): 240-164631.2	
Client Contact: Shipping/Receiving		E-Mail: roxanne.cisneros@et.eurofinsus.com		Page: Page 2 of 2	
Company: TestAmerica Laboratories, Inc.		State of Origin: Ohio		Job #: 240-181314-1	
Address: 13715 Rider Trail North,		Due Date Requested: 4/3/2023		Preservation Codes:	
City: Earth City		TAT Requested (days):		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 L - EDA Other:	
State, Zip: MO, 63045		PO #:		Total Number of Containers: <u>2</u>	
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		WO #:		Special Instructions/Note: Recount of TAR after 21 day ingrowth if > action limit; save planchet	
Email:		Project #: 24019633			
Project Name: Federal CCR Wells - App IV		SSOW#:			
Site:		Sample Date: 3/2/23			
Sample Identification - Client ID (Lab ID)		Sample Time: 16:45 Eastern			
EB-001-F-20230302-01 (240-181314-8)		Sample Type (C=Comp, G=grab):			
Matrix (W=Water, S=solid, O=wastefoil, BT=Tissue, AA=K)		Preservation Code:			
		Water			
Field Filtered Sample (Yes or No)		9315_Ra226/PreSep_21 Radium-226 (GFC)		X	
Perform MS/MSD (Yes or No)		9320_Ra226/PreSep_0 Radium-226 (GFC)		X	
Radium-226		Radium-226		X	
		330_Ra226/PreSep_0 Radium-226 and			
<p>Possible Hazard Identification</p> <p>Unconfirmed</p> <p>Deliverable Requested: I, II, III, IV, Other (specify) _____ Primary Deliverable Rank: 2</p> <p>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</p> <p><input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months</p> <p>Special Instructions/QC Requirements: _____</p>					
Relinquished by: <u>Spencer</u>		Date/Time: <u>3/2/23</u>		Company: <u>FEDEX</u>	
Relinquished by: <u>Spencer</u>		Date/Time: <u>3/2/23</u>		Company: <u>FEDEX</u>	
Relinquished by: <u>Spencer</u>		Date/Time: <u>3/2/23</u>		Company: <u>FEDEX</u>	
Relinquished by: <u>Spencer</u>		Date/Time: <u>3/2/23</u>		Company: <u>FEDEX</u>	
Custody Seals Intact: <u>Yes</u>		Custody Seal No.: _____		Cooler Temperature(s) °C and Other Remarks:	



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-181314-1

Login Number: 181314

List Number: 2

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

List Creation: 03/07/23 12:45 PM

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



 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 3/20/2023 5:46:43 PM

JOB DESCRIPTION

Federal CCR Wells - App III

JOB NUMBER

240-181316-1

Eurofins Canton

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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



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3/20/2023 5:46:43 PM

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Designee for
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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
E	Result exceeded calibration range.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Job ID: 240-181316-1

Laboratory: Eurofins Canton

Narrative

**Job Narrative
240-181316-1**

Receipt

The samples were received on 3/3/2023 @ 2:35 PM. 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 0.4°C, 1.0°C and 2.3°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 - App III

Job ID: 240-181316-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CAN
6020B	Metals (ICP/MS)	SW846	EET CAN
2320B-1997	Alkalinity, Total	SM	EET CAN
300.0	Anions, Ion Chromatography	EPA	EET CAN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CAN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CAN

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 CAN = Eurofins Canton, 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 - App III

Job ID: 240-181316-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-181316-1	BAC-07-F-20230302-01	Water	03/02/23 11:26	03/03/23 14:35
240-181316-2	DUP-003-BAC-07-F-20230302-01	Water	03/02/23 11:26	03/03/23 14:35
240-181316-3	BAC-18-F-20230302-01	Water	03/02/23 13:33	03/03/23 14:35
240-181316-4	BAC-06-F-20230302-01	Water	03/02/23 14:16	03/03/23 14:35
240-181316-5	EB-001-F-20230302-01	Water	03/02/23 16:45	03/03/23 14:35

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Client Sample ID: BAC-07-F-20230302-01

Lab Sample ID: 240-181316-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1100		100	57	ug/L	1		6010D	Total Recoverable
Calcium	95000		1000	580	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	130		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	130		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	25		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.079		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	440		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-003-BAC-07-F-20230302-01

Lab Sample ID: 240-181316-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1100		100	57	ug/L	1		6010D	Total Recoverable
Calcium	94000		1000	580	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	130		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	130		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	25		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.083		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	450		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-18-F-20230302-01

Lab Sample ID: 240-181316-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1400		100	57	ug/L	1		6010D	Total Recoverable
Calcium	79000		1000	580	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	96		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	96		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	25		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.064		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	420		10	7.8	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Client Sample ID: BAC-06-F-20230302-01

Lab Sample ID: 240-181316-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1900		100	57	ug/L	1		6010D	Total Recoverable
Calcium	120000		1000	580	ug/L	1		6020B	Total Recoverable
Magnesium	27000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	24		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.098		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	220		2.0	0.70	mg/L	2		300.0	Total/NA
Total Dissolved Solids	560		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-001-F-20230302-01

Lab Sample ID: 240-181316-5

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Client Sample ID: BAC-07-F-20230302-01

Lab Sample ID: 240-181316-1

Date Collected: 03/02/23 11:26

Matrix: Water

Date Received: 03/03/23 14:35

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1100		100	57	ug/L		03/06/23 14:00	03/07/23 22:34	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	95000		1000	580	ug/L		03/06/23 14:00	03/07/23 20:13	1
Magnesium	22000		1000	200	ug/L		03/06/23 14:00	03/07/23 20:13	1
Potassium	1400		1000	220	ug/L		03/06/23 14:00	03/07/23 20:13	1
Sodium	16000		1000	330	ug/L		03/06/23 14:00	03/07/23 20:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	130		5.0	2.6	mg/L			03/06/23 19:49	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	130		5.0	2.6	mg/L			03/06/23 19:49	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 19:49	1
Chloride (EPA 300.0)	25		1.0	0.13	mg/L			03/16/23 00:36	1
Fluoride (EPA 300.0)	0.079		0.050	0.024	mg/L			03/16/23 00:36	1
Sulfate (EPA 300.0)	190		1.0	0.35	mg/L			03/16/23 00:36	1
Total Dissolved Solids (SM 2540C)	440		10	7.8	mg/L			03/09/23 10:39	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Client Sample ID: DUP-003-BAC-07-F-20230302-01

Lab Sample ID: 240-181316-2

Date Collected: 03/02/23 11:26

Matrix: Water

Date Received: 03/03/23 14:35

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1100		100	57	ug/L		03/06/23 14:00	03/07/23 22:46	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	94000		1000	580	ug/L		03/06/23 14:00	03/07/23 20:16	1
Magnesium	22000		1000	200	ug/L		03/06/23 14:00	03/07/23 20:16	1
Potassium	1400		1000	220	ug/L		03/06/23 14:00	03/07/23 20:16	1
Sodium	16000		1000	330	ug/L		03/06/23 14:00	03/07/23 20:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	130		5.0	2.6	mg/L			03/06/23 20:39	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	130		5.0	2.6	mg/L			03/06/23 20:39	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 20:39	1
Chloride (EPA 300.0)	25		1.0	0.13	mg/L			03/16/23 01:41	1
Fluoride (EPA 300.0)	0.083		0.050	0.024	mg/L			03/16/23 01:41	1
Sulfate (EPA 300.0)	190		1.0	0.35	mg/L			03/16/23 01:41	1
Total Dissolved Solids (SM 2540C)	450		10	7.8	mg/L			03/09/23 10:39	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Client Sample ID: BAC-18-F-20230302-01

Lab Sample ID: 240-181316-3

Date Collected: 03/02/23 13:33

Matrix: Water

Date Received: 03/03/23 14:35

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1400		100	57	ug/L		03/06/23 14:00	03/07/23 22:50	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	79000		1000	580	ug/L		03/06/23 14:00	03/07/23 20:19	1
Magnesium	21000		1000	200	ug/L		03/06/23 14:00	03/07/23 20:19	1
Potassium	1500		1000	220	ug/L		03/06/23 14:00	03/07/23 20:19	1
Sodium	15000		1000	330	ug/L		03/06/23 14:00	03/07/23 20:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	96		5.0	2.6	mg/L			03/06/23 20:43	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	96		5.0	2.6	mg/L			03/06/23 20:43	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 20:43	1
Chloride (EPA 300.0)	25		1.0	0.13	mg/L			03/16/23 02:03	1
Fluoride (EPA 300.0)	0.064		0.050	0.024	mg/L			03/16/23 02:03	1
Sulfate (EPA 300.0)	190		1.0	0.35	mg/L			03/16/23 02:03	1
Total Dissolved Solids (SM 2540C)	420		10	7.8	mg/L			03/09/23 10:39	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Client Sample ID: BAC-06-F-20230302-01

Lab Sample ID: 240-181316-4

Date Collected: 03/02/23 14:16

Matrix: Water

Date Received: 03/03/23 14:35

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1900		100	57	ug/L		03/06/23 14:00	03/07/23 22:55	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	120000		1000	580	ug/L		03/06/23 14:00	03/07/23 20:21	1
Magnesium	27000		1000	200	ug/L		03/06/23 14:00	03/07/23 20:21	1
Potassium	1500		1000	220	ug/L		03/06/23 14:00	03/07/23 20:21	1
Sodium	16000		1000	330	ug/L		03/06/23 14:00	03/07/23 20:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	190		5.0	2.6	mg/L			03/06/23 20:02	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	190		5.0	2.6	mg/L			03/06/23 20:02	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 20:02	1
Chloride (EPA 300.0)	24		1.0	0.13	mg/L			03/16/23 02:25	1
Fluoride (EPA 300.0)	0.098		0.050	0.024	mg/L			03/16/23 02:25	1
Sulfate (EPA 300.0)	220		2.0	0.70	mg/L			03/16/23 15:24	2
Total Dissolved Solids (SM 2540C)	560		10	7.8	mg/L			03/09/23 10:39	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Client Sample ID: EB-001-F-20230302-01

Lab Sample ID: 240-181316-5

Date Collected: 03/02/23 16:45

Matrix: Water

Date Received: 03/03/23 14:35

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		03/06/23 14:00	03/07/23 22:59	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	580	ug/L		03/06/23 14:00	03/07/23 20:24	1
Magnesium	ND		1000	200	ug/L		03/06/23 14:00	03/07/23 20:24	1
Potassium	ND		1000	220	ug/L		03/06/23 14:00	03/07/23 20:24	1
Sodium	ND		1000	330	ug/L		03/06/23 14:00	03/07/23 20:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 20:53	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 20:53	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 20:53	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			03/16/23 03:30	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			03/16/23 03:30	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			03/16/23 03:30	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			03/09/23 10:39	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-564412/1-A
 Matrix: Water
 Analysis Batch: 564578

Client Sample ID: Method Blank
 Prep Type: Total Recoverable
 Prep Batch: 564412

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		03/06/23 14:00	03/07/23 22:01	1

Lab Sample ID: LCS 240-564412/2-A
 Matrix: Water
 Analysis Batch: 564578

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 564412

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 240-564412/1-A
 Matrix: Water
 Analysis Batch: 564592

Client Sample ID: Method Blank
 Prep Type: Total Recoverable
 Prep Batch: 564412

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	580	ug/L		03/06/23 14:00	03/07/23 19:45	1
Magnesium	ND		1000	200	ug/L		03/06/23 14:00	03/07/23 19:45	1
Potassium	ND		1000	220	ug/L		03/06/23 14:00	03/07/23 19:45	1
Sodium	ND		1000	330	ug/L		03/06/23 14:00	03/07/23 19:45	1

Lab Sample ID: LCS 240-564412/3-A
 Matrix: Water
 Analysis Batch: 564592

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 564412

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	24200		ug/L		97	80 - 120
Magnesium	25000	25000		ug/L		100	80 - 120
Potassium	25000	24600		ug/L		98	80 - 120
Sodium	25000	24800		ug/L		99	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-564459/109
 Matrix: Water
 Analysis Batch: 564459

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			03/06/23 18:23	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 18:23	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 18:23	1

Lab Sample ID: MB 240-564459/136
 Matrix: Water
 Analysis Batch: 564459

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			03/06/23 20:12	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 20:12	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 20:12	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Method: 2320B-1997 - Alkalinity, Total (Continued)

Lab Sample ID: MB 240-564459/83
Matrix: Water
Analysis Batch: 564459

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			03/06/23 16:43	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 16:43	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 16:43	1

Lab Sample ID: LCS 240-564459/108
Matrix: Water
Analysis Batch: 564459

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	141		mg/L		97	86 - 123

Lab Sample ID: LCS 240-564459/135
Matrix: Water
Analysis Batch: 564459

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	139		mg/L		95	86 - 123

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-565543/3
Matrix: Water
Analysis Batch: 565543

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			03/15/23 14:29	1
Fluoride	ND		0.050	0.024	mg/L			03/15/23 14:29	1
Sulfate	ND		1.0	0.35	mg/L			03/15/23 14:29	1

Lab Sample ID: LCS 240-565543/4
Matrix: Water
Analysis Batch: 565543

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	2.72		mg/L		109	90 - 110
Sulfate	50.0	50.8		mg/L		102	90 - 110

Lab Sample ID: 240-181316-1 MS
Matrix: Water
Analysis Batch: 565543

Client Sample ID: BAC-07-F-20230302-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25		50.0	76.9		mg/L		104	80 - 120
Fluoride	0.079		2.50	2.94		mg/L		114	80 - 120
Sulfate	190		50.0	231	E	mg/L		91	80 - 120

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-181316-1 MSD
Matrix: Water
Analysis Batch: 565543

Client Sample ID: BAC-07-F-20230302-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	25		50.0	76.7		mg/L		103	80 - 120	0	15
Fluoride	0.079		2.50	2.92		mg/L		114	80 - 120	1	15
Sulfate	190		50.0	231	E	mg/L		91	80 - 120	0	15

Lab Sample ID: MB 240-565679/3
Matrix: Water
Analysis Batch: 565679

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			03/16/23 12:34	1
Fluoride	ND		0.050	0.024	mg/L			03/16/23 12:34	1
Sulfate	ND		1.0	0.35	mg/L			03/16/23 12:34	1

Lab Sample ID: LCS 240-565679/4
Matrix: Water
Analysis Batch: 565679

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	50.5		mg/L		101	90 - 110
Fluoride	2.50	2.64		mg/L		105	90 - 110
Sulfate	50.0	52.9		mg/L		106	90 - 110

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

Lab Sample ID: MB 240-564824/1
Matrix: Water
Analysis Batch: 564824

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			03/09/23 10:39	1

Lab Sample ID: LCS 240-564824/2
Matrix: Water
Analysis Batch: 564824

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	500	455		mg/L		91	80 - 120

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Metals

Prep Batch: 564412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181316-1	BAC-07-F-20230302-01	Total Recoverable	Water	3005A	
240-181316-2	DUP-003-BAC-07-F-20230302-01	Total Recoverable	Water	3005A	
240-181316-3	BAC-18-F-20230302-01	Total Recoverable	Water	3005A	
240-181316-4	BAC-06-F-20230302-01	Total Recoverable	Water	3005A	
240-181316-5	EB-001-F-20230302-01	Total Recoverable	Water	3005A	
MB 240-564412/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-564412/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-564412/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 564578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181316-1	BAC-07-F-20230302-01	Total Recoverable	Water	6010D	564412
240-181316-2	DUP-003-BAC-07-F-20230302-01	Total Recoverable	Water	6010D	564412
240-181316-3	BAC-18-F-20230302-01	Total Recoverable	Water	6010D	564412
240-181316-4	BAC-06-F-20230302-01	Total Recoverable	Water	6010D	564412
240-181316-5	EB-001-F-20230302-01	Total Recoverable	Water	6010D	564412
MB 240-564412/1-A	Method Blank	Total Recoverable	Water	6010D	564412
LCS 240-564412/2-A	Lab Control Sample	Total Recoverable	Water	6010D	564412

Analysis Batch: 564592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181316-1	BAC-07-F-20230302-01	Total Recoverable	Water	6020B	564412
240-181316-2	DUP-003-BAC-07-F-20230302-01	Total Recoverable	Water	6020B	564412
240-181316-3	BAC-18-F-20230302-01	Total Recoverable	Water	6020B	564412
240-181316-4	BAC-06-F-20230302-01	Total Recoverable	Water	6020B	564412
240-181316-5	EB-001-F-20230302-01	Total Recoverable	Water	6020B	564412
MB 240-564412/1-A	Method Blank	Total Recoverable	Water	6020B	564412
LCS 240-564412/3-A	Lab Control Sample	Total Recoverable	Water	6020B	564412

General Chemistry

Analysis Batch: 564459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181316-1	BAC-07-F-20230302-01	Total/NA	Water	2320B-1997	
240-181316-2	DUP-003-BAC-07-F-20230302-01	Total/NA	Water	2320B-1997	
240-181316-3	BAC-18-F-20230302-01	Total/NA	Water	2320B-1997	
240-181316-4	BAC-06-F-20230302-01	Total/NA	Water	2320B-1997	
240-181316-5	EB-001-F-20230302-01	Total/NA	Water	2320B-1997	
MB 240-564459/109	Method Blank	Total/NA	Water	2320B-1997	
MB 240-564459/136	Method Blank	Total/NA	Water	2320B-1997	
MB 240-564459/83	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-564459/108	Lab Control Sample	Total/NA	Water	2320B-1997	
LCS 240-564459/135	Lab Control Sample	Total/NA	Water	2320B-1997	

Analysis Batch: 564824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181316-1	BAC-07-F-20230302-01	Total/NA	Water	SM 2540C	
240-181316-2	DUP-003-BAC-07-F-20230302-01	Total/NA	Water	SM 2540C	
240-181316-3	BAC-18-F-20230302-01	Total/NA	Water	SM 2540C	
240-181316-4	BAC-06-F-20230302-01	Total/NA	Water	SM 2540C	
240-181316-5	EB-001-F-20230302-01	Total/NA	Water	SM 2540C	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

General Chemistry (Continued)

Analysis Batch: 564824 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-564824/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-564824/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 565543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181316-1	BAC-07-F-20230302-01	Total/NA	Water	300.0	
240-181316-2	DUP-003-BAC-07-F-20230302-01	Total/NA	Water	300.0	
240-181316-3	BAC-18-F-20230302-01	Total/NA	Water	300.0	
240-181316-4	BAC-06-F-20230302-01	Total/NA	Water	300.0	
240-181316-5	EB-001-F-20230302-01	Total/NA	Water	300.0	
MB 240-565543/3	Method Blank	Total/NA	Water	300.0	
LCS 240-565543/4	Lab Control Sample	Total/NA	Water	300.0	
240-181316-1 MS	BAC-07-F-20230302-01	Total/NA	Water	300.0	
240-181316-1 MSD	BAC-07-F-20230302-01	Total/NA	Water	300.0	

Analysis Batch: 565679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181316-4	BAC-06-F-20230302-01	Total/NA	Water	300.0	
MB 240-565679/3	Method Blank	Total/NA	Water	300.0	
LCS 240-565679/4	Lab Control Sample	Total/NA	Water	300.0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Client Sample ID: BAC-07-F-20230302-01

Lab Sample ID: 240-181316-1

Date Collected: 03/02/23 11:26

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6010D		1	564578	KLC	EET CAN	03/07/23 22:34
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6020B		1	564592	AJC	EET CAN	03/07/23 20:13
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 19:49
Total/NA	Analysis	300.0		1	565543	JMB	EET CAN	03/16/23 00:36
Total/NA	Analysis	SM 2540C		1	564824	GH	EET CAN	03/09/23 10:39

Client Sample ID: DUP-003-BAC-07-F-20230302-01

Lab Sample ID: 240-181316-2

Date Collected: 03/02/23 11:26

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6010D		1	564578	KLC	EET CAN	03/07/23 22:46
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6020B		1	564592	AJC	EET CAN	03/07/23 20:16
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 20:39
Total/NA	Analysis	300.0		1	565543	JMB	EET CAN	03/16/23 01:41
Total/NA	Analysis	SM 2540C		1	564824	GH	EET CAN	03/09/23 10:39

Client Sample ID: BAC-18-F-20230302-01

Lab Sample ID: 240-181316-3

Date Collected: 03/02/23 13:33

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6010D		1	564578	KLC	EET CAN	03/07/23 22:50
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6020B		1	564592	AJC	EET CAN	03/07/23 20:19
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 20:43
Total/NA	Analysis	300.0		1	565543	JMB	EET CAN	03/16/23 02:03
Total/NA	Analysis	SM 2540C		1	564824	GH	EET CAN	03/09/23 10:39

Client Sample ID: BAC-06-F-20230302-01

Lab Sample ID: 240-181316-4

Date Collected: 03/02/23 14:16

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6010D		1	564578	KLC	EET CAN	03/07/23 22:55
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6020B		1	564592	AJC	EET CAN	03/07/23 20:21
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 20:02

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Client Sample ID: BAC-06-F-20230302-01

Lab Sample ID: 240-181316-4

Date Collected: 03/02/23 14:16

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	565543	JMB	EET CAN	03/16/23 02:25
Total/NA	Analysis	300.0		2	565679	JMB	EET CAN	03/16/23 15:24
Total/NA	Analysis	SM 2540C		1	564824	GH	EET CAN	03/09/23 10:39

Client Sample ID: EB-001-F-20230302-01

Lab Sample ID: 240-181316-5

Date Collected: 03/02/23 16:45

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6010D		1	564578	KLC	EET CAN	03/07/23 22:59
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6020B		1	564592	AJC	EET CAN	03/07/23 20:24
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 20:53
Total/NA	Analysis	300.0		1	565543	JMB	EET CAN	03/16/23 03:30
Total/NA	Analysis	SM 2540C		1	564824	GH	EET CAN	03/09/23 10:39

Laboratory References:

EET CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396



Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23 *
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-27-23 *
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23 *
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-23 *
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.



Chain of Custody Record



Client Information Client Contact: <u>Taylor Huffman</u> Phone: <u>740-373-4308</u> PWSID: _____		Lab PM: <u>Cisneros, Roxanne</u> E-Mail: <u>roxanne.cisneros@Eurofins.com</u>		Carrier Tracking No(s): _____ State of Origin: _____ COC No: <u>240-93465-34577.1</u> Page: <u>Page 1 of 1</u> Job #: _____	
Due Date Requested: _____ TAT Requested (days): _____ Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: <u>2935505</u> WO #: _____ Project #: <u>24019633</u> SSOW#: _____		Analysis Requested Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 60108.6020 2540C_Calcd 300.0_280 2320B - Alkalinity			
City: <u>Cheshire</u> State, Zip: <u>OH, 45620</u> Phone: <u>740-925-3171(Tel)</u> Email: <u>taylor.huffman@lightstonegen.com</u> Project Name: <u>Federal CCR Wells - App III</u> Site: <u>Garvin Plant</u>		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 Other: _____ 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)			
Sample Identification Sample Date Sample Time Sample Type (G=Comp, G=grab) Matrix (W=Water, S=Soil, O=Other, A=Air) Preservation Code:		Total Number of Containers: _____ Special Instructions/Note: _____			
<u>BAC-07-F-20230302-01</u> <u>DUP-003-BAC-07-F-20230302-01</u> <u>BAC-18-F-20230302-01</u> <u>BAC-06-F-20230302-01</u> <u>BAC-EB-001-F-20230302-01</u>		3-2-23 1126 G W 3-2-23 1126 G W 3-2-23 1333 G W 3-2-23 1416 G W 3-2-23 1645 G W			
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify) _____					
Empty Kit Relinquished by: _____ Date: _____ Relinquished by: <u>Bobby Costo</u> Relinquished by: <u>Tom Edwards</u> Relinquished by: _____					
Date/Time: <u>3-3-23 / 10:30</u> Date/Time: <u>3-3-23 14:35hrs</u> Date/Time: _____		Received by: <u>Tom Edwards</u> Received by: <u>M. A. A.</u> Received by: _____		Date/Time: <u>3-3-23 10:45</u> Date/Time: <u>3/3/23 14:35</u> Date/Time: _____	
Company: <u>Lightstone Generation Gavin Power LLC</u> Address: <u>7397 OH-7</u> City: <u>Cheshire</u> State, Zip: <u>OH, 45620</u> Phone: <u>740-925-3171(Tel)</u> Email: <u>taylor.huffman@lightstonegen.com</u> Project Name: <u>Federal CCR Wells - App III</u> Site: <u>Garvin Plant</u>		Company: <u>REMPER</u> Company: <u>Auto Options</u> Company: _____		Company: <u>Auto Options</u> Company: <u>F.E.C.</u> Company: _____	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.: _____		Cooler Temperature(s) °C and Other Remarks: _____			



Eurofins - Canton Sample Receipt Form/Narrative
Barberton Facility

Login # : _____

Client Lightsone Site Name _____
 Cooler Received on 3-3-23 Opened on 3-3-23
 FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off Eurofins Courier Other _____

Cooler unpacked by:
Mandaly

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

Eurofins Cooler # 0276 Foam Box _____ Client Cooler _____ Box _____ Other _____
 Packing material used: Bubble Wrap _____ Foam _____ Plastic Bag _____ None _____ Other _____
 COOLANT: Wet Ice Blue Ice _____ Dry Ice _____ Water _____ None _____

1. Cooler temperature upon receipt See Multiple Cooler Form
 IR GUN # IR-13 (CF -0.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN # IR-16 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN # IR-17 (CF -0.3 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity _____
 -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

Tests that are not checked for pH by Receiving:
 VOAs
 Oil and Grease
 TOC

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# HC293086
 14. Were VOAs on the COC? Yes No
 15. Were air bubbles >6 mm in any VOA vials? Yes ← 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: _____

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-07-F-20230302-01	240-181316-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-003-BAC-07-F-20230302-01	240-181316-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-18-F-20230302-01	240-181316-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-06-F-20230302-01	240-181316-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230302-01	240-181316-C-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____



ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 4/4/2023 9:17:39 AM

JOB DESCRIPTION

Federal CCR Wells - App IV

JOB NUMBER

240-181320-1

Eurofins Canton

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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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4/4/2023 9:17:39 AM

Authorized for release by
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(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

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.

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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Job ID: 240-181320-1

Laboratory: Eurofins Canton

Narrative

Job Narrative 240-181320-1

Receipt

The samples were received on 3/3/2023 2:35 PM. 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 1.0°C

Metals

Method 6020B: The continuing calibration verification (CCV) associated with batch 240-564732 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: BAC-03-F-20230303-01 (240-181320-1) and EB-001-F-20230303-01 (240-181320-2).

Method 6020B: The continuing calibration verification (CCV) associated with batch 240-564732 recovered above the upper control limit for Lithium. 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: BAC-03-F-20230303-01 (240-181320-1) and EB-001-F-20230303-01 (240-181320-2).

Method 6020B: The continuing calibration verification (CCV) associated with batch 240-564732 recovered above the upper control limit for Chromium. 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: BAC-03-F-20230303-01 (240-181320-1) and EB-001-F-20230303-01 (240-181320-2).

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 prep batch 160-602832: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-03-F-20230303-01 (240-181320-1), EB-001-F-20230303-01 (240-181320-2), (LCS 160-602832/2-A), (LCSD 160-602832/25-A) and (MB 160-602832/1-A)

Method 9320_Ra228: Radium-228 batch 602838: The LCS/LCSD recovered at (143% / 130%). 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/LCSD are not from this agency and are therefore held to our in-house statistical limits of (62-148%) per method requirements. The LCS/LCSD pass, no further action is required (LCS 160-602838/2-A) and (LCSD 160-602838/25-A)

Method 9320_Ra228: Radium-228 batch 602838: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-03-F-20230303-01 (240-181320-1), EB-001-F-20230303-01 (240-181320-2), (LCS 160-602838/2-A), (LCSD 160-602838/25-A) and (MB 160-602838/1-A)

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 - App IV

Job ID: 240-181320-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CAN
7470A	Mercury (CVAA)	SW846	EET CAN
2320B-1997	Alkalinity, Total	SM	EET CAN
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CAN
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 CAN
7470A	Preparation, Mercury	SW846	EET CAN
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 CAN = Eurofins Canton, 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 - App IV

Job ID: 240-181320-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-181320-1	BAC-03-F-20230303-01	Water	03/03/23 09:47	03/03/23 14:35
240-181320-2	EB-001-F-20230303-01	Water	03/03/23 10:15	03/03/23 14:35

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Client Sample ID: BAC-03-F-20230303-01

Lab Sample ID: 240-181320-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.1	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	52		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.6		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	3.7		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.4	J ^+	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	16000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	2000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	30000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	82		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	82		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.062		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: EB-001-F-20230303-01

Lab Sample ID: 240-181320-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	1.8	J	8.0	1.7	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Client Sample ID: BAC-03-F-20230303-01

Lab Sample ID: 240-181320-1

Date Collected: 03/03/23 09:47

Matrix: Water

Date Received: 03/03/23 14:35

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		03/05/23 14:00	03/08/23 18:08	1
Arsenic	1.1	J	5.0	0.75	ug/L		03/05/23 14:00	03/08/23 18:08	1
Barium	52		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 18:08	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 18:08	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 18:08	1
Chromium	ND	^+	5.0	2.5	ug/L		03/05/23 14:00	03/08/23 18:08	1
Cobalt	1.6		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 18:08	1
Lead	3.7		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 18:08	1
Lithium	6.4	J ^+	8.0	1.7	ug/L		03/05/23 14:00	03/08/23 18:08	1
Magnesium	16000		1000	200	ug/L		03/05/23 14:00	03/08/23 18:08	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 18:08	1
Potassium	2000		1000	220	ug/L		03/05/23 14:00	03/08/23 18:08	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 18:08	1
Sodium	30000		1000	330	ug/L		03/05/23 14:00	03/08/23 18:08	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 18:08	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		03/06/23 10:00	03/07/23 20:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	82		5.0	2.6	mg/L			03/06/23 20:57	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	82		5.0	2.6	mg/L			03/06/23 20:57	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 20:57	1
Fluoride (EPA 300.0-1993 R2.1)	0.062		0.050	0.024	mg/L			03/28/23 12:16	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	0.197		0.126	0.127	1.00	0.166	pCi/L	03/08/23 12:16	04/03/23 15:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	63.3		30 - 110					03/08/23 12:16	04/03/23 15:06	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	0.758	U	0.619	0.623	1.00	0.960	pCi/L	03/08/23 13:13	03/23/23 12:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	63.3		30 - 110					03/08/23 13:13	03/23/23 12:00	1
Y Carrier	81.9		30 - 110					03/08/23 13:13	03/23/23 12:00	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Client Sample ID: BAC-03-F-20230303-01

Lab Sample ID: 240-181320-1

Date Collected: 03/03/23 09:47

Matrix: Water

Date Received: 03/03/23 14:35

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	0.954	U	0.632	0.636	5.00	0.960	pCi/L		04/03/23 17:14	1

- 1
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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Client Sample ID: EB-001-F-20230303-01

Lab Sample ID: 240-181320-2

Date Collected: 03/03/23 10:15

Matrix: Water

Date Received: 03/03/23 14:35

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		03/05/23 14:00	03/08/23 18:21	1
Arsenic	ND		5.0	0.75	ug/L		03/05/23 14:00	03/08/23 18:21	1
Barium	ND		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 18:21	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 18:21	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 18:21	1
Chromium	ND	^+	5.0	2.5	ug/L		03/05/23 14:00	03/08/23 18:21	1
Cobalt	ND		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 18:21	1
Lead	ND		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 18:21	1
Lithium	1.8	J	8.0	1.7	ug/L		03/05/23 14:00	03/08/23 18:21	1
Magnesium	ND		1000	200	ug/L		03/05/23 14:00	03/08/23 18:21	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 18:21	1
Potassium	ND		1000	220	ug/L		03/05/23 14:00	03/08/23 18:21	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 18:21	1
Sodium	ND		1000	330	ug/L		03/05/23 14:00	03/08/23 18:21	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 18:21	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		03/06/23 10:00	03/07/23 20:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 21:00	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 21:00	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 21:00	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			03/28/23 12:36	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0269	U	0.0447	0.0448	1.00	0.0794	pCi/L	03/08/23 12:16	04/03/23 15:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.4		30 - 110					03/08/23 12:16	04/03/23 15:06	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	1.11		0.486	0.497	1.00	0.662	pCi/L	03/08/23 13:13	03/23/23 12:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.4		30 - 110					03/08/23 13:13	03/23/23 12:00	1
Y Carrier	81.5		30 - 110					03/08/23 13:13	03/23/23 12:00	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Client Sample ID: EB-001-F-20230303-01

Lab Sample ID: 240-181320-2

Date Collected: 03/03/23 10:15

Matrix: Water

Date Received: 03/03/23 14:35

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		0.488	0.499	5.00	0.662	pCi/L		04/03/23 17:14	1

- 1
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- 14
- 15

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
240-181320-1	BAC-03-F-20230303-01	63.3	
240-181320-2	EB-001-F-20230303-01	81.4	
LCS 160-602832/2-A	Lab Control Sample	92.4	
LCSD 160-602832/25-A	Lab Control Sample Dup	93.8	
MB 160-602832/1-A	Method Blank	97.2	
Tracer/Carrier Legend			
Ba = Ba Carrier			

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-181320-1	BAC-03-F-20230303-01	63.3	81.9
240-181320-2	EB-001-F-20230303-01	81.4	81.5
LCS 160-602838/2-A	Lab Control Sample	92.4	82.6
LCSD 160-602838/25-A	Lab Control Sample Dup	93.8	80.7
MB 160-602838/1-A	Method Blank	97.2	83.0
Tracer/Carrier Legend			
Ba = Ba Carrier			
Y = Y Carrier			

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-564268/1-A
Matrix: Water
Analysis Batch: 564732

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 564268

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/05/23 14:00	03/08/23 16:39	1
Arsenic	ND		5.0	0.75	ug/L		03/05/23 14:00	03/08/23 16:39	1
Barium	ND		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 16:39	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 16:39	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 16:39	1
Chromium	ND		5.0	2.5	ug/L		03/05/23 14:00	03/08/23 16:39	1
Cobalt	ND		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 16:39	1
Lead	ND		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 16:39	1
Lithium	ND	^+	8.0	1.7	ug/L		03/05/23 14:00	03/08/23 16:39	1
Magnesium	ND		1000	200	ug/L		03/05/23 14:00	03/08/23 16:39	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 16:39	1
Potassium	ND		1000	220	ug/L		03/05/23 14:00	03/08/23 16:39	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 16:39	1
Sodium	ND		1000	330	ug/L		03/05/23 14:00	03/08/23 16:39	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 16:39	1

Lab Sample ID: LCS 240-564268/2-A
Matrix: Water
Analysis Batch: 564732

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 564268

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	101		ug/L		101	80 - 120
Arsenic	1000	908		ug/L		91	80 - 120
Barium	1000	962		ug/L		96	80 - 120
Beryllium	500	485	^+	ug/L		97	80 - 120
Cadmium	500	480		ug/L		96	80 - 120
Chromium	500	514		ug/L		103	80 - 120
Cobalt	500	462		ug/L		92	80 - 120
Lead	500	501		ug/L		100	80 - 120
Lithium	500	476	^+	ug/L		95	80 - 120
Magnesium	25000	24900		ug/L		99	80 - 120
Molybdenum	500	467		ug/L		93	80 - 120
Potassium	25000	24000		ug/L		96	80 - 120
Selenium	1000	915		ug/L		91	80 - 120
Sodium	25000	24900		ug/L		100	80 - 120
Thallium	1000	968		ug/L		97	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-564269/1-A
Matrix: Water
Analysis Batch: 564598

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 564269

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/06/23 10:00	03/07/23 19:58	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-564269/2-A
 Matrix: Water
 Analysis Batch: 564598

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 564269

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.19		ug/L		104	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-564459/109
 Matrix: Water
 Analysis Batch: 564459

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			03/06/23 18:23	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 18:23	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 18:23	1

Lab Sample ID: MB 240-564459/136
 Matrix: Water
 Analysis Batch: 564459

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			03/06/23 20:12	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 20:12	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 20:12	1

Lab Sample ID: LCS 240-564459/135
 Matrix: Water
 Analysis Batch: 564459

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	139		mg/L		95	86 - 123

Lab Sample ID: 240-181320-2 DU
 Matrix: Water
 Analysis Batch: 564459

Client Sample ID: EB-001-F-20230303-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Alkalinity	ND		ND		mg/L		NC	20
Bicarbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-566932/3
 Matrix: Water
 Analysis Batch: 566932

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			03/28/23 02:32	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 240-566932/4
 Matrix: Water
 Analysis Batch: 566932

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.58		mg/L		103	90 - 110

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-602832/1-A
 Matrix: Water
 Analysis Batch: 605833

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 602832

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.006515	U	0.0337	0.0337	1.00	0.0790	pCi/L	03/08/23 12:16	04/03/23 15:02	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.2		30 - 110					03/08/23 12:16	04/03/23 15:02	1

Lab Sample ID: LCS 160-602832/2-A
 Matrix: Water
 Analysis Batch: 605833

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 602832

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	11.3	11.49		1.18	1.00	0.124	pCi/L	101	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	92.4		30 - 110						

Lab Sample ID: LCSD 160-602832/25-A
 Matrix: Water
 Analysis Batch: 605835

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 602832

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-226	11.3	11.17		1.15	1.00	0.0864	pCi/L	99	75 - 125	0.14	1
Carrier	LCSD %Yield	LCSD Qualifier	Limits								
Ba Carrier	93.8		30 - 110								

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-602838/1-A
 Matrix: Water
 Analysis Batch: 604790

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 602838

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.6552		0.342	0.347	1.00	0.477	pCi/L	03/08/23 13:13	03/23/23 11:56	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

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

Lab Sample ID: MB 160-602838/1-A
Matrix: Water
Analysis Batch: 604790

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602838

Carrier	MB MB		Limits
	%Yield	Qualifier	
Ba Carrier	97.2		30 - 110
Y Carrier	83.0		30 - 110

Prepared	Analyzed	Dil Fac
03/08/23 13:13	03/23/23 11:56	1
03/08/23 13:13	03/23/23 11:56	1

Lab Sample ID: LCS 160-602838/2-A
Matrix: Water
Analysis Batch: 604790

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602838

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	
Radium-228	8.09	11.54		1.47	1.00	0.464	pCi/L	143	75 - 125	

Carrier	LCS LCS		Limits
	%Yield	Qualifier	
Ba Carrier	92.4		30 - 110
Y Carrier	82.6		30 - 110

Lab Sample ID: LCSD 160-602838/25-A
Matrix: Water
Analysis Batch: 604790

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 602838

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		RER	RER Limit
Radium-228	8.09	10.51		1.39	1.00	0.494	pCi/L	130	75 - 125	0.36	1	

Carrier	LCSD LCSD		Limits
	%Yield	Qualifier	
Ba Carrier	93.8		30 - 110
Y Carrier	80.7		30 - 110

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Metals

Prep Batch: 564268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181320-1	BAC-03-F-20230303-01	Total Recoverable	Water	3005A	
240-181320-2	EB-001-F-20230303-01	Total Recoverable	Water	3005A	
MB 240-564268/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-564268/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 564269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181320-1	BAC-03-F-20230303-01	Total/NA	Water	7470A	
240-181320-2	EB-001-F-20230303-01	Total/NA	Water	7470A	
MB 240-564269/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-564269/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 564598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181320-1	BAC-03-F-20230303-01	Total/NA	Water	7470A	564269
240-181320-2	EB-001-F-20230303-01	Total/NA	Water	7470A	564269
MB 240-564269/1-A	Method Blank	Total/NA	Water	7470A	564269
LCS 240-564269/2-A	Lab Control Sample	Total/NA	Water	7470A	564269

Analysis Batch: 564732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181320-1	BAC-03-F-20230303-01	Total Recoverable	Water	6020B	564268
240-181320-2	EB-001-F-20230303-01	Total Recoverable	Water	6020B	564268
MB 240-564268/1-A	Method Blank	Total Recoverable	Water	6020B	564268
LCS 240-564268/2-A	Lab Control Sample	Total Recoverable	Water	6020B	564268

General Chemistry

Analysis Batch: 564459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181320-1	BAC-03-F-20230303-01	Total/NA	Water	2320B-1997	
240-181320-2	EB-001-F-20230303-01	Total/NA	Water	2320B-1997	
MB 240-564459/109	Method Blank	Total/NA	Water	2320B-1997	
MB 240-564459/136	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-564459/135	Lab Control Sample	Total/NA	Water	2320B-1997	
240-181320-2 DU	EB-001-F-20230303-01	Total/NA	Water	2320B-1997	

Analysis Batch: 566932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181320-1	BAC-03-F-20230303-01	Total/NA	Water	300.0-1993 R2.1	
240-181320-2	EB-001-F-20230303-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-566932/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-566932/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

Rad

Prep Batch: 602832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181320-1	BAC-03-F-20230303-01	Total/NA	Water	PrecSep-21	
240-181320-2	EB-001-F-20230303-01	Total/NA	Water	PrecSep-21	
MB 160-602832/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-602832/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Rad (Continued)

Prep Batch: 602832 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 160-602832/25-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 602838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181320-1	BAC-03-F-20230303-01	Total/NA	Water	PrecSep_0	
240-181320-2	EB-001-F-20230303-01	Total/NA	Water	PrecSep_0	
MB 160-602838/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-602838/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-602838/25-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Client Sample ID: BAC-03-F-20230303-01

Lab Sample ID: 240-181320-1

Date Collected: 03/03/23 09:47

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 18:08
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:37
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 20:57
Total/NA	Analysis	300.0-1993 R2.1		1	566932	JWW	EET CAN	03/28/23 12:16
Total/NA	Prep	PrecSep-21			602832	DJP	EET SL	03/08/23 12:16
Total/NA	Analysis	9315		1	605833	EMH	EET SL	04/03/23 15:06
Total/NA	Prep	PrecSep_0			602838	DJP	EET SL	03/08/23 13:13
Total/NA	Analysis	9320		1	604790	FLC	EET SL	03/23/23 12:00
Total/NA	Analysis	Ra226_Ra228		1	605951	SCB	EET SL	04/03/23 17:14

Client Sample ID: EB-001-F-20230303-01

Lab Sample ID: 240-181320-2

Date Collected: 03/03/23 10:15

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 18:21
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:39
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 21:00
Total/NA	Analysis	300.0-1993 R2.1		1	566932	JWW	EET CAN	03/28/23 12:36
Total/NA	Prep	PrecSep-21			602832	DJP	EET SL	03/08/23 12:16
Total/NA	Analysis	9315		1	605833	EMH	EET SL	04/03/23 15:06
Total/NA	Prep	PrecSep_0			602838	DJP	EET SL	03/08/23 13:13
Total/NA	Analysis	9320		1	604790	FLC	EET SL	03/23/23 12:00
Total/NA	Analysis	Ra226_Ra228		1	605951	SCB	EET SL	04/03/23 17:14

Laboratory References:

EET CAN = Eurofins Canton, 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
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23 *
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-28-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23 *
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-23 *
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	03-29-23
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-23
Florida	NELAP	E87689	06-30-23
HI - RadChem Recognition	State	n/a	06-30-23
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana (All)	NELAP	04080	06-30-23
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-23
MI - RadChem Recognition	State	9005	06-30-23
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-23
New Jersey	NELAP	MO002	06-30-23
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-23
North Dakota	State	R-207	06-30-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Canton

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

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
Oklahoma	NELAP	9997	08-31-23
Oregon	NELAP	4157	09-01-23
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23
Texas	NELAP	T104704193	07-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00028	06-11-23
Utah	NELAP	MO000542021-14	07-31-23
Virginia	NELAP	10310	06-14-24
Washington	State	C592	08-30-23
West Virginia DEP	State	381	10-31-23

Chain of Custody Record



Client Information Client Contact: Bobby Castro Taylor Huffman Phone: 740-373-4308 E-Mail: roxanne.cisneros@Eurofins.com Job #: 240-93466-34578.1		Lab PM: Cisneros, Roxanne State of Origin:		Carrier Tracking No(s): Page: 1 of 1 Job #:		COC No: 240-93466-34578.1	
Address: Lightstone Generation Gavin Power LLC 7397 OH-7 City: Cheshire State, Zip: OH, 45620 Phone: 740-925-3171(Tel) Email: taylor.huffman@lightstonegen.com Project Name: Federal CCR Wells - App IV Site:		Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PO #: 2935505 WO #: Project #: 24019633 SSOW#:		Analysis Requested 9315_Ra226, 9320_Ra228, Ra226Ra228_GFPc 300.0_28D - Fluoride 6020_7470A Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Total Number of Containers:		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 Other: M - Hexane N - None O - AsHClO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Sample Identification BAC-03-F-20230303-01 EB-001-F-20230303-01		Sample Date 3-3-23 0947 3-3-23 1615	Sample Time 0947 1615	Sample Type (C=Comp, G=grab) G G	Matrix (Water, Soil, Other) Water Water Water Water Water	Preservation Code: D N I Z N I Z	Special Instructions/Note: 240-181320 Chain of Custody
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Special Instructions/QC Requirements:		Method of Shipment:	
Relinquished by: Bobby Castro Relinquished by: Tom Edwards Relinquished by:		Date/Time: 3-3-23 10:30 Date/Time: 3-3-23 14:35 hrs Date/Time:		Received by: Tom Edwards Received by: M. A. A. Received by:		Company: Auto Options Company: Auto Options Company:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Ver: 01/16/2019	



Eurofins - Canton Sample Receipt Form/Narrative Login # : _____
Barberton Facility

Client Lighthouse Gavin Site Name _____ Cooler unpacked by: Mandy
Cooler Received on 3-3-23 Opened on 3-3-23
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off Eurofins Courier Other _____

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


Eurofins Cooler # 221 Foam Box _____ Client Cooler Box Other _____
Packing material used: Bubble Wrap _____ Foam Plastic Bag None _____ Other _____
COOLANT: Wet Ice Blue Ice _____ Dry Ice _____ Water _____ None _____

1. Cooler temperature upon receipt See Multiple Cooler Form
IR GUN # IR-13 (CF -0.2 °C) Observed Cooler Temp. 1.2 °C Corrected Cooler Temp. 1.0 °C
IR GUN # IR-16 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
IR GUN # IR-17 (CF -0.3 °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 NA
-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# HC293086
14. Were VOAs on the COC? Yes No NA
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 NA
17. Was a LL Hg or Me Hg trip blank present? Yes No

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

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

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: _____

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-03-F-20230303-01	240-181320-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-03-F-20230303-01	240-181320-D-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-03-F-20230303-01	240-181320-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230303-01	240-181320-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230303-01	240-181320-D-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230303-01	240-181320-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

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Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Carrier Tracking No(s):	COC No:
Shipping/Receiving		Phone:	Cisneros, Roxanne	State of Origin:	240-164631.1
Company: TestAmerica Laboratories, Inc.		E-Mail: roxanne.cisneros@et.eurofins.com		Page:	Page 1 of 1
Address: 13715 Rider Trail North,		Accreditations Required (See note):		Job #:	240-181320-1
City: Earth City	Due Date Requested: 3/16/2023	Analysis Requested			
State, Zip: MO, 63045	TAT Requested (days):	Total Number of Containers			
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:	Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/>			
Email:	WO #:	Perform MSMSD (Yes or No) <input checked="" type="checkbox"/>			
Project Name: Federal GWM Wells	Project #: 24019633	9315_Ra226/PreSep_21 Radium-226 (GFC) <input checked="" type="checkbox"/>			
Site:	SSOW#:	9320_Ra226/PreSep_0 Radium-226 (GFC) <input checked="" type="checkbox"/>			
		Radium-228 <input checked="" type="checkbox"/>			
		Special Instructions/Note:			
		Recount of TAR after 21 day ingrowth if > action limit: save planchet			
		Recount of TAR after 21 day ingrowth if > action limit: save planchet			

Sample Identification - Client ID (Lab ID)

Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastefoil, B=tissue, A=air)	Preservation Code:
BAC-03-F-20230303-01 (240-181320-1)	3/3/23	09:47 Eastern	G=grab	Water	X
EB-001-F-20230303-01 (240-181320-2)	3/3/23	10:15 Eastern	G=grab	Water	X

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/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
 Deliverable Requested: I, II, III, IV, Other (specify) _____
 Primary Deliverable Rank: 2

Empty Kit Relinquished by: _____ Date: _____
 Relinquished by: *Roxanne Cisneros* Date: 3/6/23 8:36
 Relinquished by: _____ Date: _____
 Relinquished by: _____ Date: _____

Received by: *Roxanne Cisneros* Date/Time: 3/7/23 09:20
 Company: *EATL*

Received by: _____ Date/Time: _____
 Company: _____

Cooler Temperature(s) °C and Other Remarks: _____

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Special Instructions/QC Requirements: _____



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-181320-1

Login Number: 181320

List Number: 2

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

List Creation: 03/07/23 12:14 PM

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



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ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 5/16/2023 12:45:09 PM

JOB DESCRIPTION

Federal CCR Wells - App IV

JOB NUMBER

240-183294-1

Eurofins Cleveland

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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 5/16/2023 12:45:09 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

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
*+	LCS and/or LCSD is outside acceptance limits, high biased.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
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.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Job ID: 240-183294-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-183294-1

Receipt

The samples were received on 4/11/2023 4:49 PM. 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 0.4°C, 0.7°C, 0.8°C, 2.3°C, 3.7°C and 23.8°C

Metals

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

General Chemistry

Method 2320B: Reanalysis of the following sample(s) was performed outside of the analytical holding time due to failure of quality control parameters in the initial analysis. BAC-21-F-20230410-01 (240-183294-1), BAC-22-F-20230410-01 (240-183294-2) and EB-001-F-20230410-01 (240-183294-3)

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 608190: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-21-F-20230410-01 (240-183294-1), BAC-21-F-20230410-01 (240-183294-1[MSJ]), BAC-21-F-20230410-01 (240-183294-1[MSD]), BAC-22-F-20230410-01 (240-183294-2), EB-001-F-20230410-01 (240-183294-3), (LCS 160-608190/2-A) and (MB 160-608190/1-A)

Method 9320_Ra228: Radium-228 batch 608193: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-21-F-20230410-01 (240-183294-1), BAC-21-F-20230410-01 (240-183294-1[MSJ]), BAC-21-F-20230410-01 (240-183294-1[MSD]), BAC-22-F-20230410-01 (240-183294-2), EB-001-F-20230410-01 (240-183294-3), (LCS 160-608193/2-A) and (MB 160-608193/1-A)

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 - App IV

Job ID: 240-183294-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0-1993 R2.1	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 - App IV

Job ID: 240-183294-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-183294-1	BAC-21-F-20230410-01	Water	04/10/23 12:49	04/11/23 16:49
240-183294-2	BAC-22-F-20230410-01	Water	04/10/23 14:40	04/11/23 16:49
240-183294-3	EB-001-F-20230410-01	Water	04/10/23 15:15	04/11/23 16:49

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Client Sample ID: BAC-21-F-20230410-01

Lab Sample ID: 240-183294-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.1	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	150		5.0	2.2	ug/L	1		6020B	Total Recoverable
Beryllium	0.67	J	1.0	0.62	ug/L	1		6020B	Total Recoverable
Cobalt	0.76	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.70	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.0	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	14000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.5	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2000		1000	220	ug/L	1		6020B	Total Recoverable
Selenium	1.0	J	5.0	0.89	ug/L	1		6020B	Total Recoverable
Sodium	25000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.48	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	280	*+	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Total Alkalinity	250	*+	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	280		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.11		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Total Alkalinity - RA	250	H	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3 - RA	250	H	5.0	2.6	mg/L	1		2320B-1997	Total/NA

Client Sample ID: BAC-22-F-20230410-01

Lab Sample ID: 240-183294-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.7	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	130		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.59	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.50	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	5.3	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	18000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	20000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220	*+	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.083		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Total Alkalinity - RA	230	H	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3 - RA	230	H	5.0	2.6	mg/L	1		2320B-1997	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 - App IV

Job ID: 240-183294-1

Client Sample ID: EB-001-F-20230410-01

Lab Sample ID: 240-183294-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity	2.8	J*+	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	2.8	J	5.0	2.6	mg/L	1		2320B-1997	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland



Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Client Sample ID: BAC-21-F-20230410-01

Lab Sample ID: 240-183294-1

Date Collected: 04/10/23 12:49

Matrix: Water

Date Received: 04/11/23 16:49

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		04/12/23 14:00	04/13/23 12:21	1
Arsenic	3.1	J	5.0	0.75	ug/L		04/12/23 14:00	04/13/23 12:21	1
Barium	150		5.0	2.2	ug/L		04/12/23 14:00	04/13/23 12:21	1
Beryllium	0.67	J	1.0	0.62	ug/L		04/12/23 14:00	04/13/23 12:21	1
Cadmium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 12:21	1
Chromium	ND		5.0	1.2	ug/L		04/12/23 14:00	04/13/23 12:21	1
Cobalt	0.76	J	1.0	0.19	ug/L		04/12/23 14:00	04/13/23 12:21	1
Lead	0.70	J	1.0	0.45	ug/L		04/12/23 14:00	04/13/23 12:21	1
Lithium	6.0	J	8.0	1.7	ug/L		04/12/23 14:00	04/13/23 12:21	1
Magnesium	14000		1000	61	ug/L		04/12/23 14:00	04/13/23 12:21	1
Molybdenum	1.5	J	5.0	1.1	ug/L		04/12/23 14:00	04/13/23 12:21	1
Potassium	2000		1000	220	ug/L		04/12/23 14:00	04/13/23 12:21	1
Selenium	1.0	J	5.0	0.89	ug/L		04/12/23 14:00	04/13/23 12:21	1
Sodium	25000		1000	330	ug/L		04/12/23 14:00	04/13/23 12:21	1
Thallium	0.48	J	1.0	0.20	ug/L		04/12/23 14:00	04/13/23 12:21	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		04/12/23 14:00	04/12/23 18:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	280	*+	5.0	2.6	mg/L			04/24/23 11:16	1
Total Alkalinity (SM 2320B-1997)	250	*+	5.0	2.6	mg/L			04/24/23 11:42	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	280		5.0	2.6	mg/L			04/24/23 11:16	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 11:16	1
Fluoride (EPA 300.0-1993 R2.1)	0.11		0.050	0.024	mg/L			05/08/23 14:49	1

General Chemistry - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	250	H	5.0	2.6	mg/L			04/25/23 14:10	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	250	H	5.0	2.6	mg/L			04/25/23 14:10	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND	H	5.0	2.6	mg/L			04/25/23 14:10	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.239		0.129	0.131	1.00	0.155	pCi/L	04/20/23 09:47	05/15/23 10:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.5		30 - 110					04/20/23 09:47	05/15/23 10:08	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.100	U	0.320	0.320	1.00	0.570	pCi/L	04/20/23 10:16	05/12/23 14:33	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Client Sample ID: BAC-21-F-20230410-01

Lab Sample ID: 240-183294-1

Date Collected: 04/10/23 12:49

Matrix: Water

Date Received: 04/11/23 16:49

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	86.5		30 - 110	04/20/23 10:16	05/12/23 14:33	1
Y Carrier	83.0		30 - 110	04/20/23 10:16	05/12/23 14:33	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.340	U	0.345	0.346	5.00	0.570	pCi/L		05/16/23 09:58	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Client Sample ID: BAC-22-F-20230410-01

Lab Sample ID: 240-183294-2

Date Collected: 04/10/23 14:40

Matrix: Water

Date Received: 04/11/23 16:49

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		04/12/23 14:00	04/13/23 13:36	1
Arsenic	1.7	J	5.0	0.75	ug/L		04/12/23 14:00	04/13/23 13:36	1
Barium	130		5.0	2.2	ug/L		04/12/23 14:00	04/13/23 13:36	1
Beryllium	ND		1.0	0.62	ug/L		04/12/23 14:00	04/13/23 13:36	1
Cadmium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 13:36	1
Chromium	ND		5.0	1.2	ug/L		04/12/23 14:00	04/13/23 13:36	1
Cobalt	0.59	J	1.0	0.19	ug/L		04/12/23 14:00	04/13/23 13:36	1
Lead	0.50	J	1.0	0.45	ug/L		04/12/23 14:00	04/13/23 13:36	1
Lithium	5.3	J	8.0	1.7	ug/L		04/12/23 14:00	04/13/23 13:36	1
Magnesium	18000		1000	61	ug/L		04/12/23 14:00	04/13/23 13:36	1
Molybdenum	ND		5.0	1.1	ug/L		04/12/23 14:00	04/13/23 13:36	1
Potassium	2600		1000	220	ug/L		04/12/23 14:00	04/13/23 13:36	1
Selenium	ND		5.0	0.89	ug/L		04/12/23 14:00	04/13/23 13:36	1
Sodium	20000		1000	330	ug/L		04/12/23 14:00	04/13/23 13:36	1
Thallium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 13:36	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		04/12/23 14:00	04/12/23 19:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220	*+	5.0	2.6	mg/L			04/24/23 11:57	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			04/24/23 11:57	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 11:57	1
Fluoride (EPA 300.0-1993 R2.1)	0.083		0.050	0.024	mg/L			05/08/23 15:49	1

General Chemistry - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230	H	5.0	2.6	mg/L			04/25/23 14:19	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230	H	5.0	2.6	mg/L			04/25/23 14:19	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND	H	5.0	2.6	mg/L			04/25/23 14:19	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.236		0.129	0.131	1.00	0.160	pCi/L	04/20/23 09:47	05/15/23 10:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.2		30 - 110					04/20/23 09:47	05/15/23 10:09	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.432	U	0.331	0.334	1.00	0.509	pCi/L	04/20/23 10:16	05/12/23 14:33	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Client Sample ID: BAC-22-F-20230410-01

Lab Sample ID: 240-183294-2

Date Collected: 04/10/23 14:40

Matrix: Water

Date Received: 04/11/23 16:49

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	90.2		30 - 110	04/20/23 10:16	05/12/23 14:33	1
Y Carrier	86.7		30 - 110	04/20/23 10:16	05/12/23 14:33	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.668		0.355	0.359	5.00	0.509	pCi/L		05/16/23 09:58	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Client Sample ID: EB-001-F-20230410-01

Lab Sample ID: 240-183294-3

Date Collected: 04/10/23 15:15

Matrix: Water

Date Received: 04/11/23 16:49

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		04/12/23 14:00	04/13/23 13:39	1
Arsenic	ND		5.0	0.75	ug/L		04/12/23 14:00	04/13/23 13:39	1
Barium	ND		5.0	2.2	ug/L		04/12/23 14:00	04/13/23 13:39	1
Beryllium	ND		1.0	0.62	ug/L		04/12/23 14:00	04/13/23 13:39	1
Cadmium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 13:39	1
Chromium	ND		5.0	1.2	ug/L		04/12/23 14:00	04/13/23 13:39	1
Cobalt	ND		1.0	0.19	ug/L		04/12/23 14:00	04/13/23 13:39	1
Lead	ND		1.0	0.45	ug/L		04/12/23 14:00	04/13/23 13:39	1
Lithium	ND		8.0	1.7	ug/L		04/12/23 14:00	04/13/23 13:39	1
Magnesium	ND		1000	61	ug/L		04/12/23 14:00	04/13/23 13:39	1
Molybdenum	ND		5.0	1.1	ug/L		04/12/23 14:00	04/13/23 13:39	1
Potassium	ND		1000	220	ug/L		04/12/23 14:00	04/13/23 13:39	1
Selenium	ND		5.0	0.89	ug/L		04/12/23 14:00	04/13/23 13:39	1
Sodium	ND		1000	330	ug/L		04/12/23 14:00	04/13/23 13:39	1
Thallium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 13:39	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		04/12/23 14:00	04/12/23 19:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	2.8	J**	5.0	2.6	mg/L			04/24/23 11:52	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	2.8	J	5.0	2.6	mg/L			04/24/23 11:52	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 11:52	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			05/08/23 16:09	1

General Chemistry - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND	H	5.0	2.6	mg/L			04/25/23 14:23	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND	H	5.0	2.6	mg/L			04/25/23 14:23	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND	H	5.0	2.6	mg/L			04/25/23 14:23	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
Radium-226	0.0625	U	(2σ+/-) 0.0892	(2σ+/-) 0.0893	1.00	0.152	pCi/L	04/20/23 09:47	05/15/23 10:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.9		30 - 110					04/20/23 09:47	05/15/23 10:09	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
Radium-228	0.149	U	(2σ+/-) 0.287	(2σ+/-) 0.287	1.00	0.497	pCi/L	04/20/23 10:16	05/12/23 14:33	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Client Sample ID: EB-001-F-20230410-01

Lab Sample ID: 240-183294-3

Date Collected: 04/10/23 15:15

Matrix: Water

Date Received: 04/11/23 16:49

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	89.9		30 - 110	04/20/23 10:16	05/12/23 14:33	1
Y Carrier	89.0		30 - 110	04/20/23 10:16	05/12/23 14:33	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.211	U	0.301	0.301	5.00	0.497	pCi/L		05/16/23 09:58	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)
240-183294-1	BAC-21-F-20230410-01	86.5
240-183294-1 MS	BAC-21-F-20230410-01	89.4
240-183294-1 MSD	BAC-21-F-20230410-01	72.5
240-183294-2	BAC-22-F-20230410-01	90.2
240-183294-3	EB-001-F-20230410-01	89.9
LCS 160-608190/2-A	Lab Control Sample	98.0
MB 160-608190/1-A	Method Blank	88.5

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-183294-1	BAC-21-F-20230410-01	86.5	83.0
240-183294-1 MS	BAC-21-F-20230410-01	89.4	84.5
240-183294-1 MSD	BAC-21-F-20230410-01	72.5	83.7
240-183294-2	BAC-22-F-20230410-01	90.2	86.7
240-183294-3	EB-001-F-20230410-01	89.9	89.0
LCS 160-608193/2-A	Lab Control Sample	98.0	86.0
MB 160-608193/1-A	Method Blank	88.5	89.3

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-569069/1-A
Matrix: Water
Analysis Batch: 569329

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 569069

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		04/12/23 14:00	04/13/23 12:07	1
Arsenic	ND		5.0	0.75	ug/L		04/12/23 14:00	04/13/23 12:07	1
Barium	ND		5.0	2.2	ug/L		04/12/23 14:00	04/13/23 12:07	1
Beryllium	ND		1.0	0.62	ug/L		04/12/23 14:00	04/13/23 12:07	1
Cadmium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 12:07	1
Chromium	ND		5.0	1.2	ug/L		04/12/23 14:00	04/13/23 12:07	1
Cobalt	ND		1.0	0.19	ug/L		04/12/23 14:00	04/13/23 12:07	1
Lead	ND		1.0	0.45	ug/L		04/12/23 14:00	04/13/23 12:07	1
Lithium	ND		8.0	1.7	ug/L		04/12/23 14:00	04/13/23 12:07	1
Magnesium	ND		1000	61	ug/L		04/12/23 14:00	04/13/23 12:07	1
Molybdenum	ND		5.0	1.1	ug/L		04/12/23 14:00	04/13/23 12:07	1
Potassium	ND		1000	220	ug/L		04/12/23 14:00	04/13/23 12:07	1
Selenium	ND		5.0	0.89	ug/L		04/12/23 14:00	04/13/23 12:07	1
Sodium	ND		1000	330	ug/L		04/12/23 14:00	04/13/23 12:07	1
Thallium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 12:07	1

Lab Sample ID: LCS 240-569069/2-A
Matrix: Water
Analysis Batch: 569329

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 569069

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	97.8		ug/L		98	80 - 120
Arsenic	1000	913		ug/L		91	80 - 120
Barium	1000	910		ug/L		91	80 - 120
Beryllium	500	476		ug/L		95	80 - 120
Cadmium	500	464		ug/L		93	80 - 120
Chromium	500	470		ug/L		94	80 - 120
Cobalt	500	462		ug/L		92	80 - 120
Lead	500	470		ug/L		94	80 - 120
Lithium	500	479		ug/L		96	80 - 120
Magnesium	25000	22700		ug/L		91	80 - 120
Molybdenum	500	467		ug/L		93	80 - 120
Potassium	25000	22500		ug/L		90	80 - 120
Selenium	1000	927		ug/L		93	80 - 120
Sodium	25000	22500		ug/L		90	80 - 120
Thallium	1000	941		ug/L		94	80 - 120

Lab Sample ID: 240-183294-1 MS
Matrix: Water
Analysis Batch: 569329

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total Recoverable
Prep Batch: 569069

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND		100	99.6		ug/L		100	80 - 120
Arsenic	3.1	J	1000	944		ug/L		94	80 - 120
Barium	150		1000	1080		ug/L		93	80 - 120
Beryllium	0.67	J	500	494		ug/L		99	80 - 120
Cadmium	ND		500	472		ug/L		94	80 - 120
Chromium	ND		500	472		ug/L		94	80 - 120
Cobalt	0.76	J	500	466		ug/L		93	80 - 120

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

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

Lab Sample ID: 240-183294-1 MS
Matrix: Water
Analysis Batch: 569329

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total Recoverable
Prep Batch: 569069

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	0.70	J	500	468		ug/L		93	80 - 120
Lithium	6.0	J	500	503		ug/L		99	80 - 120
Magnesium	14000		25000	36700		ug/L		90	80 - 120
Molybdenum	1.5	J	500	484		ug/L		96	80 - 120
Potassium	2000		25000	25200		ug/L		93	80 - 120
Selenium	1.0	J	1000	955		ug/L		95	80 - 120
Sodium	25000		25000	48100		ug/L		92	80 - 120
Thallium	0.48	J	1000	949		ug/L		95	80 - 120

Lab Sample ID: 240-183294-1 MSD
Matrix: Water
Analysis Batch: 569329

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total Recoverable
Prep Batch: 569069

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		100	98.7		ug/L		99	80 - 120	1	20
Arsenic	3.1	J	1000	924		ug/L		92	80 - 120	2	20
Barium	150		1000	1080		ug/L		93	80 - 120	1	20
Beryllium	0.67	J	500	475		ug/L		95	80 - 120	4	20
Cadmium	ND		500	466		ug/L		93	80 - 120	1	20
Chromium	ND		500	466		ug/L		93	80 - 120	1	20
Cobalt	0.76	J	500	460		ug/L		92	80 - 120	1	20
Lead	0.70	J	500	468		ug/L		93	80 - 120	0	20
Lithium	6.0	J	500	483		ug/L		95	80 - 120	4	20
Magnesium	14000		25000	36800		ug/L		91	80 - 120	0	20
Molybdenum	1.5	J	500	473		ug/L		94	80 - 120	2	20
Potassium	2000		25000	25000		ug/L		92	80 - 120	1	20
Selenium	1.0	J	1000	930		ug/L		93	80 - 120	3	20
Sodium	25000		25000	48500		ug/L		93	80 - 120	1	20
Thallium	0.48	J	1000	951		ug/L		95	80 - 120	0	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-569077/1-A
Matrix: Water
Analysis Batch: 569170

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 569077

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		04/12/23 14:00	04/12/23 18:49	1

Lab Sample ID: LCS 240-569077/2-A
Matrix: Water
Analysis Batch: 569170

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 569077

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.35		ug/L		107	80 - 120

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 240-183294-1 MS
 Matrix: Water
 Analysis Batch: 569170

Client Sample ID: BAC-21-F-20230410-01
 Prep Type: Total/NA
 Prep Batch: 569077

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: 240-183294-1 MSD
 Matrix: Water
 Analysis Batch: 569170

Client Sample ID: BAC-21-F-20230410-01
 Prep Type: Total/NA
 Prep Batch: 569077

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		1.00	0.971		ug/L		97	80 - 120	16	20

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-570651/4
 Matrix: Water
 Analysis Batch: 570651

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			04/24/23 11:12	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 11:12	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 11:12	1

Lab Sample ID: 240-183294-1 DU
 Matrix: Water
 Analysis Batch: 570651

Client Sample ID: BAC-21-F-20230410-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	Prepared	Analyzed	RPD	RPD Limit
Total Alkalinity	250	*+	247	*+	mg/L				0.8	20
Bicarbonate Alkalinity as CaCO3	250		247		mg/L				0.8	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L				NC	20

Lab Sample ID: MB 240-570826/4
 Matrix: Water
 Analysis Batch: 570826

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			04/25/23 13:05	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/25/23 13:05	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/25/23 13:05	1

Lab Sample ID: LCS 240-570826/3
 Matrix: Water
 Analysis Batch: 570826

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	149		mg/L		102	86 - 123

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Method: 2320B-1997 - Alkalinity, Total (Continued)

Lab Sample ID: 240-183294-1 DU
 Matrix: Water
 Analysis Batch: 570826

Client Sample ID: BAC-21-F-20230410-01
 Prep Type: Total/NA

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Total Alkalinity	250	H	247		mg/L		3	20
Bicarbonate Alkalinity as CaCO3	250	H	247		mg/L		3	20
Carbonate Alkalinity as CaCO3	ND	H	ND		mg/L		NC	20

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-572493/3
 Matrix: Water
 Analysis Batch: 572493

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Fluoride	ND		0.050	0.024	mg/L			05/08/23 13:48	1

Lab Sample ID: LCS 240-572493/4
 Matrix: Water
 Analysis Batch: 572493

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Fluoride	2.50	2.62		mg/L		105	90 - 110

Lab Sample ID: 240-183294-1 MS
 Matrix: Water
 Analysis Batch: 572493

Client Sample ID: BAC-21-F-20230410-01
 Prep Type: Total/NA

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
Fluoride	0.11		2.50	2.60		mg/L		100	80 - 120

Lab Sample ID: 240-183294-1 MSD
 Matrix: Water
 Analysis Batch: 572493

Client Sample ID: BAC-21-F-20230410-01
 Prep Type: Total/NA

Analyte	Sample	Sample	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Fluoride	0.11		2.50	2.69		mg/L		103	80 - 120	3	15

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-608190/1-A
 Matrix: Water
 Analysis Batch: 611502

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 608190

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.04942	U	0.0841	0.0842	1.00	0.149	pCi/L	04/20/23 09:47	05/15/23 10:07	1

Carrier	MB	MB	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	%Yield	Qualifier				
Ba Carrier	88.5		30 - 110	04/20/23 09:47	05/15/23 10:07	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: LCS 160-608190/2-A
Matrix: Water
Analysis Batch: 611502

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 608190

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	
Radium-226	11.3	9.162		1.04	1.00	0.205	pCi/L	81	75 - 113	
Carrier		LCS %Yield	LCS Qualifier	Limits						
Ba Carrier		98.0		30 - 110						

Lab Sample ID: 240-183294-1 MS
Matrix: Water
Analysis Batch: 611502

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total/NA
Prep Batch: 608190

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	
Radium-226	0.239		11.4	9.168		1.05	1.00	0.150	pCi/L	78	60 - 140	
Carrier		MS %Yield	MS Qualifier	Limits								
Ba Carrier		89.4		30 - 110								

Lab Sample ID: 240-183294-1 MSD
Matrix: Water
Analysis Batch: 611502

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total/NA
Prep Batch: 608190

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		RER	Limit
Radium-226	0.239		11.3	9.266		1.10	1.00	0.179	pCi/L	80	60 - 140	0.05	1	
Carrier		MSD %Yield	MSD Qualifier	Limits										
Ba Carrier		72.5		30 - 110										

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-608193/1-A
Matrix: Water
Analysis Batch: 611287

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 608193

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared		Analyzed		Dil Fac
Radium-228	0.05470	U	0.271	0.271	1.00	0.493	pCi/L	04/20/23 10:16	05/12/23 14:32			1
Carrier		MB %Yield	MB Qualifier	Limits			Prepared		Analyzed		Dil Fac	
Ba Carrier		88.5		30 - 110			04/20/23 10:16		05/12/23 14:32		1	
Y Carrier		89.3		30 - 110			04/20/23 10:16		05/12/23 14:32		1	

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

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

Lab Sample ID: LCS 160-608193/2-A
Matrix: Water
Analysis Batch: 611287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 608193

Analyte	Spike Added	LCS		Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
		Result	Qual						
Radium-228	7.96	6.545		0.964	1.00	0.456	pCi/L	82	75 - 125
LCS LCS									
Carrier	%Yield	Qualifier	Limits						
Ba Carrier	98.0		30 - 110						
Y Carrier	86.0		30 - 110						

Lab Sample ID: 240-183294-1 MS
Matrix: Water
Analysis Batch: 611287

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total/NA
Prep Batch: 608193

Analyte	Sample Result	Sample Qual	Spike Added	MS		Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
				Result	Qual						
Radium-228	0.100	U	8.02	7.930		1.13	1.00	0.513	pCi/L	98	60 - 140
MS MS											
Carrier	%Yield	Qualifier	Limits								
Ba Carrier	89.4		30 - 110								
Y Carrier	84.5		30 - 110								

Lab Sample ID: 240-183294-1 MSD
Matrix: Water
Analysis Batch: 611287

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total/NA
Prep Batch: 608193

Analyte	Sample Result	Sample Qual	Spike Added	MSD		Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
				Result	Qual								
Radium-228	0.100	U	7.92	6.767		1.10	1.00	0.580	pCi/L	84	60 - 140	0.52	1
MSD MSD													
Carrier	%Yield	Qualifier	Limits										
Ba Carrier	72.5		30 - 110										
Y Carrier	83.7		30 - 110										

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Metals

Prep Batch: 569069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183294-1	BAC-21-F-20230410-01	Total Recoverable	Water	3005A	
240-183294-2	BAC-22-F-20230410-01	Total Recoverable	Water	3005A	
240-183294-3	EB-001-F-20230410-01	Total Recoverable	Water	3005A	
MB 240-569069/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-569069/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-183294-1 MS	BAC-21-F-20230410-01	Total Recoverable	Water	3005A	
240-183294-1 MSD	BAC-21-F-20230410-01	Total Recoverable	Water	3005A	

Prep Batch: 569077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183294-1	BAC-21-F-20230410-01	Total/NA	Water	7470A	
240-183294-2	BAC-22-F-20230410-01	Total/NA	Water	7470A	
240-183294-3	EB-001-F-20230410-01	Total/NA	Water	7470A	
MB 240-569077/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-569077/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-183294-1 MS	BAC-21-F-20230410-01	Total/NA	Water	7470A	
240-183294-1 MSD	BAC-21-F-20230410-01	Total/NA	Water	7470A	

Analysis Batch: 569170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183294-1	BAC-21-F-20230410-01	Total/NA	Water	7470A	569077
240-183294-2	BAC-22-F-20230410-01	Total/NA	Water	7470A	569077
240-183294-3	EB-001-F-20230410-01	Total/NA	Water	7470A	569077
MB 240-569077/1-A	Method Blank	Total/NA	Water	7470A	569077
LCS 240-569077/2-A	Lab Control Sample	Total/NA	Water	7470A	569077
240-183294-1 MS	BAC-21-F-20230410-01	Total/NA	Water	7470A	569077
240-183294-1 MSD	BAC-21-F-20230410-01	Total/NA	Water	7470A	569077

Analysis Batch: 569329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183294-1	BAC-21-F-20230410-01	Total Recoverable	Water	6020B	569069
240-183294-2	BAC-22-F-20230410-01	Total Recoverable	Water	6020B	569069
240-183294-3	EB-001-F-20230410-01	Total Recoverable	Water	6020B	569069
MB 240-569069/1-A	Method Blank	Total Recoverable	Water	6020B	569069
LCS 240-569069/2-A	Lab Control Sample	Total Recoverable	Water	6020B	569069
240-183294-1 MS	BAC-21-F-20230410-01	Total Recoverable	Water	6020B	569069
240-183294-1 MSD	BAC-21-F-20230410-01	Total Recoverable	Water	6020B	569069

General Chemistry

Analysis Batch: 570651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183294-1	BAC-21-F-20230410-01	Total/NA	Water	2320B-1997	
240-183294-1	BAC-21-F-20230410-01	Total/NA	Water	2320B-1997	
240-183294-2	BAC-22-F-20230410-01	Total/NA	Water	2320B-1997	
240-183294-3	EB-001-F-20230410-01	Total/NA	Water	2320B-1997	
MB 240-570651/4	Method Blank	Total/NA	Water	2320B-1997	
240-183294-1 DU	BAC-21-F-20230410-01	Total/NA	Water	2320B-1997	

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

General Chemistry

Analysis Batch: 570826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183294-1 - RA	BAC-21-F-20230410-01	Total/NA	Water	2320B-1997	
240-183294-2 - RA	BAC-22-F-20230410-01	Total/NA	Water	2320B-1997	
240-183294-3 - RA	EB-001-F-20230410-01	Total/NA	Water	2320B-1997	
MB 240-570826/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-570826/3	Lab Control Sample	Total/NA	Water	2320B-1997	
240-183294-1 DU	BAC-21-F-20230410-01	Total/NA	Water	2320B-1997	

Analysis Batch: 572493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183294-1	BAC-21-F-20230410-01	Total/NA	Water	300.0-1993 R2.1	
240-183294-2	BAC-22-F-20230410-01	Total/NA	Water	300.0-1993 R2.1	
240-183294-3	EB-001-F-20230410-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-572493/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-572493/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-183294-1 MS	BAC-21-F-20230410-01	Total/NA	Water	300.0-1993 R2.1	
240-183294-1 MSD	BAC-21-F-20230410-01	Total/NA	Water	300.0-1993 R2.1	

Rad

Prep Batch: 608190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183294-1	BAC-21-F-20230410-01	Total/NA	Water	PrecSep-21	
240-183294-2	BAC-22-F-20230410-01	Total/NA	Water	PrecSep-21	
240-183294-3	EB-001-F-20230410-01	Total/NA	Water	PrecSep-21	
MB 160-608190/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-608190/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
240-183294-1 MS	BAC-21-F-20230410-01	Total/NA	Water	PrecSep-21	
240-183294-1 MSD	BAC-21-F-20230410-01	Total/NA	Water	PrecSep-21	

Prep Batch: 608193

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183294-1	BAC-21-F-20230410-01	Total/NA	Water	PrecSep_0	
240-183294-2	BAC-22-F-20230410-01	Total/NA	Water	PrecSep_0	
240-183294-3	EB-001-F-20230410-01	Total/NA	Water	PrecSep_0	
MB 160-608193/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-608193/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
240-183294-1 MS	BAC-21-F-20230410-01	Total/NA	Water	PrecSep_0	
240-183294-1 MSD	BAC-21-F-20230410-01	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Client Sample ID: BAC-21-F-20230410-01

Lab Sample ID: 240-183294-1

Date Collected: 04/10/23 12:49

Matrix: Water

Date Received: 04/11/23 16:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569069	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569329	RKT	EET CLE	04/13/23 12:21
Total/NA	Prep	7470A			569077	MRL	EET CLE	04/12/23 14:00
Total/NA	Analysis	7470A		1	569170	AJC	EET CLE	04/12/23 18:53
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 11:16
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 11:42
Total/NA	Analysis	2320B-1997	RA	1	570826	JWW	EET CLE	04/25/23 14:10
Total/NA	Analysis	300.0-1993 R2.1		1	572493	JWW	EET CLE	05/08/23 14:49
Total/NA	Prep	PrecSep-21			608190	KAC	EET SL	04/20/23 09:47
Total/NA	Analysis	9315		1	611502	FLC	EET SL	05/15/23 10:08
Total/NA	Prep	PrecSep_0			608193	KAC	EET SL	04/20/23 10:16
Total/NA	Analysis	9320		1	611287	FLC	EET SL	05/12/23 14:33
Total/NA	Analysis	Ra226_Ra228		1	611699	EMH	EET SL	05/16/23 09:58

Client Sample ID: BAC-22-F-20230410-01

Lab Sample ID: 240-183294-2

Date Collected: 04/10/23 14:40

Matrix: Water

Date Received: 04/11/23 16:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569069	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569329	RKT	EET CLE	04/13/23 13:36
Total/NA	Prep	7470A			569077	MRL	EET CLE	04/12/23 14:00
Total/NA	Analysis	7470A		1	569170	AJC	EET CLE	04/12/23 19:44
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 11:57
Total/NA	Analysis	2320B-1997	RA	1	570826	JWW	EET CLE	04/25/23 14:19
Total/NA	Analysis	300.0-1993 R2.1		1	572493	JWW	EET CLE	05/08/23 15:49
Total/NA	Prep	PrecSep-21			608190	KAC	EET SL	04/20/23 09:47
Total/NA	Analysis	9315		1	611502	FLC	EET SL	05/15/23 10:09
Total/NA	Prep	PrecSep_0			608193	KAC	EET SL	04/20/23 10:16
Total/NA	Analysis	9320		1	611287	FLC	EET SL	05/12/23 14:33
Total/NA	Analysis	Ra226_Ra228		1	611699	EMH	EET SL	05/16/23 09:58

Client Sample ID: EB-001-F-20230410-01

Lab Sample ID: 240-183294-3

Date Collected: 04/10/23 15:15

Matrix: Water

Date Received: 04/11/23 16:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569069	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569329	RKT	EET CLE	04/13/23 13:39
Total/NA	Prep	7470A			569077	MRL	EET CLE	04/12/23 14:00
Total/NA	Analysis	7470A		1	569170	AJC	EET CLE	04/12/23 19:46
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 11:52
Total/NA	Analysis	2320B-1997	RA	1	570826	JWW	EET CLE	04/25/23 14:23
Total/NA	Analysis	300.0-1993 R2.1		1	572493	JWW	EET CLE	05/08/23 16:09

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Client Sample ID: EB-001-F-20230410-01

Lab Sample ID: 240-183294-3

Date Collected: 04/10/23 15:15

Matrix: Water

Date Received: 04/11/23 16:49

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total/NA	Prep	PrecSep-21			608190	KAC	EET SL	04/20/23 09:47
Total/NA	Analysis	9315		1	611502	FLC	EET SL	05/15/23 10:09
Total/NA	Prep	PrecSep_0			608193	KAC	EET SL	04/20/23 10:16
Total/NA	Analysis	9320		1	611287	FLC	EET SL	05/12/23 14:33
Total/NA	Analysis	Ra226_Ra228		1	611699	EMH	EET SL	05/16/23 09:58

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
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

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
California	State	2927	02-27-24
Connecticut	State	PH-0590	06-29-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-28-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-23
Florida	NELAP	E87689	06-30-23
HI - RadChem Recognition	State	n/a	06-30-23
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana (All)	NELAP	04080	06-30-23
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-23
MI - RadChem Recognition	State	9005	06-30-23
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-23
New Jersey	NELAP	MO002	06-30-23
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-23
North Dakota	State	R-207	06-30-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

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
Oklahoma	NELAP	9997	08-31-23
Oregon	NELAP	4157	09-01-23
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23
Texas	NELAP	T104704193	07-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00028	06-11-23
Utah	NELAP	MO000542021-14	07-31-23
Virginia	NELAP	10310	06-14-23
Washington	State	C592	08-30-23
West Virginia DEP	State	381	10-31-23

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: Federal CCR Wells - App IV Site:		Supplier: Bobby Casio Lab PM: Cisneros, Roxanne Phone: 740-373-4308 E-Mail: roxanne.cisneros@Eurofins.com PWSID:		Carrier Tracking No(s): State of Origin:		COC No: 240-93466-34578.1 Page: Page 1 of 1 Job #:			
Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: 2935505 WO #:		Analysis Requested Perform HARS (Yes or No) <input checked="" type="checkbox"/> D <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> D Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> D <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> D 6020, 7470A 300.0, 28D - Fluoride 2320B - Alkalinity 9315, R4226, 9320, R4228, R4226R4228, GPPC		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 Other:		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - H2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)		Special Instructions/Note: Total Number of Containers:	
Sample Identification Sample ID: BAC-21-F-20230410-01 Sample ID: BAC-21-F-20230410-MS Sample ID: BAC-21-F-20230410-MSD Sample ID: BAC-22-F-20230410-01 Sample ID: EB-001-F-20230410-01		Sample Date: 4-10-23 Sample Time: 1249 Sample Type (C=Comp, G=grab): 6 Matrix (Water, Soil, Sediment, Other): Water		Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> D <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> D Perform HARS (Yes or No) <input checked="" type="checkbox"/> D <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> D 6020, 7470A 300.0, 28D - Fluoride 2320B - Alkalinity 9315, R4226, 9320, R4228, R4226R4228, GPPC		Special Instructions/Note: Total Number of Containers:			
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Deliverable Requested: <input type="checkbox"/> I, II, III, IV, Other (specify)		Empty Kit Relinquished by:		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Relinquished by: Tom Eduardson Relinquished Date: 4-11-23 / 13:45 Relinquished by: Tom Eduardson Relinquished Date: 4-11-23 / 13:45		Relinquished by: Tom Eduardson Relinquished Date: 4-11-23 / 13:45 Relinquished by: Tom Eduardson Relinquished Date: 4-11-23 / 13:45		Relinquished by: Tom Eduardson Relinquished Date: 4-11-23 / 13:45 Relinquished by: Tom Eduardson Relinquished Date: 4-11-23 / 13:45		Relinquished by: Tom Eduardson Relinquished Date: 4-11-23 / 13:45 Relinquished by: Tom Eduardson Relinquished Date: 4-11-23 / 13:45			
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Method of Shipment:			



183294

Eurofins - Canton Sample Receipt Form/Narrative Login # : _____
Barberton Facility

Client LightStone Site Name _____ Cooler unpacked by: Rachelle Haidet

Cooler Received on 4/1/23 Opened on 4/1/23
FedEx: 1st Grd Exp UPS FAS Clipper 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# HC203864
- 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: _____

Temperature readings:

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-21-F-20230410-01	240-183294-G-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-21-F-20230410-01	240-183294-H-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-21-F-20230410-01	240-183294-I-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-21-F-20230410-01	240-183294-J-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-21-F-20230410-01	240-183294-K-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-21-F-20230410-01	240-183294-L-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-21-F-20230410-01	240-183294-M-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-21-F-20230410-01	240-183294-N-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-21-F-20230410-01	240-183294-O-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-22-F-20230410-01	240-183294-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-22-F-20230410-01	240-183294-D-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-22-F-20230410-01	240-183294-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230410-01	240-183294-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230410-01	240-183294-D-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230410-01	240-183294-E-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____



Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Cistneros, Roxanne		Carrier Tracking No(s):	COC No:	240-166273.1			
Client Contact:		Phone:	E-Mail:	roxanne.cistneros@et.eurofins.com		State of Origin:	Page:	Page 1 of 1			
Shipping/Receiving		Accreditations Required (See note):									
Company:		Tests/America Laboratories, Inc.									
Address:		13715 Rider Trail North,									
City:		Earth City									
State, Zip:		MO, 63045									
Phone:		314-298-8566(Tel) 314-298-8757(Fax)									
Email:											
Project Name:		Federal GWM Wells									
Site:											
Due Date Requested:		4/24/2023									
TAT Requested (days):											
PO #:											
WO #:											
Project #:		24019633									
SSOW#:											
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (w=water, S=solid, O=water/soil, BT=Issue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Analysis Requested	Preservation Codes:	Total Number of Containers	Special Instructions/Note:
BAC-21-F-20230410-01 (240-183294-1)	4/10/23	12:49 Eastern	Water		Water	X	X	9315_Ra226/PreSep_21 Radium-226 (GFPC)	X	6	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-21-F-20230410-01 (240-183294-1MS)	4/10/23	12:49 Eastern	Water	MS	Water	X	X	9320_Ra228/PreSep_0 Radium-228 and Radium-228	X	1	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-21-F-20230410-01 (240-183294-1MSD)	4/10/23	12:49 Eastern	Water	MSD	Water	X	X		X	1	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-22-F-20230410-01 (240-183294-2)	4/10/23	14:40 Eastern	Water		Water	X	X		X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
EB-001-F-20230410-01 (240-183294-3)	4/10/23	15:15 Eastern	Water		Water	X	X		X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
<p>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/test/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.</p>											
Possible Hazard Identification											
Unconfirmed											
Deliverable Requested: I, II, III, IV, Other (specify)											
Primary Deliverable Rank: 2											
Empty Kit Relinquished by:											
Date:											
Relinquished by: <i>[Signature]</i>											
Date/Time: 4/10/23 1715											
Relinquished by: <i>[Signature]</i>											
Date/Time: 4/10/23 1715											
Relinquished by: <i>[Signature]</i>											
Date/Time: 4/10/23 1715											
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No											
Custody Seal No.:											
Cooler Temperature(s) °C and Other Remarks:											
<p>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</p> <p><input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For <input type="checkbox"/> Months</p> <p>Special Instructions/QC Requirements:</p>											
<p>Received by: <i>[Signature]</i> Company: <i>[Signature]</i></p> <p>Received by: <i>[Signature]</i> Company: <i>[Signature]</i></p> <p>Received by: <i>[Signature]</i> Company: <i>[Signature]</i></p>											



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-183294-1

Login Number: 183294

List Number: 2

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

List Creation: 04/12/23 06:50 PM

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





ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 4/26/2023 12:42:19 PM

JOB DESCRIPTION

Federal CCR Wells - App III

JOB NUMBER

240-183295-1

Eurofins Canton

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
H	Sample was prepped or analyzed beyond the specified holding time
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.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

Job ID: 240-183295-1

Laboratory: Eurofins Canton

Narrative

**Job Narrative
240-183295-1**

Receipt

The samples were received on 4/11/2023 1:45 PM. 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 0.4°C, 0.7°C, 0.8°C, 2.3°C, 3.7°C and 23.8°C

Metals

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

General Chemistry

Method 2320B: Reanalysis of the following sample(s) was performed outside of the analytical holding time due to failure of quality control parameters in the initial analysis. BAC-22-F-20230410-01 (240-183295-2) and EB-001-F-20230410-01 (240-183295-3)

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 - App III

Job ID: 240-183295-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CAN
6020B	Metals (ICP/MS)	SW846	EET CAN
2320B-1997	Alkalinity, Total	SM	EET CAN
300.0	Anions, Ion Chromatography	EPA	EET CAN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CAN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CAN

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 CAN = Eurofins Canton, 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 - App III

Job ID: 240-183295-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-183295-1	BAC-21-F-20230410-01	Water	04/10/23 12:49	04/11/23 13:45
240-183295-2	BAC-22-F-20230410-01	Water	04/10/23 14:40	04/11/23 13:45
240-183295-3	EB-001-F-20230410-01	Water	04/10/23 15:15	04/11/23 13:45

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

Client Sample ID: BAC-21-F-20230410-01

Lab Sample ID: 240-183295-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	320		100	57	ug/L	1		6010D	Total Recoverable
Calcium	120000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	14000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2100		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	25000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	250		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	250		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	65		2.0	0.26	mg/L	2		300.0	Total/NA
Fluoride	0.096	J	0.10	0.048	mg/L	2		300.0	Total/NA
Sulfate	120		2.0	0.70	mg/L	2		300.0	Total/NA
Total Dissolved Solids	500		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-22-F-20230410-01

Lab Sample ID: 240-183295-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	230		100	57	ug/L	1		6010D	Total Recoverable
Calcium	150000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	19000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	19000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220	*+	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	35		5.0	0.64	mg/L	5		300.0	Total/NA
Sulfate	260		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	610		10	7.8	mg/L	1		SM 2540C	Total/NA
Total Alkalinity - RA	230	H	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3 - RA	230	H	5.0	2.6	mg/L	1		2320B-1997	Total/NA

Client Sample ID: EB-001-F-20230410-01

Lab Sample ID: 240-183295-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity	2.6	J *+	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	2.6	J	5.0	2.6	mg/L	1		2320B-1997	Total/NA

This Detection Summary does not include radiochemical test results.

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

Client Sample ID: BAC-21-F-20230410-01

Lab Sample ID: 240-183295-1

Date Collected: 04/10/23 12:49

Matrix: Water

Date Received: 04/11/23 13:45

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	320		100	57	ug/L		04/12/23 14:00	04/13/23 11:47	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	120000		1000	250	ug/L		04/12/23 14:00	04/14/23 13:20	1
Magnesium	14000		1000	61	ug/L		04/12/23 14:00	04/14/23 13:20	1
Potassium	2100		1000	220	ug/L		04/12/23 14:00	04/14/23 13:20	1
Sodium	25000		1000	330	ug/L		04/12/23 14:00	04/14/23 13:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	250		5.0	2.6	mg/L			04/20/23 20:14	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	250		5.0	2.6	mg/L			04/20/23 20:14	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/20/23 20:14	1
Chloride (EPA 300.0)	65		2.0	0.26	mg/L			04/22/23 14:48	2
Fluoride (EPA 300.0)	0.096	J	0.10	0.048	mg/L			04/22/23 14:48	2
Sulfate (EPA 300.0)	120		2.0	0.70	mg/L			04/22/23 14:48	2
Total Dissolved Solids (SM 2540C)	500		10	7.8	mg/L			04/13/23 10:05	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

Client Sample ID: BAC-22-F-20230410-01

Lab Sample ID: 240-183295-2

Date Collected: 04/10/23 14:40

Matrix: Water

Date Received: 04/11/23 13:45

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	230		100	57	ug/L		04/12/23 14:00	04/13/23 12:09	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	150000		1000	250	ug/L		04/12/23 14:00	04/14/23 13:40	1
Magnesium	19000		1000	61	ug/L		04/12/23 14:00	04/14/23 13:40	1
Potassium	2900		1000	220	ug/L		04/12/23 14:00	04/14/23 13:40	1
Sodium	19000		1000	330	ug/L		04/12/23 14:00	04/14/23 13:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220	*+	5.0	2.6	mg/L			04/24/23 12:02	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			04/24/23 12:02	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 12:02	1
Chloride (EPA 300.0)	35		5.0	0.64	mg/L			04/22/23 15:09	5
Fluoride (EPA 300.0)	ND		0.25	0.12	mg/L			04/22/23 15:09	5
Sulfate (EPA 300.0)	260		5.0	1.7	mg/L			04/22/23 15:09	5
Total Dissolved Solids (SM 2540C)	610		10	7.8	mg/L			04/13/23 10:05	1

General Chemistry - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230	H	5.0	2.6	mg/L			04/25/23 13:39	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230	H	5.0	2.6	mg/L			04/25/23 13:39	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND	H	5.0	2.6	mg/L			04/25/23 13:39	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

Client Sample ID: EB-001-F-20230410-01

Lab Sample ID: 240-183295-3

Date Collected: 04/10/23 15:15

Matrix: Water

Date Received: 04/11/23 13:45

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		04/12/23 14:00	04/13/23 12:13	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		04/12/23 14:00	04/14/23 13:49	1
Magnesium	ND		1000	61	ug/L		04/12/23 14:00	04/14/23 13:49	1
Potassium	ND		1000	220	ug/L		04/12/23 14:00	04/14/23 13:49	1
Sodium	ND		1000	330	ug/L		04/12/23 14:00	04/14/23 13:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	2.6	J **	5.0	2.6	mg/L			04/24/23 12:05	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	2.6	J	5.0	2.6	mg/L			04/24/23 12:05	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 12:05	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			04/22/23 15:29	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			04/22/23 15:29	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			04/22/23 15:29	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			04/13/23 10:05	1

General Chemistry - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND	H	5.0	2.6	mg/L			04/25/23 13:44	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND	H	5.0	2.6	mg/L			04/25/23 13:44	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND	H	5.0	2.6	mg/L			04/25/23 13:44	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-569079/1-A
Matrix: Water
Analysis Batch: 569319

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 569079

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		04/12/23 14:00	04/13/23 11:31	1

Lab Sample ID: LCS 240-569079/2-A
Matrix: Water
Analysis Batch: 569319

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 569079

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	998		ug/L		100	80 - 120

Lab Sample ID: 240-183295-1 MS
Matrix: Water
Analysis Batch: 569319

Client Sample ID: BAC-21-F-20230410-MS
Prep Type: Total Recoverable
Prep Batch: 569079

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	320		1000	1300		ug/L		98	75 - 125

Lab Sample ID: 240-183295-1 MSD
Matrix: Water
Analysis Batch: 569319

Client Sample ID: BAC-21-F-20230410-MSD
Prep Type: Total Recoverable
Prep Batch: 569079

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	320		1000	1300		ug/L		98	75 - 125	0	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-569079/1-A
Matrix: Water
Analysis Batch: 569539

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 569079

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		04/12/23 14:00	04/14/23 13:15	1
Magnesium	ND		1000	61	ug/L		04/12/23 14:00	04/14/23 13:15	1
Potassium	ND		1000	220	ug/L		04/12/23 14:00	04/14/23 13:15	1
Sodium	ND		1000	330	ug/L		04/12/23 14:00	04/14/23 13:15	1

Lab Sample ID: LCS 240-569079/3-A
Matrix: Water
Analysis Batch: 569539

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 569079

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	23200		ug/L		93	80 - 120
Magnesium	25000	23400		ug/L		94	80 - 120
Potassium	25000	23500		ug/L		94	80 - 120
Sodium	25000	23500		ug/L		94	80 - 120

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

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

Lab Sample ID: 240-183295-1 MS
Matrix: Water
Analysis Batch: 569539

Client Sample ID: BAC-21-F-20230410-MS
Prep Type: Total Recoverable
Prep Batch: 569079

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD
Calcium	120000		25000	138000	4	ug/L		72	80 - 120	
Magnesium	14000		25000	36700		ug/L		89	80 - 120	
Potassium	2100		25000	25000		ug/L		92	80 - 120	
Sodium	25000		25000	47300		ug/L		89	80 - 120	

Lab Sample ID: 240-183295-1 MSD
Matrix: Water
Analysis Batch: 569539

Client Sample ID: BAC-21-F-20230410-MSD
Prep Type: Total Recoverable
Prep Batch: 569079

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec		RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD		
Calcium	120000		25000	149000	4	ug/L		113	80 - 120	7	20	
Magnesium	14000		25000	39500		ug/L		101	80 - 120	7	20	
Potassium	2100		25000	26900		ug/L		100	80 - 120	8	20	
Sodium	25000		25000	51100		ug/L		104	80 - 120	8	20	

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-570374/4
Matrix: Water
Analysis Batch: 570374

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			04/20/23 19:28	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/20/23 19:28	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/20/23 19:28	1

Lab Sample ID: LCS 240-570374/3
Matrix: Water
Analysis Batch: 570374

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec	
	Added	Result	Qualifier				Limits	RPD
Total Alkalinity	146	151		mg/L		103	86 - 123	

Lab Sample ID: 240-183295-1 DU
Matrix: Water
Analysis Batch: 570374

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total/NA

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Total Alkalinity	250		251		mg/L		0.6	20
Bicarbonate Alkalinity as CaCO3	250		251		mg/L		0.6	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Lab Sample ID: MB 240-570651/4
Matrix: Water
Analysis Batch: 570651

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			04/24/23 11:12	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 11:12	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 11:12	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-570826/4
Matrix: Water
Analysis Batch: 570826

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			04/25/23 13:05	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/25/23 13:05	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/25/23 13:05	1

Lab Sample ID: LCS 240-570826/3
Matrix: Water
Analysis Batch: 570826

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	149		mg/L		102	86 - 123

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-570408/3
Matrix: Water
Analysis Batch: 570408

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			04/22/23 14:08	1
Fluoride	ND		0.050	0.024	mg/L			04/22/23 14:08	1
Sulfate	ND		1.0	0.35	mg/L			04/22/23 14:08	1

Lab Sample ID: LCS 240-570408/4
Matrix: Water
Analysis Batch: 570408

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	50.7		mg/L		101	90 - 110
Fluoride	2.50	2.64		mg/L		105	90 - 110
Sulfate	50.0	52.1		mg/L		104	90 - 110

Lab Sample ID: 240-183295-1 MS
Matrix: Water
Analysis Batch: 570408

Client Sample ID: BAC-21-F-20230410-MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	62		50.0	116		mg/L		108	80 - 120
Fluoride	0.10		2.50	3.08		mg/L		119	80 - 120
Sulfate	120		50.0	173		mg/L		106	80 - 120

Lab Sample ID: 240-183295-1 MSD
Matrix: Water
Analysis Batch: 570408

Client Sample ID: BAC-21-F-20230410-MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	62		50.0	117		mg/L		109	80 - 120	0	15
Fluoride	0.10		2.50	3.09		mg/L		119	80 - 120	0	15
Sulfate	120		50.0	173		mg/L		106	80 - 120	0	15

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

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

Lab Sample ID: MB 240-569230/1
Matrix: Water
Analysis Batch: 569230

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			04/13/23 10:05	1

Lab Sample ID: LCS 240-569230/2
Matrix: Water
Analysis Batch: 569230

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	580	543		mg/L		94	80 - 120



QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

Metals

Prep Batch: 569079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183295-1	BAC-21-F-20230410-01	Total Recoverable	Water	3005A	
240-183295-2	BAC-22-F-20230410-01	Total Recoverable	Water	3005A	
240-183295-3	EB-001-F-20230410-01	Total Recoverable	Water	3005A	
MB 240-569079/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-569079/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-569079/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-183295-1 MS	BAC-21-F-20230410-MS	Total Recoverable	Water	3005A	
240-183295-1 MS	BAC-21-F-20230410-MS	Total Recoverable	Water	3005A	
240-183295-1 MSD	BAC-21-F-20230410-MSD	Total Recoverable	Water	3005A	
240-183295-1 MSD	BAC-21-F-20230410-MSD	Total Recoverable	Water	3005A	

Analysis Batch: 569319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183295-1	BAC-21-F-20230410-01	Total Recoverable	Water	6010D	569079
240-183295-2	BAC-22-F-20230410-01	Total Recoverable	Water	6010D	569079
240-183295-3	EB-001-F-20230410-01	Total Recoverable	Water	6010D	569079
MB 240-569079/1-A	Method Blank	Total Recoverable	Water	6010D	569079
LCS 240-569079/2-A	Lab Control Sample	Total Recoverable	Water	6010D	569079
240-183295-1 MS	BAC-21-F-20230410-MS	Total Recoverable	Water	6010D	569079
240-183295-1 MSD	BAC-21-F-20230410-MSD	Total Recoverable	Water	6010D	569079

Analysis Batch: 569539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183295-1	BAC-21-F-20230410-01	Total Recoverable	Water	6020B	569079
240-183295-2	BAC-22-F-20230410-01	Total Recoverable	Water	6020B	569079
240-183295-3	EB-001-F-20230410-01	Total Recoverable	Water	6020B	569079
MB 240-569079/1-A	Method Blank	Total Recoverable	Water	6020B	569079
LCS 240-569079/3-A	Lab Control Sample	Total Recoverable	Water	6020B	569079
240-183295-1 MS	BAC-21-F-20230410-MS	Total Recoverable	Water	6020B	569079
240-183295-1 MSD	BAC-21-F-20230410-MSD	Total Recoverable	Water	6020B	569079

General Chemistry

Analysis Batch: 569230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183295-1	BAC-21-F-20230410-01	Total/NA	Water	SM 2540C	
240-183295-2	BAC-22-F-20230410-01	Total/NA	Water	SM 2540C	
240-183295-3	EB-001-F-20230410-01	Total/NA	Water	SM 2540C	
MB 240-569230/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-569230/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 570374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183295-1	BAC-21-F-20230410-01	Total/NA	Water	2320B-1997	
MB 240-570374/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-570374/3	Lab Control Sample	Total/NA	Water	2320B-1997	
240-183295-1 DU	BAC-21-F-20230410-01	Total/NA	Water	2320B-1997	

Analysis Batch: 570408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183295-1	BAC-21-F-20230410-01	Total/NA	Water	300.0	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

General Chemistry (Continued)

Analysis Batch: 570408 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183295-2	BAC-22-F-20230410-01	Total/NA	Water	300.0	
240-183295-3	EB-001-F-20230410-01	Total/NA	Water	300.0	
MB 240-570408/3	Method Blank	Total/NA	Water	300.0	
LCS 240-570408/4	Lab Control Sample	Total/NA	Water	300.0	
240-183295-1 MS	BAC-21-F-20230410-MS	Total/NA	Water	300.0	
240-183295-1 MSD	BAC-21-F-20230410-MSD	Total/NA	Water	300.0	

Analysis Batch: 570651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183295-2	BAC-22-F-20230410-01	Total/NA	Water	2320B-1997	
240-183295-3	EB-001-F-20230410-01	Total/NA	Water	2320B-1997	
MB 240-570651/4	Method Blank	Total/NA	Water	2320B-1997	

Analysis Batch: 570826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183295-2 - RA	BAC-22-F-20230410-01	Total/NA	Water	2320B-1997	
240-183295-3 - RA	EB-001-F-20230410-01	Total/NA	Water	2320B-1997	
MB 240-570826/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-570826/3	Lab Control Sample	Total/NA	Water	2320B-1997	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

Client Sample ID: BAC-21-F-20230410-01

Lab Sample ID: 240-183295-1

Date Collected: 04/10/23 12:49

Matrix: Water

Date Received: 04/11/23 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569079	MRL	EET CAN	04/12/23 14:00
Total Recoverable	Analysis	6010D		1	569319	KLC	EET CAN	04/13/23 11:47
Total Recoverable	Prep	3005A			569079	MRL	EET CAN	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569539	RKT	EET CAN	04/14/23 13:20
Total/NA	Analysis	2320B-1997		1	570374	JWW	EET CAN	04/20/23 20:14
Total/NA	Analysis	300.0		2	570408	JMB	EET CAN	04/22/23 14:48
Total/NA	Analysis	SM 2540C		1	569230	GH	EET CAN	04/13/23 10:05

Client Sample ID: BAC-22-F-20230410-01

Lab Sample ID: 240-183295-2

Date Collected: 04/10/23 14:40

Matrix: Water

Date Received: 04/11/23 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569079	MRL	EET CAN	04/12/23 14:00
Total Recoverable	Analysis	6010D		1	569319	KLC	EET CAN	04/13/23 12:09
Total Recoverable	Prep	3005A			569079	MRL	EET CAN	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569539	RKT	EET CAN	04/14/23 13:40
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 12:02
Total/NA	Analysis	2320B-1997	RA	1	570826	JWW	EET CAN	04/25/23 13:39
Total/NA	Analysis	300.0		5	570408	JMB	EET CAN	04/22/23 15:09
Total/NA	Analysis	SM 2540C		1	569230	GH	EET CAN	04/13/23 10:05

Client Sample ID: EB-001-F-20230410-01

Lab Sample ID: 240-183295-3

Date Collected: 04/10/23 15:15

Matrix: Water

Date Received: 04/11/23 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569079	MRL	EET CAN	04/12/23 14:00
Total Recoverable	Analysis	6010D		1	569319	KLC	EET CAN	04/13/23 12:13
Total Recoverable	Prep	3005A			569079	MRL	EET CAN	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569539	RKT	EET CAN	04/14/23 13:49
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 12:05
Total/NA	Analysis	2320B-1997	RA	1	570826	JWW	EET CAN	04/25/23 13:44
Total/NA	Analysis	300.0		1	570408	JMB	EET CAN	04/22/23 15:29
Total/NA	Analysis	SM 2540C		1	569230	GH	EET CAN	04/13/23 10:05

Laboratory References:

EET CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23 *
Connecticut	State	PH-0590	06-29-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-28-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23 *
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-23 *
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Chain of Custody Record



Client Information		Sample: <i>Bobby Cesto</i>		Lab PM: Cisneros, Roxanne		Carrier Tracking No(s):		COC No: 240-93465-34577.1	
Client Contact: Taylor Huffman		Phone: 740-373-4308		E-Mail: roxanne.cisneros@Eurofins.com		State of Origin:		Page: Page 1 of 1	
Company: Lightstone Generation Gavin Power LLC		Address: 7397 OH-7		City: Cheshire		State, Zip: OH, 45620		Job #:	
Phone: 740-925-3171(Tel)		PO #: 2935505		WO #: 24019633		Project #: 24019633		SSOW#:	
Email: taylor.huffman@lightstonegen.com		Project Name: Federal CCR Wells - App III		Site:		Due Date Requested:		TAT Requested (days):	
Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		Sample Date		Sample Time		Sample Type (C-comp, G-grab)		Matrix (Hexane, None, AsNaO2, NaHSO4, MeOH, Amchlor, Ascorbic Acid, Ice, DI Water, EDTA, MCAA, pH 4.5, other (specify))	
Field Filtered Sample (Yes or No)		Sample Date		Sample Time		Sample Type (C-comp, G-grab)		Matrix (Hexane, None, AsNaO2, NaHSO4, MeOH, Amchlor, Ascorbic Acid, Ice, DI Water, EDTA, MCAA, pH 4.5, other (specify))	
Perform MS/MS (Yes or No)		Sample Date		Sample Time		Sample Type (C-comp, G-grab)		Matrix (Hexane, None, AsNaO2, NaHSO4, MeOH, Amchlor, Ascorbic Acid, Ice, DI Water, EDTA, MCAA, pH 4.5, other (specify))	
2540C, Calcd, 300.0, 28D		Sample Date		Sample Time		Sample Type (C-comp, G-grab)		Matrix (Hexane, None, AsNaO2, NaHSO4, MeOH, Amchlor, Ascorbic Acid, Ice, DI Water, EDTA, MCAA, pH 4.5, other (specify))	
6010B, 6020		Sample Date		Sample Time		Sample Type (C-comp, G-grab)		Matrix (Hexane, None, AsNaO2, NaHSO4, MeOH, Amchlor, Ascorbic Acid, Ice, DI Water, EDTA, MCAA, pH 4.5, other (specify))	
2320B - Alkalinity		Sample Date		Sample Time		Sample Type (C-comp, G-grab)		Matrix (Hexane, None, AsNaO2, NaHSO4, MeOH, Amchlor, Ascorbic Acid, Ice, DI Water, EDTA, MCAA, pH 4.5, other (specify))	
Total Number of Containers		Sample Date		Sample Time		Sample Type (C-comp, G-grab)		Matrix (Hexane, None, AsNaO2, NaHSO4, MeOH, Amchlor, Ascorbic Acid, Ice, DI Water, EDTA, MCAA, pH 4.5, other (specify))	
Special Instructions/Note:		Sample Date		Sample Time		Sample Type (C-comp, G-grab)		Matrix (Hexane, None, AsNaO2, NaHSO4, MeOH, Amchlor, Ascorbic Acid, Ice, DI Water, EDTA, MCAA, pH 4.5, other (specify))	
240-183295 Chain of Custody		Sample Date		Sample Time		Sample Type (C-comp, G-grab)		Matrix (Hexane, None, AsNaO2, NaHSO4, MeOH, Amchlor, Ascorbic Acid, Ice, DI Water, EDTA, MCAA, pH 4.5, other (specify))	
Possible Hazard Identification		Sample Date		Sample Time		Sample Type (C-comp, G-grab)		Matrix (Hexane, None, AsNaO2, NaHSO4, MeOH, Amchlor, Ascorbic Acid, Ice, DI Water, EDTA, MCAA, pH 4.5, other (specify))	
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Date		Sample Time		Sample Type (C-comp, G-grab)		Matrix (Hexane, None, AsNaO2, NaHSO4, MeOH, Amchlor, Ascorbic Acid, Ice, DI Water, EDTA, MCAA, pH 4.5, other (specify))	
Deliverable Requested: I, II, III, IV, Other (specify)		Sample Date		Sample Time		Sample Type (C-comp, G-grab)		Matrix (Hexane, None, AsNaO2, NaHSO4, MeOH, Amchlor, Ascorbic Acid, Ice, DI Water, EDTA, MCAA, pH 4.5, other (specify))	
Empty Kit Relinquished by:		Sample Date		Sample Time		Sample Type (C-comp, G-grab)		Matrix (Hexane, None, AsNaO2, NaHSO4, MeOH, Amchlor, Ascorbic Acid, Ice, DI Water, EDTA, MCAA, pH 4.5, other (specify))	
Relinquished by: <i>Taylor Huffman</i>		Sample Date: 4-11-23		Sample Time: 10:45		Sample Type: G		Matrix: W	
Relinquished by: <i>Jan Edwards</i>		Sample Date: 4-11-23		Sample Time: 13:45		Sample Type: G		Matrix: W	
Custody Seal No.: <input type="checkbox"/> Yes <input type="checkbox"/> No		Sample Date		Sample Time		Sample Type (C-comp, G-grab)		Matrix (Hexane, None, AsNaO2, NaHSO4, MeOH, Amchlor, Ascorbic Acid, Ice, DI Water, EDTA, MCAA, pH 4.5, other (specify))	
Special Instructions/OC Requirements:		Sample Date		Sample Time		Sample Type (C-comp, G-grab)		Matrix (Hexane, None, AsNaO2, NaHSO4, MeOH, Amchlor, Ascorbic Acid, Ice, DI Water, EDTA, MCAA, pH 4.5, other (specify))	
Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Sample Date		Sample Time		Sample Type (C-comp, G-grab)		Matrix (Hexane, None, AsNaO2, NaHSO4, MeOH, Amchlor, Ascorbic Acid, Ice, DI Water, EDTA, MCAA, pH 4.5, other (specify))	
Method of Shipment:		Sample Date		Sample Time		Sample Type (C-comp, G-grab)		Matrix (Hexane, None, AsNaO2, NaHSO4, MeOH, Amchlor, Ascorbic Acid, Ice, DI Water, EDTA, MCAA, pH 4.5, other (specify))	
Received by: <i>Jan Edwards</i>		Sample Date: 4-11-23		Sample Time: 10:00		Sample Type: G		Matrix: W	
Received by: <i>Jan Edwards</i>		Sample Date: 4-11-23		Sample Time: 13:45		Sample Type: G		Matrix: W	
Cooler Temperature(s) °C and Other Remarks:		Sample Date		Sample Time		Sample Type (C-comp, G-grab)		Matrix (Hexane, None, AsNaO2, NaHSO4, MeOH, Amchlor, Ascorbic Acid, Ice, DI Water, EDTA, MCAA, pH 4.5, other (specify))	

Eurofins - Canton Sample Receipt Form/Narrative Login # : _____
Barberton Facility

Client LightStone Site Name _____ Cooler unpacked by: Rachelle Haidet
Cooler Received on 4/11/23 Opened on 4/11/23
FedEx: 1st Grd Exp UPS FAS Clipper 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 NA
-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# HC203864
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 _____

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

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: _____

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-21-F-20230410-01	240-183295-G-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-21-F-20230410-01	240-183295-H-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-21-F-20230410-01	240-183295-I-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-22-F-20230410-01	240-183295-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230410-01	240-183295-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____

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ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 5/22/2023 11:48:51 AM

JOB DESCRIPTION

Federal CCR Wells - App IV

JOB NUMBER

240-183578-1

Eurofins Cleveland

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
5/22/2023 11:48:51 AM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Qualifiers

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
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.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.

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.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Job ID: 240-183578-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-183578-1

Receipt

The samples were received on 4/14/2023 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 1.1°C, 1.2°C, 1.4°C, 1.6°C, 1.8°C, 1.8°C, 2.0°C, 2.3°C, 2.6°C, 2.8°C, 3.2°C and 18.1°C

Metals

Method 6020B: The continuing calibration verification (CCV) associated with batch 240-570098 recovered above the upper control limit for Lithium. The samples associated with this CCV were below the reporting limits for the affected analytes; therefore, the data have been reported. The associated samples are impacted: BAC-23-F-20230411-01 (240-183578-3), BAC-08-F-20230411-01 (240-183578-4), EB-001-F-20230411-01 (240-183578-7), BAC-07-F-20230412-01 (240-183578-8), BAC-18-F--20230412-01 (240-183578-9), BAC-06-F-20230412-01 (240-183578-10) and EB-001-F-20230412-01 (240-183578-12).

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(s) was analyzed outside of analytical holding time due to instrument error. Instrument motor went out and samples had to be rerun on second instrument. BAC-12-F-20230411-01 (240-183578-6) and EB-001-F-20230411-01 (240-183578-7).

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 160-609093The following samples were prepared at a reduced aliquot due to Matrix: BAC-10-F-20230411-01 (240-183578-1), DUP-001-BAC-10-F-20230411-01 (240-183578-2), BAC-14-F-20230411-01 (240-183578-5), BAC-12-F-20230411-01 (240-183578-6) and BAC-16-F-20230412-01 (240-183578-11). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method 9315_Ra226: Radium-22 Prep Batch 160-609093Insufficient sample volume was available to perform a sample duplicate for the following samples: BAC-23-F-20230411-01 (240-183578-3), BAC-08-F-20230411-01 (240-183578-4), EB-001-F-20230411-01 (240-183578-7), BAC-07-F-20230412-01 (240-183578-8), BAC-18-F--20230412-01 (240-183578-9), BAC-06-F-20230412-01 (240-183578-10) and EB-001-F-20230412-01 (240-183578-12). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method 9315_Ra226: Radium-226 batch 609093Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-10-F-20230411-01 (240-183578-1), DUP-001-BAC-10-F-20230411-01 (240-183578-2), BAC-23-F-20230411-01 (240-183578-3), BAC-08-F-20230411-01 (240-183578-4), BAC-14-F-20230411-01 (240-183578-5), BAC-12-F-20230411-01 (240-183578-6), EB-001-F-20230411-01 (240-183578-7), BAC-07-F-20230412-01 (240-183578-8), BAC-18-F--20230412-01 (240-183578-9), BAC-06-F-20230412-01 (240-183578-10), BAC-16-F-20230412-01 (240-183578-11), EB-001-F-20230412-01 (240-183578-12), (LCS 160-609093/2-A), (LCSD 160-609093/3-A) and (MB 160-609093/1-A)

Method 9320_Ra228: Radium-228 Prep Batch 160-609099The following samples were prepared at a reduced aliquot due to Matrix: BAC-10-F-20230411-01 (240-183578-1), DUP-001-BAC-10-F-20230411-01 (240-183578-2), BAC-14-F-20230411-01 (240-183578-5), BAC-12-F-20230411-01 (240-183578-6) and BAC-16-F-20230412-01 (240-183578-11). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method 9320_Ra228: Radium-228 Prep Batch160-609099Insufficient sample volume was available to perform a sample duplicate for the following samples: BAC-23-F-20230411-01 (240-183578-3), BAC-08-F-20230411-01 (240-183578-4), EB-001-F-20230411-01 (240-183578-7), BAC-07-F-20230412-01 (240-183578-8), BAC-18-F--20230412-01 (240-183578-9), BAC-06-F-20230412-01

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Job ID: 240-183578-1 (Continued)

Laboratory: Eurofins Cleveland (Continued)

(240-183578-10) and EB-001-F-20230412-01 (240-183578-12). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method 9320_Ra228: Radium-228 batch 609099The detection goal was not met for the following sample(s). Samples were prepped at a reduced volume due to the presence of matrix interferences: BAC-10-F-20230411-01 (240-183578-1), DUP-001-BAC-10-F-20230411-01 (240-183578-2), BAC-14-F-20230411-01 (240-183578-5) and BAC-12-F-20230411-01 (240-183578-6). Analytical results are reported with the detection limit achieved.

Method 9320_Ra228: Radium-228 batch 609099Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.BAC-10-F-20230411-01 (240-183578-1), DUP-001-BAC-10-F-20230411-01 (240-183578-2), BAC-23-F-20230411-01 (240-183578-3), BAC-08-F-20230411-01 (240-183578-4), BAC-14-F-20230411-01 (240-183578-5), BAC-12-F-20230411-01 (240-183578-6), EB-001-F-20230411-01 (240-183578-7), BAC-07-F-20230412-01 (240-183578-8), BAC-18-F--20230412-01 (240-183578-9), BAC-06-F-20230412-01 (240-183578-10), BAC-16-F-20230412-01 (240-183578-11), EB-001-F-20230412-01 (240-183578-12), (LCS 160-609099/2-A), (LCSD 160-609099/3-A) and (MB 160-609099/1-A)

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 - App IV

Job ID: 240-183578-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0-1993 R2.1	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 - App IV

Job ID: 240-183578-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-183578-1	BAC-10-F-20230411-01	Water	04/11/23 10:03	04/14/23 08:00
240-183578-2	DUP-001-BAC-10-F-20230411-01	Water	04/11/23 10:03	04/14/23 08:00
240-183578-3	BAC-23-F-20230411-01	Water	04/11/23 11:22	04/14/23 08:00
240-183578-4	BAC-08-F-20230411-01	Water	04/11/23 12:27	04/14/23 08:00
240-183578-5	BAC-14-F-20230411-01	Water	04/11/23 14:00	04/14/23 08:00
240-183578-6	BAC-12-F-20230411-01	Water	04/11/23 14:58	04/14/23 08:00
240-183578-7	EB-001-F-20230411-01	Water	04/11/23 15:30	04/14/23 08:00
240-183578-8	BAC-07-F-20230412-01	Water	04/12/23 10:34	04/14/23 08:00
240-183578-9	BAC-18-F--20230412-01	Water	04/12/23 11:31	04/14/23 08:00
240-183578-10	BAC-06-F-20230412-01	Water	04/12/23 13:00	04/14/23 08:00
240-183578-11	BAC-16-F-20230412-01	Water	04/12/23 14:29	04/14/23 08:00
240-183578-12	EB-001-F-20230412-01	Water	04/12/23 15:30	04/14/23 08:00



Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-10-F-20230411-01

Lab Sample ID: 240-183578-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.74	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	75		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.26	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Chromium	5.8		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	5.0		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	3.5		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.8	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	29000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.6	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	55000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.53	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.23		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: DUP-001-BAC-10-F-20230411-01

Lab Sample ID: 240-183578-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.2		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	78		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.24	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Chromium	6.1		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	5.2		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	3.7		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.7	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	30000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	56000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.22		0.050	0.024	mg/L	1		300.0-1993 R2.1	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 - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-23-F-20230411-01

Lab Sample ID: 240-183578-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.0	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	130		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.0		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	4.6	J ^+	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	15000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	18000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.14		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-08-F-20230411-01

Lab Sample ID: 240-183578-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.6	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	180		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.6		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	5.1	J ^+	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	12000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.8	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	1200		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	12000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	210		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	210		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.13		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-14-F-20230411-01

Lab Sample ID: 240-183578-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	4.9	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	110		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	2.0	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.3		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.1		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.9	J	8.0	1.7	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 - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-14-F-20230411-01 (Continued)

Lab Sample ID: 240-183578-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Magnesium	20000		1000	61	ug/L	1			6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1			6020B	Total Recoverable
Sodium	22000		1000	330	ug/L	1			6020B	Total Recoverable
Total Alkalinity	82		5.0	2.6	mg/L	1			2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	82		5.0	2.6	mg/L	1			2320B-1997	Total/NA
Fluoride	0.068		0.050	0.024	mg/L	1			300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-12-F-20230411-01

Lab Sample ID: 240-183578-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Arsenic	6.5		5.0	0.75	ug/L	1			6020B	Total Recoverable
Barium	130		5.0	2.2	ug/L	1			6020B	Total Recoverable
Chromium	4.1	J	5.0	1.2	ug/L	1			6020B	Total Recoverable
Cobalt	8.8		1.0	0.19	ug/L	1			6020B	Total Recoverable
Lead	4.7		1.0	0.45	ug/L	1			6020B	Total Recoverable
Lithium	9.8		8.0	1.7	ug/L	1			6020B	Total Recoverable
Magnesium	17000		1000	61	ug/L	1			6020B	Total Recoverable
Molybdenum	2.0	J	5.0	1.1	ug/L	1			6020B	Total Recoverable
Potassium	2700		1000	220	ug/L	1			6020B	Total Recoverable
Sodium	28000		1000	330	ug/L	1			6020B	Total Recoverable
Total Alkalinity	100		5.0	2.6	mg/L	1			2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	100		5.0	2.6	mg/L	1			2320B-1997	Total/NA
Fluoride	0.086	H	0.050	0.024	mg/L	1			300.0-1993 R2.1	Total/NA

Client Sample ID: EB-001-F-20230411-01

Lab Sample ID: 240-183578-7

No Detections.

Client Sample ID: BAC-07-F-20230412-01

Lab Sample ID: 240-183578-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Barium	45		5.0	2.2	ug/L	1			6020B	Total Recoverable
Cobalt	1.7		1.0	0.19	ug/L	1			6020B	Total Recoverable
Lithium	7.0	J ^+	8.0	1.7	ug/L	1			6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1			6020B	Total Recoverable
Potassium	1300		1000	220	ug/L	1			6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1			6020B	Total Recoverable
Total Alkalinity	140		5.0	2.6	mg/L	1			2320B-1997	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 - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-07-F-20230412-01 (Continued)

Lab Sample ID: 240-183578-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bicarbonate Alkalinity as CaCO3	140		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.084		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-18-F--20230412-01

Lab Sample ID: 240-183578-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.0	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	37		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.7		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	7.9	J ^+	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	110		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	110		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.059		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-06-F-20230412-01

Lab Sample ID: 240-183578-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.85	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	94		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	3.9		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	7.6	J ^+	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	25000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	110		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	110		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.098		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-16-F-20230412-01

Lab Sample ID: 240-183578-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.7	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	63		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.4		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	6.9	J	8.0	1.7	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 - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-16-F-20230412-01 (Continued)

Lab Sample ID: 240-183578-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	21000		1000	61	ug/L	1		6020B	Total
									Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total
									Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total
									Recoverable
Total Alkalinity	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.061		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: EB-001-F-20230412-01

Lab Sample ID: 240-183578-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity	180		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	180		5.0	2.6	mg/L	1		2320B-1997	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland



Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-10-F-20230411-01

Lab Sample ID: 240-183578-1

Date Collected: 04/11/23 10:03

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.74	J	2.0	0.57	ug/L		04/18/23 14:00	04/19/23 23:53	1
Arsenic	4.7	J	5.0	0.75	ug/L		04/18/23 14:00	04/19/23 23:53	1
Barium	75		5.0	2.2	ug/L		04/18/23 14:00	04/19/23 23:53	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/19/23 23:53	1
Cadmium	0.26	J	1.0	0.20	ug/L		04/18/23 14:00	04/19/23 23:53	1
Chromium	5.8		5.0	1.2	ug/L		04/18/23 14:00	04/19/23 23:53	1
Cobalt	5.0		1.0	0.19	ug/L		04/18/23 14:00	04/19/23 23:53	1
Lead	3.5		1.0	0.45	ug/L		04/18/23 14:00	04/19/23 23:53	1
Lithium	6.8	J	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 15:11	1
Magnesium	29000		1000	61	ug/L		04/18/23 14:00	04/19/23 23:53	1
Molybdenum	1.6	J	5.0	1.1	ug/L		04/18/23 14:00	04/19/23 23:53	1
Potassium	2400		1000	220	ug/L		04/18/23 14:00	04/19/23 23:53	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/19/23 23:53	1
Sodium	55000		1000	330	ug/L		04/18/23 14:00	04/19/23 23:53	1
Thallium	0.53	J	1.0	0.20	ug/L		04/18/23 14:00	04/19/23 23:53	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		04/18/23 14:00	04/19/23 19:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			04/24/23 15:35	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			04/24/23 15:35	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 15:35	1
Fluoride (EPA 300.0-1993 R2.1)	0.23		0.050	0.024	mg/L			05/09/23 22:42	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.263	U	0.279	0.280	1.00	0.447	pCi/L	04/27/23 13:34	05/19/23 19:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	61.9		30 - 110					04/27/23 13:34	05/19/23 19:38	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	-0.225	U G	0.790	0.790	1.00	1.55	pCi/L	04/27/23 14:08	05/16/23 11:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	61.9		30 - 110					04/27/23 14:08	05/16/23 11:15	1
Y Carrier	81.9		30 - 110					04/27/23 14:08	05/16/23 11:15	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-10-F-20230411-01

Lab Sample ID: 240-183578-1

Date Collected: 04/11/23 10:03

Matrix: Water

Date Received: 04/14/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.0376	U	0.838	0.838	5.00	1.55	pCi/L		05/22/23 12:41	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: DUP-001-BAC-10-F-20230411-01

Lab Sample ID: 240-183578-2

Date Collected: 04/11/23 10:03

Matrix: Water

Date Received: 04/14/23 08:00

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		04/18/23 14:00	04/19/23 23:56	1
Arsenic	5.2		5.0	0.75	ug/L		04/18/23 14:00	04/19/23 23:56	1
Barium	78		5.0	2.2	ug/L		04/18/23 14:00	04/19/23 23:56	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/19/23 23:56	1
Cadmium	0.24	J	1.0	0.20	ug/L		04/18/23 14:00	04/19/23 23:56	1
Chromium	6.1		5.0	1.2	ug/L		04/18/23 14:00	04/19/23 23:56	1
Cobalt	5.2		1.0	0.19	ug/L		04/18/23 14:00	04/19/23 23:56	1
Lead	3.7		1.0	0.45	ug/L		04/18/23 14:00	04/19/23 23:56	1
Lithium	6.7	J	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 15:15	1
Magnesium	30000		1000	61	ug/L		04/18/23 14:00	04/19/23 23:56	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/19/23 23:56	1
Potassium	2500		1000	220	ug/L		04/18/23 14:00	04/19/23 23:56	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/19/23 23:56	1
Sodium	56000		1000	330	ug/L		04/18/23 14:00	04/19/23 23:56	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/19/23 23:56	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		04/18/23 14:00	04/19/23 19:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			04/24/23 15:39	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			04/24/23 15:39	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 15:39	1
Fluoride (EPA 300.0-1993 R2.1)	0.22		0.050	0.024	mg/L			05/09/23 23:02	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.288	U	0.356	0.357	1.00	0.588	pCi/L	04/27/23 13:34	05/19/23 19:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	53.8		30 - 110					04/27/23 13:34	05/19/23 19:39	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.963	U G	1.08	1.09	1.00	1.78	pCi/L	04/27/23 14:08	05/16/23 11:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	53.8		30 - 110					04/27/23 14:08	05/16/23 11:15	1
Y Carrier	82.6		30 - 110					04/27/23 14:08	05/16/23 11:15	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: DUP-001-BAC-10-F-20230411-01

Lab Sample ID: 240-183578-2

Date Collected: 04/11/23 10:03

Matrix: Water

Date Received: 04/14/23 08:00

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	1.25	U	1.14	1.15	5.00	1.78	pCi/L		05/22/23 12:41	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-23-F-20230411-01

Lab Sample ID: 240-183578-3

Date Collected: 04/11/23 11:22

Matrix: Water

Date Received: 04/14/23 08:00

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		04/18/23 14:00	04/19/23 23:59	1
Arsenic	2.0	J	5.0	0.75	ug/L		04/18/23 14:00	04/19/23 23:59	1
Barium	130		5.0	2.2	ug/L		04/18/23 14:00	04/19/23 23:59	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/19/23 23:59	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/19/23 23:59	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/19/23 23:59	1
Cobalt	1.0		1.0	0.19	ug/L		04/18/23 14:00	04/19/23 23:59	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/19/23 23:59	1
Lithium	4.6	J ^+	8.0	1.7	ug/L		04/18/23 14:00	04/19/23 23:59	1
Magnesium	15000		1000	61	ug/L		04/18/23 14:00	04/19/23 23:59	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/19/23 23:59	1
Potassium	1800		1000	220	ug/L		04/18/23 14:00	04/19/23 23:59	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/19/23 23:59	1
Sodium	18000		1000	330	ug/L		04/18/23 14:00	04/19/23 23:59	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/19/23 23:59	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		04/18/23 14:00	04/19/23 19:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			04/24/23 15:43	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			04/24/23 15:43	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 15:43	1
Fluoride (EPA 300.0-1993 R2.1)	0.14		0.050	0.024	mg/L			05/09/23 23:23	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.125	U	0.116	0.116	1.00	0.180	pCi/L	04/27/23 13:34	05/19/23 19:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.6		30 - 110					04/27/23 13:34	05/19/23 19:39	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.172	U	0.279	0.280	1.00	0.477	pCi/L	04/27/23 14:08	05/16/23 11:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.6		30 - 110					04/27/23 14:08	05/16/23 11:15	1
Y Carrier	85.6		30 - 110					04/27/23 14:08	05/16/23 11:15	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-23-F-20230411-01

Lab Sample ID: 240-183578-3

Date Collected: 04/11/23 11:22

Matrix: Water

Date Received: 04/14/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.297	U	0.302	0.303	5.00	0.477	pCi/L		05/22/23 12:41	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-08-F-20230411-01

Lab Sample ID: 240-183578-4

Date Collected: 04/11/23 12:27

Matrix: Water

Date Received: 04/14/23 08:00

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		04/18/23 14:00	04/20/23 00:01	1
Arsenic	3.6	J	5.0	0.75	ug/L		04/18/23 14:00	04/20/23 00:01	1
Barium	180		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 00:01	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 00:01	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:01	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/20/23 00:01	1
Cobalt	2.6		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 00:01	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 00:01	1
Lithium	5.1	J ^+	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 00:01	1
Magnesium	12000		1000	61	ug/L		04/18/23 14:00	04/20/23 00:01	1
Molybdenum	1.8	J	5.0	1.1	ug/L		04/18/23 14:00	04/20/23 00:01	1
Potassium	1200		1000	220	ug/L		04/18/23 14:00	04/20/23 00:01	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 00:01	1
Sodium	12000		1000	330	ug/L		04/18/23 14:00	04/20/23 00:01	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:01	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		04/18/23 14:00	04/19/23 19:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	210		5.0	2.6	mg/L			04/24/23 15:48	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	210		5.0	2.6	mg/L			04/24/23 15:48	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 15:48	1
Fluoride (EPA 300.0-1993 R2.1)	0.13		0.050	0.024	mg/L			05/08/23 23:52	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0642	U	0.0918	0.0920	1.00	0.156	pCi/L	04/27/23 13:34	05/19/23 19:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.3		30 - 110					04/27/23 13:34	05/19/23 19:39	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.131	U	0.271	0.271	1.00	0.473	pCi/L	04/27/23 14:08	05/16/23 11:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.3		30 - 110					04/27/23 14:08	05/16/23 11:16	1
Y Carrier	82.6		30 - 110					04/27/23 14:08	05/16/23 11:16	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-08-F-20230411-01

Lab Sample ID: 240-183578-4

Date Collected: 04/11/23 12:27

Matrix: Water

Date Received: 04/14/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.195	U	0.286	0.286	5.00	0.473	pCi/L		05/22/23 12:41	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-14-F-20230411-01

Lab Sample ID: 240-183578-5

Date Collected: 04/11/23 14:00

Matrix: Water

Date Received: 04/14/23 08:00

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		04/18/23 14:00	04/20/23 00:04	1
Arsenic	4.9	J	5.0	0.75	ug/L		04/18/23 14:00	04/20/23 00:04	1
Barium	110		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 00:04	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 00:04	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:04	1
Chromium	2.0	J	5.0	1.2	ug/L		04/18/23 14:00	04/20/23 00:04	1
Cobalt	2.3		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 00:04	1
Lead	1.1		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 00:04	1
Lithium	6.9	J	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 15:18	1
Magnesium	20000		1000	61	ug/L		04/18/23 14:00	04/20/23 00:04	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/20/23 00:04	1
Potassium	1600		1000	220	ug/L		04/18/23 14:00	04/20/23 00:04	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 00:04	1
Sodium	22000		1000	330	ug/L		04/18/23 14:00	04/20/23 00:04	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:04	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		04/18/23 14:00	04/19/23 19:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	82		5.0	2.6	mg/L			04/24/23 15:51	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	82		5.0	2.6	mg/L			04/24/23 15:51	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 15:51	1
Fluoride (EPA 300.0-1993 R2.1)	0.068		0.050	0.024	mg/L			05/09/23 23:43	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	0.438		0.240	0.244	1.00	0.288	pCi/L	04/27/23 13:34	05/19/23 19:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	52.1		30 - 110					04/27/23 13:34	05/19/23 19:45	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	0.0693	U G	0.572	0.572	1.00	1.06	pCi/L	04/27/23 14:08	05/16/23 11:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	52.1		30 - 110					04/27/23 14:08	05/16/23 11:16	1
Y Carrier	89.7		30 - 110					04/27/23 14:08	05/16/23 11:16	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-14-F-20230411-01

Lab Sample ID: 240-183578-5

Date Collected: 04/11/23 14:00

Matrix: Water

Date Received: 04/14/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.507	U	0.620	0.622	5.00	1.06	pCi/L		05/22/23 12:41	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-12-F-20230411-01

Lab Sample ID: 240-183578-6

Date Collected: 04/11/23 14:58

Matrix: Water

Date Received: 04/14/23 08:00

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		04/18/23 14:00	04/20/23 00:07	1
Arsenic	6.5		5.0	0.75	ug/L		04/18/23 14:00	04/20/23 00:07	1
Barium	130		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 00:07	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 00:07	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:07	1
Chromium	4.1	J	5.0	1.2	ug/L		04/18/23 14:00	04/20/23 00:07	1
Cobalt	8.8		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 00:07	1
Lead	4.7		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 00:07	1
Lithium	9.8		8.0	1.7	ug/L		04/18/23 14:00	04/20/23 15:20	1
Magnesium	17000		1000	61	ug/L		04/18/23 14:00	04/20/23 00:07	1
Molybdenum	2.0	J	5.0	1.1	ug/L		04/18/23 14:00	04/20/23 00:07	1
Potassium	2700		1000	220	ug/L		04/18/23 14:00	04/20/23 00:07	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 00:07	1
Sodium	28000		1000	330	ug/L		04/18/23 14:00	04/20/23 00:07	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:07	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		04/18/23 14:00	04/19/23 19:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	100		5.0	2.6	mg/L			04/24/23 15:55	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	100		5.0	2.6	mg/L			04/24/23 15:55	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 15:55	1
Fluoride (EPA 300.0-1993 R2.1)	0.086	H	0.050	0.024	mg/L			05/10/23 00:03	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	-0.0255	U	0.232	0.232	1.00	0.489	pCi/L	04/27/23 13:34	05/19/23 19:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	56.8		30 - 110					04/27/23 13:34	05/19/23 19:45	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.324	U G	0.878	0.879	1.00	1.56	pCi/L	04/27/23 14:08	05/16/23 11:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	56.8		30 - 110					04/27/23 14:08	05/16/23 11:16	1
Y Carrier	85.6		30 - 110					04/27/23 14:08	05/16/23 11:16	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-12-F-20230411-01

Lab Sample ID: 240-183578-6

Date Collected: 04/11/23 14:58

Matrix: Water

Date Received: 04/14/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.298	U	0.908	0.909	5.00	1.56	pCi/L		05/22/23 12:41	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: EB-001-F-20230411-01

Lab Sample ID: 240-183578-7

Date Collected: 04/11/23 15:30

Matrix: Water

Date Received: 04/14/23 08:00

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		04/18/23 14:00	04/20/23 00:09	1
Arsenic	ND		5.0	0.75	ug/L		04/18/23 14:00	04/20/23 00:09	1
Barium	ND		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 00:09	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 00:09	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:09	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/20/23 00:09	1
Cobalt	ND		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 00:09	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 00:09	1
Lithium	ND	^+	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 00:09	1
Magnesium	ND		1000	61	ug/L		04/18/23 14:00	04/20/23 00:09	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/20/23 00:09	1
Potassium	ND		1000	220	ug/L		04/18/23 14:00	04/20/23 00:09	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 00:09	1
Sodium	ND		1000	330	ug/L		04/18/23 14:00	04/20/23 00:09	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:09	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		04/18/23 14:00	04/19/23 19:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 15:59	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 15:59	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 15:59	1
Fluoride (EPA 300.0-1993 R2.1)	ND	H	0.050	0.024	mg/L			05/10/23 00:23	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.00363	U	0.0760	0.0760	1.00	0.159	pCi/L	04/27/23 13:34	05/19/23 19:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.2		30 - 110					04/27/23 13:34	05/19/23 19:44	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.0687	U	0.312	0.312	1.00	0.573	pCi/L	04/27/23 14:08	05/16/23 11:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.2		30 - 110					04/27/23 14:08	05/16/23 11:18	1
Y Carrier	81.9		30 - 110					04/27/23 14:08	05/16/23 11:18	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: EB-001-F-20230411-01

Lab Sample ID: 240-183578-7

Date Collected: 04/11/23 15:30

Matrix: Water

Date Received: 04/14/23 08:00

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	0.0723	U	0.321	0.321	5.00	0.573	pCi/L		05/22/23 12:41	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-07-F-20230412-01

Lab Sample ID: 240-183578-8

Date Collected: 04/12/23 10:34

Matrix: Water

Date Received: 04/14/23 08:00

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		04/18/23 14:00	04/20/23 00:12	1
Arsenic	ND		5.0	0.75	ug/L		04/18/23 14:00	04/20/23 00:12	1
Barium	45		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 00:12	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 00:12	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:12	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/20/23 00:12	1
Cobalt	1.7		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 00:12	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 00:12	1
Lithium	7.0	J ^+	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 00:12	1
Magnesium	20000		1000	61	ug/L		04/18/23 14:00	04/20/23 00:12	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/20/23 00:12	1
Potassium	1300		1000	220	ug/L		04/18/23 14:00	04/20/23 00:12	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 00:12	1
Sodium	16000		1000	330	ug/L		04/18/23 14:00	04/20/23 00:12	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:12	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		04/18/23 14:00	04/19/23 19:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	140		5.0	2.6	mg/L			04/24/23 16:05	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	140		5.0	2.6	mg/L			04/24/23 16:05	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 16:05	1
Fluoride (EPA 300.0-1993 R2.1)	0.084		0.050	0.024	mg/L			05/10/23 16:15	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0631	U	0.0869	0.0871	1.00	0.147	pCi/L	04/27/23 13:34	05/19/23 19:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.8		30 - 110					04/27/23 13:34	05/19/23 19:44	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.0948	U	0.321	0.321	1.00	0.578	pCi/L	04/27/23 14:08	05/16/23 11:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.8		30 - 110					04/27/23 14:08	05/16/23 11:18	1
Y Carrier	79.3		30 - 110					04/27/23 14:08	05/16/23 11:18	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-07-F-20230412-01

Lab Sample ID: 240-183578-8

Date Collected: 04/12/23 10:34

Matrix: Water

Date Received: 04/14/23 08:00

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	0.158	U	0.333	0.333	5.00	0.578	pCi/L		05/22/23 12:41	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-18-F--20230412-01

Lab Sample ID: 240-183578-9

Date Collected: 04/12/23 11:31

Matrix: Water

Date Received: 04/14/23 08:00

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		04/18/23 14:00	04/20/23 00:15	1
Arsenic	1.0	J	5.0	0.75	ug/L		04/18/23 14:00	04/20/23 00:15	1
Barium	37		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 00:15	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 00:15	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:15	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/20/23 00:15	1
Cobalt	2.7		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 00:15	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 00:15	1
Lithium	7.9	J ^+	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 00:15	1
Magnesium	20000		1000	61	ug/L		04/18/23 14:00	04/20/23 00:15	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/20/23 00:15	1
Potassium	1300		1000	220	ug/L		04/18/23 14:00	04/20/23 00:15	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 00:15	1
Sodium	15000		1000	330	ug/L		04/18/23 14:00	04/20/23 00:15	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:15	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		04/18/23 14:00	04/19/23 19:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	110		5.0	2.6	mg/L			04/24/23 16:09	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	110		5.0	2.6	mg/L			04/24/23 16:09	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 16:09	1
Fluoride (EPA 300.0-1993 R2.1)	0.059		0.050	0.024	mg/L			05/10/23 16:36	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.109	U	0.0972	0.0977	1.00	0.146	pCi/L	04/27/23 13:34	05/19/23 19:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.9		30 - 110					04/27/23 13:34	05/19/23 19:44	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.239	U	0.293	0.294	1.00	0.485	pCi/L	04/27/23 14:08	05/16/23 11:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.9		30 - 110					04/27/23 14:08	05/16/23 11:18	1
Y Carrier	81.5		30 - 110					04/27/23 14:08	05/16/23 11:18	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-18-F--20230412-01

Lab Sample ID: 240-183578-9

Date Collected: 04/12/23 11:31

Matrix: Water

Date Received: 04/14/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.349	U	0.309	0.310	5.00	0.485	pCi/L		05/22/23 12:41	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-06-F-20230412-01

Lab Sample ID: 240-183578-10

Date Collected: 04/12/23 13:00

Matrix: Water

Date Received: 04/14/23 08:00

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		04/18/23 14:00	04/20/23 00:23	1
Arsenic	0.85	J	5.0	0.75	ug/L		04/18/23 14:00	04/20/23 00:23	1
Barium	94		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 00:23	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 00:23	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:23	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/20/23 00:23	1
Cobalt	3.9		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 00:23	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 00:23	1
Lithium	7.6	J ^+	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 00:23	1
Magnesium	25000		1000	61	ug/L		04/18/23 14:00	04/20/23 00:23	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/20/23 00:23	1
Potassium	1400		1000	220	ug/L		04/18/23 14:00	04/20/23 00:23	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 00:23	1
Sodium	15000		1000	330	ug/L		04/18/23 14:00	04/20/23 00:23	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:23	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		04/18/23 14:00	04/19/23 19:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	110		5.0	2.6	mg/L			04/24/23 16:17	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	110		5.0	2.6	mg/L			04/24/23 16:17	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 16:17	1
Fluoride (EPA 300.0-1993 R2.1)	0.098		0.050	0.024	mg/L			05/10/23 16:56	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	0.182		0.107	0.108	1.00	0.131	pCi/L	04/27/23 13:34	05/19/23 19:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.9		30 - 110					04/27/23 13:34	05/19/23 19:43	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	0.00790	U	0.252	0.252	1.00	0.472	pCi/L	04/27/23 14:08	05/16/23 11:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.9		30 - 110					04/27/23 14:08	05/16/23 11:18	1
Y Carrier	88.6		30 - 110					04/27/23 14:08	05/16/23 11:18	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-06-F-20230412-01

Lab Sample ID: 240-183578-10

Date Collected: 04/12/23 13:00

Matrix: Water

Date Received: 04/14/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.189	U	0.274	0.274	5.00	0.472	pCi/L		05/22/23 12:41	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-16-F-20230412-01

Lab Sample ID: 240-183578-11

Date Collected: 04/12/23 14:29

Matrix: Water

Date Received: 04/14/23 08:00

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		04/18/23 14:00	04/20/23 00:25	1
Arsenic	1.7	J	5.0	0.75	ug/L		04/18/23 14:00	04/20/23 00:25	1
Barium	63		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 00:25	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 00:25	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:25	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/20/23 00:25	1
Cobalt	2.4		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 00:25	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 00:25	1
Lithium	6.9	J	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 15:23	1
Magnesium	21000		1000	61	ug/L		04/18/23 14:00	04/20/23 00:25	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/20/23 00:25	1
Potassium	1600		1000	220	ug/L		04/18/23 14:00	04/20/23 00:25	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 00:25	1
Sodium	15000		1000	330	ug/L		04/18/23 14:00	04/20/23 00:25	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:25	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		04/18/23 14:00	04/19/23 19:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	200		5.0	2.6	mg/L			04/24/23 16:21	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	200		5.0	2.6	mg/L			04/24/23 16:21	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 16:21	1
Fluoride (EPA 300.0-1993 R2.1)	0.061		0.050	0.024	mg/L			05/10/23 17:16	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	0.178		0.117	0.118	1.00	0.146	pCi/L	04/27/23 13:34	05/19/23 19:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.5		30 - 110					04/27/23 13:34	05/19/23 19:43	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	0.377	U	0.364	0.366	1.00	0.583	pCi/L	04/27/23 14:08	05/16/23 11:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.5		30 - 110					04/27/23 14:08	05/16/23 11:19	1
Y Carrier	92.7		30 - 110					04/27/23 14:08	05/16/23 11:19	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-16-F-20230412-01

Lab Sample ID: 240-183578-11

Date Collected: 04/12/23 14:29

Matrix: Water

Date Received: 04/14/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.556	U	0.382	0.385	5.00	0.583	pCi/L		05/22/23 12:41	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: EB-001-F-20230412-01

Lab Sample ID: 240-183578-12

Date Collected: 04/12/23 15:30

Matrix: Water

Date Received: 04/14/23 08:00

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		04/18/23 14:00	04/20/23 00:28	1
Arsenic	ND		5.0	0.75	ug/L		04/18/23 14:00	04/20/23 00:28	1
Barium	ND		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 00:28	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 00:28	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:28	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/20/23 00:28	1
Cobalt	ND		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 00:28	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 00:28	1
Lithium	ND	^+	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 00:28	1
Magnesium	ND		1000	61	ug/L		04/18/23 14:00	04/20/23 00:28	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/20/23 00:28	1
Potassium	ND		1000	220	ug/L		04/18/23 14:00	04/20/23 00:28	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 00:28	1
Sodium	ND		1000	330	ug/L		04/18/23 14:00	04/20/23 00:28	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:28	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	F1	0.20	0.13	ug/L		04/18/23 14:00	04/19/23 19:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	180		5.0	2.6	mg/L			04/24/23 16:25	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	180		5.0	2.6	mg/L			04/24/23 16:25	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 16:25	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			05/10/23 17:36	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	-0.00529	U	0.0737	0.0737	1.00	0.156	pCi/L	04/27/23 13:34	05/19/23 19:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.8		30 - 110					04/27/23 13:34	05/19/23 19:43	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.0554	U	0.275	0.275	1.00	0.500	pCi/L	04/27/23 14:08	05/16/23 11:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.8		30 - 110					04/27/23 14:08	05/16/23 11:20	1
Y Carrier	84.9		30 - 110					04/27/23 14:08	05/16/23 11:20	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: EB-001-F-20230412-01

Lab Sample ID: 240-183578-12

Date Collected: 04/12/23 15:30

Matrix: Water

Date Received: 04/14/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.0501	U	0.285	0.285	5.00	0.500	pCi/L		05/22/23 12:41	1

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Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
240-183578-1	BAC-10-F-20230411-01	61.9	
240-183578-2	DUP-001-BAC-10-F-20230411-01	53.8	
240-183578-3	BAC-23-F-20230411-01	91.6	
240-183578-4	BAC-08-F-20230411-01	97.3	
240-183578-5	BAC-14-F-20230411-01	52.1	
240-183578-6	BAC-12-F-20230411-01	56.8	
240-183578-7	EB-001-F-20230411-01	76.2	
240-183578-8	BAC-07-F-20230412-01	82.8	
240-183578-9	BAC-18-F--20230412-01	91.9	
240-183578-10	BAC-06-F-20230412-01	93.9	
240-183578-11	BAC-16-F-20230412-01	99.5	
240-183578-12	EB-001-F-20230412-01	94.8	
LCS 160-609093/2-A	Lab Control Sample	94.3	
LCS D 160-609093/3-A	Lab Control Sample Dup	99.5	
MB 160-609093/1-A	Method Blank	92.9	

Tracer/Carrier Legend
 Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-183578-1	BAC-10-F-20230411-01	61.9	81.9
240-183578-2	DUP-001-BAC-10-F-20230411-01	53.8	82.6
240-183578-3	BAC-23-F-20230411-01	91.6	85.6
240-183578-4	BAC-08-F-20230411-01	97.3	82.6
240-183578-5	BAC-14-F-20230411-01	52.1	89.7
240-183578-6	BAC-12-F-20230411-01	56.8	85.6
240-183578-7	EB-001-F-20230411-01	76.2	81.9
240-183578-8	BAC-07-F-20230412-01	82.8	79.3
240-183578-9	BAC-18-F--20230412-01	91.9	81.5
240-183578-10	BAC-06-F-20230412-01	93.9	88.6
240-183578-11	BAC-16-F-20230412-01	99.5	92.7
240-183578-12	EB-001-F-20230412-01	94.8	84.9
LCS 160-609099/2-A	Lab Control Sample	94.3	86.4
LCS D 160-609099/3-A	Lab Control Sample Dup	99.5	84.9
MB 160-609099/1-A	Method Blank	92.9	86.7

Tracer/Carrier Legend
 Ba = Ba Carrier
 Y = Y Carrier

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-569804/1-A
Matrix: Water
Analysis Batch: 570098

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 569804

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	ND		2.0	0.57	ug/L		04/18/23 14:00	04/19/23 23:43	1
Arsenic	ND		5.0	0.75	ug/L		04/18/23 14:00	04/19/23 23:43	1
Barium	ND		5.0	2.2	ug/L		04/18/23 14:00	04/19/23 23:43	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/19/23 23:43	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/19/23 23:43	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/19/23 23:43	1
Cobalt	ND		1.0	0.19	ug/L		04/18/23 14:00	04/19/23 23:43	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/19/23 23:43	1
Lithium	ND	^+	8.0	1.7	ug/L		04/18/23 14:00	04/19/23 23:43	1
Magnesium	ND		1000	61	ug/L		04/18/23 14:00	04/19/23 23:43	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/19/23 23:43	1
Potassium	ND		1000	220	ug/L		04/18/23 14:00	04/19/23 23:43	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/19/23 23:43	1
Sodium	ND		1000	330	ug/L		04/18/23 14:00	04/19/23 23:43	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/19/23 23:43	1

Lab Sample ID: LCS 240-569804/2-A
Matrix: Water
Analysis Batch: 570098

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 569804

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec	Limits
		Result	Qualifier					
Antimony	100	105		ug/L		105		80 - 120
Arsenic	1000	953		ug/L		95		80 - 120
Barium	1000	980		ug/L		98		80 - 120
Beryllium	500	494		ug/L		99		80 - 120
Cadmium	500	492		ug/L		98		80 - 120
Chromium	500	496		ug/L		99		80 - 120
Cobalt	500	483		ug/L		97		80 - 120
Lead	500	464		ug/L		93		80 - 120
Lithium	500	527	^+	ug/L		105		80 - 120
Magnesium	25000	23800		ug/L		95		80 - 120
Molybdenum	500	487		ug/L		97		80 - 120
Potassium	25000	24100		ug/L		96		80 - 120
Selenium	1000	938		ug/L		94		80 - 120
Sodium	25000	23800		ug/L		95		80 - 120
Thallium	1000	978		ug/L		98		80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-569809/1-A
Matrix: Water
Analysis Batch: 570094

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 569809

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.20	0.13	ug/L		04/18/23 14:00	04/19/23 18:53	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-569809/2-A
Matrix: Water
Analysis Batch: 570094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 569809

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.73		ug/L		115	80 - 120

Lab Sample ID: 240-183578-12 MS
Matrix: Water
Analysis Batch: 570094

Client Sample ID: EB-001-F-20230412-01
Prep Type: Total/NA
Prep Batch: 569809

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

Lab Sample ID: 240-183578-12 MSD
Matrix: Water
Analysis Batch: 570094

Client Sample ID: EB-001-F-20230412-01
Prep Type: Total/NA
Prep Batch: 569809

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND	F1	1.00	1.09		ug/L		109	80 - 120	13	20

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-570651/30
Matrix: Water
Analysis Batch: 570651

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			04/24/23 13:02	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 13:02	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 13:02	1

Lab Sample ID: MB 240-570651/56
Matrix: Water
Analysis Batch: 570651

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			04/24/23 15:17	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 15:17	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 15:17	1

Lab Sample ID: LCS 240-570651/55
Matrix: Water
Analysis Batch: 570651

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	146		mg/L		100	86 - 123

Lab Sample ID: 240-183578-9 DU
Matrix: Water
Analysis Batch: 570651

Client Sample ID: BAC-18-F--20230412-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	110		98.7		mg/L		6	20
Bicarbonate Alkalinity as CaCO3	110		98.7		mg/L		6	20

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Method: 2320B-1997 - Alkalinity, Total (Continued)

Lab Sample ID: 240-183578-9 DU
 Matrix: Water
 Analysis Batch: 570651

Client Sample ID: BAC-18-F--20230412-01
 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: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-572493/3
 Matrix: Water
 Analysis Batch: 572493

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			05/08/23 13:48	1

Lab Sample ID: LCS 240-572493/4
 Matrix: Water
 Analysis Batch: 572493

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.62		mg/L		105	90 - 110

Lab Sample ID: MB 240-572672/3
 Matrix: Water
 Analysis Batch: 572672

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			05/09/23 18:40	1

Lab Sample ID: LCS 240-572672/4
 Matrix: Water
 Analysis Batch: 572672

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.60		mg/L		104	90 - 110

Lab Sample ID: MB 240-572836/3
 Matrix: Water
 Analysis Batch: 572836

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			05/10/23 15:35	1

Lab Sample ID: LCS 240-572836/4
 Matrix: Water
 Analysis Batch: 572836

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.61		mg/L		104	90 - 110

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-609093/1-A
Matrix: Water
Analysis Batch: 612288

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 609093

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.05188	U	0.0943	0.0944	1.00	0.166	pCi/L	04/27/23 13:34	05/19/23 19:37	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	92.9		30 - 110		04/27/23 13:34	05/19/23 19:37	1			

Lab Sample ID: LCS 160-609093/2-A
Matrix: Water
Analysis Batch: 612288

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 609093

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	9.643		1.07	1.00	0.175	pCi/L	85	75 - 113
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	94.3		30 - 110						

Lab Sample ID: LCSD 160-609093/3-A
Matrix: Water
Analysis Batch: 612288

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 609093

Analyte	Spike Added	LCSD Result	LCSD Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits	RER	Limit
				Uncert. (2σ+/-)							
Radium-226	11.3	10.10		1.11	1.00	0.174	pCi/L	89	75 - 113	0.21	1
Carrier	LCSD %Yield	LCSD Qualifier	Limits								
Ba Carrier	99.5		30 - 110								

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-609099/1-A
Matrix: Water
Analysis Batch: 611850

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 609099

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.09285	U	0.270	0.271	1.00	0.481	pCi/L	04/27/23 14:08	05/16/23 11:14	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	92.9		30 - 110		04/27/23 14:08	05/16/23 11:14	1			
Y Carrier	86.7		30 - 110		04/27/23 14:08	05/16/23 11:14	1			

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

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

Lab Sample ID: LCS 160-609099/2-A

Matrix: Water

Analysis Batch: 611850

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 609099

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	7.95	8.033		1.12	1.00	0.469	pCi/L	101	75 - 125
Carrier									
	%Yield	LCSD Qualifier	LCSD	Limits					
Ba Carrier	94.3			30 - 110					
Y Carrier	86.4			30 - 110					

Lab Sample ID: LCSD 160-609099/3-A

Matrix: Water

Analysis Batch: 611850

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 609099

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-228	7.95	8.070		1.10	1.00	0.411	pCi/L	101	75 - 125	0.02	1
Carrier											
	%Yield	LCSD Qualifier	LCSD	Limits							
Ba Carrier	99.5			30 - 110							
Y Carrier	84.9			30 - 110							

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Metals

Prep Batch: 569804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183578-1	BAC-10-F-20230411-01	Total Recoverable	Water	3005A	
240-183578-2	DUP-001-BAC-10-F-20230411-01	Total Recoverable	Water	3005A	
240-183578-3	BAC-23-F-20230411-01	Total Recoverable	Water	3005A	
240-183578-4	BAC-08-F-20230411-01	Total Recoverable	Water	3005A	
240-183578-5	BAC-14-F-20230411-01	Total Recoverable	Water	3005A	
240-183578-6	BAC-12-F-20230411-01	Total Recoverable	Water	3005A	
240-183578-7	EB-001-F-20230411-01	Total Recoverable	Water	3005A	
240-183578-8	BAC-07-F-20230412-01	Total Recoverable	Water	3005A	
240-183578-9	BAC-18-F--20230412-01	Total Recoverable	Water	3005A	
240-183578-10	BAC-06-F-20230412-01	Total Recoverable	Water	3005A	
240-183578-11	BAC-16-F-20230412-01	Total Recoverable	Water	3005A	
240-183578-12	EB-001-F-20230412-01	Total Recoverable	Water	3005A	
MB 240-569804/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-569804/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 569809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183578-1	BAC-10-F-20230411-01	Total/NA	Water	7470A	
240-183578-2	DUP-001-BAC-10-F-20230411-01	Total/NA	Water	7470A	
240-183578-3	BAC-23-F-20230411-01	Total/NA	Water	7470A	
240-183578-4	BAC-08-F-20230411-01	Total/NA	Water	7470A	
240-183578-5	BAC-14-F-20230411-01	Total/NA	Water	7470A	
240-183578-6	BAC-12-F-20230411-01	Total/NA	Water	7470A	
240-183578-7	EB-001-F-20230411-01	Total/NA	Water	7470A	
240-183578-8	BAC-07-F-20230412-01	Total/NA	Water	7470A	
240-183578-9	BAC-18-F--20230412-01	Total/NA	Water	7470A	
240-183578-10	BAC-06-F-20230412-01	Total/NA	Water	7470A	
240-183578-11	BAC-16-F-20230412-01	Total/NA	Water	7470A	
240-183578-12	EB-001-F-20230412-01	Total/NA	Water	7470A	
MB 240-569809/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-569809/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-183578-12 MS	EB-001-F-20230412-01	Total/NA	Water	7470A	
240-183578-12 MSD	EB-001-F-20230412-01	Total/NA	Water	7470A	

Analysis Batch: 570094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183578-1	BAC-10-F-20230411-01	Total/NA	Water	7470A	569809
240-183578-2	DUP-001-BAC-10-F-20230411-01	Total/NA	Water	7470A	569809
240-183578-3	BAC-23-F-20230411-01	Total/NA	Water	7470A	569809
240-183578-4	BAC-08-F-20230411-01	Total/NA	Water	7470A	569809
240-183578-5	BAC-14-F-20230411-01	Total/NA	Water	7470A	569809
240-183578-6	BAC-12-F-20230411-01	Total/NA	Water	7470A	569809
240-183578-7	EB-001-F-20230411-01	Total/NA	Water	7470A	569809
240-183578-8	BAC-07-F-20230412-01	Total/NA	Water	7470A	569809
240-183578-9	BAC-18-F--20230412-01	Total/NA	Water	7470A	569809
240-183578-10	BAC-06-F-20230412-01	Total/NA	Water	7470A	569809
240-183578-11	BAC-16-F-20230412-01	Total/NA	Water	7470A	569809
240-183578-12	EB-001-F-20230412-01	Total/NA	Water	7470A	569809
MB 240-569809/1-A	Method Blank	Total/NA	Water	7470A	569809
LCS 240-569809/2-A	Lab Control Sample	Total/NA	Water	7470A	569809
240-183578-12 MS	EB-001-F-20230412-01	Total/NA	Water	7470A	569809

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Metals (Continued)

Analysis Batch: 570094 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183578-12 MSD	EB-001-F-20230412-01	Total/NA	Water	7470A	569809

Analysis Batch: 570098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183578-1	BAC-10-F-20230411-01	Total Recoverable	Water	6020B	569804
240-183578-2	DUP-001-BAC-10-F-20230411-01	Total Recoverable	Water	6020B	569804
240-183578-3	BAC-23-F-20230411-01	Total Recoverable	Water	6020B	569804
240-183578-4	BAC-08-F-20230411-01	Total Recoverable	Water	6020B	569804
240-183578-5	BAC-14-F-20230411-01	Total Recoverable	Water	6020B	569804
240-183578-6	BAC-12-F-20230411-01	Total Recoverable	Water	6020B	569804
240-183578-7	EB-001-F-20230411-01	Total Recoverable	Water	6020B	569804
240-183578-8	BAC-07-F-20230412-01	Total Recoverable	Water	6020B	569804
240-183578-9	BAC-18-F--20230412-01	Total Recoverable	Water	6020B	569804
240-183578-10	BAC-06-F-20230412-01	Total Recoverable	Water	6020B	569804
240-183578-11	BAC-16-F-20230412-01	Total Recoverable	Water	6020B	569804
240-183578-12	EB-001-F-20230412-01	Total Recoverable	Water	6020B	569804
MB 240-569804/1-A	Method Blank	Total Recoverable	Water	6020B	569804
LCS 240-569804/2-A	Lab Control Sample	Total Recoverable	Water	6020B	569804

Analysis Batch: 570329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183578-1	BAC-10-F-20230411-01	Total Recoverable	Water	6020B	569804
240-183578-2	DUP-001-BAC-10-F-20230411-01	Total Recoverable	Water	6020B	569804
240-183578-5	BAC-14-F-20230411-01	Total Recoverable	Water	6020B	569804
240-183578-6	BAC-12-F-20230411-01	Total Recoverable	Water	6020B	569804
240-183578-11	BAC-16-F-20230412-01	Total Recoverable	Water	6020B	569804

General Chemistry

Analysis Batch: 570651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183578-1	BAC-10-F-20230411-01	Total/NA	Water	2320B-1997	
240-183578-2	DUP-001-BAC-10-F-20230411-01	Total/NA	Water	2320B-1997	
240-183578-3	BAC-23-F-20230411-01	Total/NA	Water	2320B-1997	
240-183578-4	BAC-08-F-20230411-01	Total/NA	Water	2320B-1997	
240-183578-5	BAC-14-F-20230411-01	Total/NA	Water	2320B-1997	
240-183578-6	BAC-12-F-20230411-01	Total/NA	Water	2320B-1997	
240-183578-7	EB-001-F-20230411-01	Total/NA	Water	2320B-1997	
240-183578-8	BAC-07-F-20230412-01	Total/NA	Water	2320B-1997	
240-183578-9	BAC-18-F--20230412-01	Total/NA	Water	2320B-1997	
240-183578-10	BAC-06-F-20230412-01	Total/NA	Water	2320B-1997	
240-183578-11	BAC-16-F-20230412-01	Total/NA	Water	2320B-1997	
240-183578-12	EB-001-F-20230412-01	Total/NA	Water	2320B-1997	
MB 240-570651/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-570651/56	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-570651/55	Lab Control Sample	Total/NA	Water	2320B-1997	
240-183578-9 DU	BAC-18-F--20230412-01	Total/NA	Water	2320B-1997	

Analysis Batch: 572493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183578-4	BAC-08-F-20230411-01	Total/NA	Water	300.0-1993 R2.1	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

General Chemistry (Continued)

Analysis Batch: 572493 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-572493/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-572493/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 572672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183578-1	BAC-10-F-20230411-01	Total/NA	Water	300.0-1993 R2.1	
240-183578-2	DUP-001-BAC-10-F-20230411-01	Total/NA	Water	300.0-1993 R2.1	
240-183578-3	BAC-23-F-20230411-01	Total/NA	Water	300.0-1993 R2.1	
240-183578-5	BAC-14-F-20230411-01	Total/NA	Water	300.0-1993 R2.1	
240-183578-6	BAC-12-F-20230411-01	Total/NA	Water	300.0-1993 R2.1	
240-183578-7	EB-001-F-20230411-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-572672/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-572672/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 572836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183578-8	BAC-07-F-20230412-01	Total/NA	Water	300.0-1993 R2.1	
240-183578-9	BAC-18-F--20230412-01	Total/NA	Water	300.0-1993 R2.1	
240-183578-10	BAC-06-F-20230412-01	Total/NA	Water	300.0-1993 R2.1	
240-183578-11	BAC-16-F-20230412-01	Total/NA	Water	300.0-1993 R2.1	
240-183578-12	EB-001-F-20230412-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-572836/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-572836/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

Rad

Prep Batch: 609093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183578-1	BAC-10-F-20230411-01	Total/NA	Water	PrecSep-21	
240-183578-2	DUP-001-BAC-10-F-20230411-01	Total/NA	Water	PrecSep-21	
240-183578-3	BAC-23-F-20230411-01	Total/NA	Water	PrecSep-21	
240-183578-4	BAC-08-F-20230411-01	Total/NA	Water	PrecSep-21	
240-183578-5	BAC-14-F-20230411-01	Total/NA	Water	PrecSep-21	
240-183578-6	BAC-12-F-20230411-01	Total/NA	Water	PrecSep-21	
240-183578-7	EB-001-F-20230411-01	Total/NA	Water	PrecSep-21	
240-183578-8	BAC-07-F-20230412-01	Total/NA	Water	PrecSep-21	
240-183578-9	BAC-18-F--20230412-01	Total/NA	Water	PrecSep-21	
240-183578-10	BAC-06-F-20230412-01	Total/NA	Water	PrecSep-21	
240-183578-11	BAC-16-F-20230412-01	Total/NA	Water	PrecSep-21	
240-183578-12	EB-001-F-20230412-01	Total/NA	Water	PrecSep-21	
MB 160-609093/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-609093/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-609093/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 609099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183578-1	BAC-10-F-20230411-01	Total/NA	Water	PrecSep_0	
240-183578-2	DUP-001-BAC-10-F-20230411-01	Total/NA	Water	PrecSep_0	
240-183578-3	BAC-23-F-20230411-01	Total/NA	Water	PrecSep_0	
240-183578-4	BAC-08-F-20230411-01	Total/NA	Water	PrecSep_0	
240-183578-5	BAC-14-F-20230411-01	Total/NA	Water	PrecSep_0	

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Rad (Continued)

Prep Batch: 609099 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183578-6	BAC-12-F-20230411-01	Total/NA	Water	PrecSep_0	
240-183578-7	EB-001-F-20230411-01	Total/NA	Water	PrecSep_0	
240-183578-8	BAC-07-F-20230412-01	Total/NA	Water	PrecSep_0	
240-183578-9	BAC-18-F--20230412-01	Total/NA	Water	PrecSep_0	
240-183578-10	BAC-06-F-20230412-01	Total/NA	Water	PrecSep_0	
240-183578-11	BAC-16-F-20230412-01	Total/NA	Water	PrecSep_0	
240-183578-12	EB-001-F-20230412-01	Total/NA	Water	PrecSep_0	
MB 160-609099/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-609099/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-609099/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-10-F-20230411-01

Lab Sample ID: 240-183578-1

Date Collected: 04/11/23 10:03

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/19/23 23:53
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570329	DSH	EET CLE	04/20/23 15:11
Total/NA	Prep	7470A			569809	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 19:02
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 15:35
Total/NA	Analysis	300.0-1993 R2.1		1	572672	JWW	EET CLE	05/09/23 22:42
Total/NA	Prep	PrecSep-21			609093	KAC	EET SL	04/27/23 13:34
Total/NA	Analysis	9315		1	612288	FLC	EET SL	05/19/23 19:38
Total/NA	Prep	PrecSep_0			609099	KAC	EET SL	04/27/23 14:08
Total/NA	Analysis	9320		1	611850	FLC	EET SL	05/16/23 11:15
Total/NA	Analysis	Ra226_Ra228		1	612631	SCB	EET SL	05/22/23 12:41

Client Sample ID: DUP-001-BAC-10-F-20230411-01

Lab Sample ID: 240-183578-2

Date Collected: 04/11/23 10:03

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/19/23 23:56
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570329	DSH	EET CLE	04/20/23 15:15
Total/NA	Prep	7470A			569809	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 19:05
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 15:39
Total/NA	Analysis	300.0-1993 R2.1		1	572672	JWW	EET CLE	05/09/23 23:02
Total/NA	Prep	PrecSep-21			609093	KAC	EET SL	04/27/23 13:34
Total/NA	Analysis	9315		1	612288	FLC	EET SL	05/19/23 19:39
Total/NA	Prep	PrecSep_0			609099	KAC	EET SL	04/27/23 14:08
Total/NA	Analysis	9320		1	611850	FLC	EET SL	05/16/23 11:15
Total/NA	Analysis	Ra226_Ra228		1	612631	SCB	EET SL	05/22/23 12:41

Client Sample ID: BAC-23-F-20230411-01

Lab Sample ID: 240-183578-3

Date Collected: 04/11/23 11:22

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/19/23 23:59
Total/NA	Prep	7470A			569809	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 19:07
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 15:43
Total/NA	Analysis	300.0-1993 R2.1		1	572672	JWW	EET CLE	05/09/23 23:23

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-23-F-20230411-01

Lab Sample ID: 240-183578-3

Date Collected: 04/11/23 11:22

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			609093	KAC	EET SL	04/27/23 13:34
Total/NA	Analysis	9315		1	612288	FLC	EET SL	05/19/23 19:39
Total/NA	Prep	PrecSep_0			609099	KAC	EET SL	04/27/23 14:08
Total/NA	Analysis	9320		1	611850	FLC	EET SL	05/16/23 11:15
Total/NA	Analysis	Ra226_Ra228		1	612631	SCB	EET SL	05/22/23 12:41

Client Sample ID: BAC-08-F-20230411-01

Lab Sample ID: 240-183578-4

Date Collected: 04/11/23 12:27

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 00:01
Total/NA	Prep	7470A			569809	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 19:09
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 15:48
Total/NA	Analysis	300.0-1993 R2.1		1	572493	JWW	EET CLE	05/08/23 23:52
Total/NA	Prep	PrecSep-21			609093	KAC	EET SL	04/27/23 13:34
Total/NA	Analysis	9315		1	612288	FLC	EET SL	05/19/23 19:39
Total/NA	Prep	PrecSep_0			609099	KAC	EET SL	04/27/23 14:08
Total/NA	Analysis	9320		1	611850	FLC	EET SL	05/16/23 11:16
Total/NA	Analysis	Ra226_Ra228		1	612631	SCB	EET SL	05/22/23 12:41

Client Sample ID: BAC-14-F-20230411-01

Lab Sample ID: 240-183578-5

Date Collected: 04/11/23 14:00

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 00:04
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570329	DSH	EET CLE	04/20/23 15:18
Total/NA	Prep	7470A			569809	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 19:11
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 15:51
Total/NA	Analysis	300.0-1993 R2.1		1	572672	JWW	EET CLE	05/09/23 23:43
Total/NA	Prep	PrecSep-21			609093	KAC	EET SL	04/27/23 13:34
Total/NA	Analysis	9315		1	612289	FLC	EET SL	05/19/23 19:45
Total/NA	Prep	PrecSep_0			609099	KAC	EET SL	04/27/23 14:08
Total/NA	Analysis	9320		1	611850	FLC	EET SL	05/16/23 11:16
Total/NA	Analysis	Ra226_Ra228		1	612631	SCB	EET SL	05/22/23 12:41

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-12-F-20230411-01

Lab Sample ID: 240-183578-6

Date Collected: 04/11/23 14:58

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 00:07
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570329	DSH	EET CLE	04/20/23 15:20
Total/NA	Prep	7470A			569809	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 19:13
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 15:55
Total/NA	Analysis	300.0-1993 R2.1		1	572672	JWW	EET CLE	05/10/23 00:03
Total/NA	Prep	PrecSep-21			609093	KAC	EET SL	04/27/23 13:34
Total/NA	Analysis	9315		1	612289	FLC	EET SL	05/19/23 19:45
Total/NA	Prep	PrecSep_0			609099	KAC	EET SL	04/27/23 14:08
Total/NA	Analysis	9320		1	611850	FLC	EET SL	05/16/23 11:16
Total/NA	Analysis	Ra226_Ra228		1	612631	SCB	EET SL	05/22/23 12:41

Client Sample ID: EB-001-F-20230411-01

Lab Sample ID: 240-183578-7

Date Collected: 04/11/23 15:30

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 00:09
Total/NA	Prep	7470A			569809	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 19:15
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 15:59
Total/NA	Analysis	300.0-1993 R2.1		1	572672	JWW	EET CLE	05/10/23 00:23
Total/NA	Prep	PrecSep-21			609093	KAC	EET SL	04/27/23 13:34
Total/NA	Analysis	9315		1	612289	FLC	EET SL	05/19/23 19:44
Total/NA	Prep	PrecSep_0			609099	KAC	EET SL	04/27/23 14:08
Total/NA	Analysis	9320		1	611700	FLC	EET SL	05/16/23 11:18
Total/NA	Analysis	Ra226_Ra228		1	612631	SCB	EET SL	05/22/23 12:41

Client Sample ID: BAC-07-F-20230412-01

Lab Sample ID: 240-183578-8

Date Collected: 04/12/23 10:34

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 00:12
Total/NA	Prep	7470A			569809	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 19:17
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 16:05
Total/NA	Analysis	300.0-1993 R2.1		1	572836	JWW	EET CLE	05/10/23 16:15
Total/NA	Prep	PrecSep-21			609093	KAC	EET SL	04/27/23 13:34
Total/NA	Analysis	9315		1	612289	FLC	EET SL	05/19/23 19:44

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-07-F-20230412-01

Lab Sample ID: 240-183578-8

Date Collected: 04/12/23 10:34

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep_0			609099	KAC	EET SL	04/27/23 14:08
Total/NA	Analysis	9320		1	611700	FLC	EET SL	05/16/23 11:18
Total/NA	Analysis	Ra226_Ra228		1	612631	SCB	EET SL	05/22/23 12:41

Client Sample ID: BAC-18-F--20230412-01

Lab Sample ID: 240-183578-9

Date Collected: 04/12/23 11:31

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 00:15
Total/NA	Prep	7470A			569809	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 19:19
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 16:09
Total/NA	Analysis	300.0-1993 R2.1		1	572836	JWW	EET CLE	05/10/23 16:36
Total/NA	Prep	PrecSep-21			609093	KAC	EET SL	04/27/23 13:34
Total/NA	Analysis	9315		1	612289	FLC	EET SL	05/19/23 19:44
Total/NA	Prep	PrecSep_0			609099	KAC	EET SL	04/27/23 14:08
Total/NA	Analysis	9320		1	611700	FLC	EET SL	05/16/23 11:18
Total/NA	Analysis	Ra226_Ra228		1	612631	SCB	EET SL	05/22/23 12:41

Client Sample ID: BAC-06-F-20230412-01

Lab Sample ID: 240-183578-10

Date Collected: 04/12/23 13:00

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 00:23
Total/NA	Prep	7470A			569809	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 19:26
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 16:17
Total/NA	Analysis	300.0-1993 R2.1		1	572836	JWW	EET CLE	05/10/23 16:56
Total/NA	Prep	PrecSep-21			609093	KAC	EET SL	04/27/23 13:34
Total/NA	Analysis	9315		1	612289	FLC	EET SL	05/19/23 19:43
Total/NA	Prep	PrecSep_0			609099	KAC	EET SL	04/27/23 14:08
Total/NA	Analysis	9320		1	611700	FLC	EET SL	05/16/23 11:18
Total/NA	Analysis	Ra226_Ra228		1	612631	SCB	EET SL	05/22/23 12:41

Client Sample ID: BAC-16-F-20230412-01

Lab Sample ID: 240-183578-11

Date Collected: 04/12/23 14:29

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 00:25

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-16-F-20230412-01

Lab Sample ID: 240-183578-11

Date Collected: 04/12/23 14:29

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570329	DSH	EET CLE	04/20/23 15:23
Total/NA	Prep	7470A			569809	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 19:28
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 16:21
Total/NA	Analysis	300.0-1993 R2.1		1	572836	JWW	EET CLE	05/10/23 17:16
Total/NA	Prep	PrecSep-21			609093	KAC	EET SL	04/27/23 13:34
Total/NA	Analysis	9315		1	612289	FLC	EET SL	05/19/23 19:43
Total/NA	Prep	PrecSep_0			609099	KAC	EET SL	04/27/23 14:08
Total/NA	Analysis	9320		1	611700	FLC	EET SL	05/16/23 11:19
Total/NA	Analysis	Ra226_Ra228		1	612631	SCB	EET SL	05/22/23 12:41

Client Sample ID: EB-001-F-20230412-01

Lab Sample ID: 240-183578-12

Date Collected: 04/12/23 15:30

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 00:28
Total/NA	Prep	7470A			569809	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 19:30
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 16:25
Total/NA	Analysis	300.0-1993 R2.1		1	572836	JWW	EET CLE	05/10/23 17:36
Total/NA	Prep	PrecSep-21			609093	KAC	EET SL	04/27/23 13:34
Total/NA	Analysis	9315		1	612289	FLC	EET SL	05/19/23 19:43
Total/NA	Prep	PrecSep_0			609099	KAC	EET SL	04/27/23 14:08
Total/NA	Analysis	9320		1	611700	FLC	EET SL	05/16/23 11:20
Total/NA	Analysis	Ra226_Ra228		1	612631	SCB	EET SL	05/22/23 12:41

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
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

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
California	State	2927	02-27-24
Connecticut	State	PH-0590	06-29-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-28-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-23
Florida	NELAP	E87689	06-30-23
HI - RadChem Recognition	State	n/a	06-30-23
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana (All)	NELAP	04080	06-30-23
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-23
MI - RadChem Recognition	State	9005	06-30-23
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-23
New Jersey	NELAP	MO002	06-30-23
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-23
North Dakota	State	R-207	06-30-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

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
Oklahoma	NELAP	9997	08-31-23
Oregon	NELAP	4157	09-01-23
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23
Texas	NELAP	T104704193	07-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO000542021-14	07-31-23
Virginia	NELAP	10310	06-14-23
Washington	State	C592	08-30-23
West Virginia DEP	State	381	10-31-23

Client Information		Sampler: <i>Bobby Caste</i>		Lab PM: Cisneros, Roxanne		Camer Tracking No(s): 240-93466-34578.1	
Client Contact: Taylor Huffman		Phone: 740-373-4308		E-Mail: roxanne.cisneros@Eurofinset.com		Page: <i>Page 1 of 2</i>	
Company: Lightstone Generation Gavin Power LLC		PWSID:		State of Origin:		Job #:	
Address: 7397 OH-7		City: Cheshire		State: OH, 45620		Preservation Codes:	
Phone: 740-925-3171(Tel)		TAT Requested (days):		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		M - Hazane N - None O - AsNaO2 P - Na2O4S Q - NaHSO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Email: taylor.huffman@lightstonegen.com		PO #: 2935505		Field Filtered Sample (Yes or No):		Other:	
Project Name: Federal CCR Wells - App IV		WO #: 24019633		Perform Filtered Sample (Yes or No):		Special Instructions/Note:	
Site:		SSOW#:		6020, 7470A		Total Number of Containers: <input checked="" type="checkbox"/>	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
BAC-10-F-20230411-01		4-11-23		1003		G Water	
NUP-001-BAC-10-F-20230411-01		4-11-23		1603		G Water	
BAC-23-F-20230411-01		4-11-23		1122		G Water	
BAC-08-F-20230411-01		4-11-23		1227		G Water	
BAC-14-F-20230411-01		4-11-23		1400		G Water	
BAC-12-F-20230411-01		4-11-23		1458		G W	
EB-001-F-20230411-01		4-11-23		1530		G W	
BAC-07-F-20230412-01		4-12-23		1034		G W	
BAC-18-F-20230412-01		4-12-23		1131		G W	
BAC-06-F-20230412-01		4-12-23		1300		G W	
BAC-16-F-20230412-01		4-12-23		1424		G W	
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard		<input type="checkbox"/> Flammable		<input type="checkbox"/> Skin Irritant	
		<input type="checkbox"/> Poison B		<input type="checkbox"/> Unknown		<input type="checkbox"/> Radiological	
						Deliverable Requested: I, II, III, IV, Other (specify)	
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by: <i>Bobby Caste</i>		4-13-23/0840		Company: KEMRON		Date/Time: 4-13-23 1130	
Relinquished by: <i>Bobby Caste</i>		4-13-23 1700		Company: E77		Date/Time: 4-13-23 800	
Relinquished by: <i>Bobby Caste</i>				Company: <i>Raymond Novak</i>		Date/Time: <i>4/13/23</i>	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Company: <i>577</i>	



183578

Eurofins - Canton Sample Receipt Form/Narrative
Barberton Facility

Login # : _____

Client Lightstone

Site Name _____

Cooler unpacked by:

Cooler Received on 4 14 23

Opened on 4 14 23

Rachelle Haidet

FedEx: 1st Grd Exp UPS FAS Clipper

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 # 22 (CF +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 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 NA

-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# HC203864

14. Were VOAs on the COC? Yes No NA

15. Were air bubbles >6 mm in any VOA vials? Yes No NA  ← Larger than this.

16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No NA

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: _____

Temperature readings:

Client Sample ID	Lab ID	Container Type	Container		Preservative	
			pH	Temp	Added (mls)	Lot #
BAC-10-F-20230411-01	240-183578-C-1	Plastic 500ml - with Nitric Acid	<2			
BAC-10-F-20230411-01	240-183578-D-1	Plastic 1 liter - Nitric Acid	<2			
BAC-10-F-20230411-01	240-183578-E-1	Plastic 1 liter - Nitric Acid	<2			
DUP-001-BAC-10-F-20230411-01	240-183578-C-2	Plastic 500ml - with Nitric Acid	<2			
DUP-001-BAC-10-F-20230411-01	240-183578-D-2	Plastic 1 liter - Nitric Acid	<2			
DUP-001-BAC-10-F-20230411-01	240-183578-E-2	Plastic 1 liter - Nitric Acid	<2			
BAC-23-F-20230411-01	240-183578-C-3	Plastic 500ml - with Nitric Acid	<2			
BAC-23-F-20230411-01	240-183578-D-3	Plastic 1 liter - Nitric Acid	<2			
BAC-23-F-20230411-01	240-183578-E-3	Plastic 1 liter - Nitric Acid	<2			
BAC-08-F-20230411-01	240-183578-C-4	Plastic 500ml - with Nitric Acid	<2			
BAC-08-F-20230411-01	240-183578-D-4	Plastic 1 liter - Nitric Acid	<2			
BAC-08-F-20230411-01	240-183578-E-4	Plastic 1 liter - Nitric Acid	<2			
BAC-14-F-20230411-01	240-183578-C-5	Plastic 500ml - with Nitric Acid	<2			
BAC-14-F-20230411-01	240-183578-D-5	Plastic 1 liter - Nitric Acid	<2			
BAC-14-F-20230411-01	240-183578-E-5	Plastic 1 liter - Nitric Acid	<2			
BAC-12-F-20230411-01	240-183578-C-6	Plastic 500ml - with Nitric Acid	<2			
BAC-12-F-20230411-01	240-183578-D-6	Plastic 1 liter - Nitric Acid	<2			
BAC-12-F-20230411-01	240-183578-E-6	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-20230411-01	240-183578-C-7	Plastic 500ml - with Nitric Acid	<2			
EB-001-F-20230411-01	240-183578-D-7	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-20230411-01	240-183578-E-7	Plastic 1 liter - Nitric Acid	<2			
BAC-07-F-20230412-01	240-183578-C-8	Plastic 500ml - with Nitric Acid	<2			
BAC-07-F-20230412-01	240-183578-D-8	Plastic 1 liter - Nitric Acid	<2			
BAC-07-F-20230412-01	240-183578-E-8	Plastic 1 liter - Nitric Acid	<2			
BAC-18-F--20230412-01	240-183578-C-9	Plastic 500ml - with Nitric Acid	<2			
BAC-18-F--20230412-01	240-183578-D-9	Plastic 1 liter - Nitric Acid	<2			
BAC-18-F--20230412-01	240-183578-E-9	Plastic 1 liter - Nitric Acid	<2			
BAC-06-F-20230412-01	240-183578-C-10	Plastic 500ml - with Nitric Acid	<2			
BAC-06-F-20230412-01	240-183578-D-10	Plastic 1 liter - Nitric Acid	<2			
BAC-06-F-20230412-01	240-183578-E-10	Plastic 1 liter - Nitric Acid	<2			
BAC-16-F-20230412-01	240-183578-C-11	Plastic 500ml - with Nitric Acid	<2			
BAC-16-F-20230412-01	240-183578-D-11	Plastic 1 liter - Nitric Acid	<2			
BAC-16-F-20230412-01	240-183578-E-11	Plastic 1 liter - Nitric Acid	<2			

Client Sample ID

Lab ID

Container Type

Container

Preservative

pH

Temp

Added (mls)

Lot #

EB-001-F-20230412-01

240-183578-C-12

Plastic 500ml - with Nitric Acid

<2

EB-001-F-20230412-01

240-183578-D-12

Plastic 1 liter - Nitric Acid

<2

EB-001-F-20230412-01

240-183578-E-12

Plastic 1 liter - Nitric Acid

<2

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Chain of Custody Record



Client Information (Sub Contract Lab)		Lab PM: Cisneros, Roxanne		COC No: 240-166535-1	
Client Contact: Shipping/Receiving		E-Mail: roxanne.cisneros@eurofins.com		Page: Page 1 of 2	
Company: TestAmerica Laboratories, Inc.		Phone:		State of Origin: Ohio	
Address: 13715 Rider Trail North,		Accreditations Required (See note):		Job #: 240-183578-1	
City: Earth City	Due Date Requested: 5/18/2023	TAT Requested (days):		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Inzma Z - other (specify)	
State, Zip: MO, 63045	PO #:	WO #:		Analysis Requested	
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	Project #: 24019633	SSOW#:		Total Number of Containers	
Email:	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	MATRIX (Water, Swab, Oil, BT, etc.)	Special Instructions/Note:
Project Name: Federal CCR Wells - App IV	4/11/23	10:03 Eastern		Water	Recount of TAR after 21 day ingrowth if > action limit; save planchet
Site:	4/11/23	10:03 Eastern		Water	Recount of TAR after 21 day ingrowth if > action limit; save planchet
	4/11/23	11:22 Eastern		Water	Recount of TAR after 21 day ingrowth if > action limit; save planchet
	4/11/23	12:27 Eastern		Water	Recount of TAR after 21 day ingrowth if > action limit; save planchet
	4/11/23	14:00 Eastern		Water	Recount of TAR after 21 day ingrowth if > action limit; save planchet
	4/11/23	14:58 Eastern		Water	Recount of TAR after 21 day ingrowth if > action limit; save planchet
	4/11/23	15:30 Eastern		Water	Recount of TAR after 21 day ingrowth if > action limit; save planchet
	4/12/23	10:34 Eastern		Water	Recount of TAR after 21 day ingrowth if > action limit; save planchet
	4/12/23	11:31 Eastern		Water	Recount of TAR after 21 day ingrowth if > action limit; save planchet
<p>Sample Identification - Client ID (Lab ID)</p> <p>BAC-10-F-20230411-01 (240-183578-1)</p> <p>DUP-001-BAC-10-F-20230411-01 (240-183578-2)</p> <p>BAC-23-F-20230411-01 (240-183578-3)</p> <p>BAC-08-F-20230411-01 (240-183578-4)</p> <p>BAC-14-F-20230411-01 (240-183578-5)</p> <p>BAC-12-F-20230411-01 (240-183578-6)</p> <p>EB-001-F-20230411-01 (240-183578-7)</p> <p>BAC-07-F-20230412-01 (240-183578-8)</p> <p>BAC-18-F--20230412-01 (240-183578-9)</p>					
<p>Possible Hazard Identification</p> <p>Unconfirmed</p> <p>Deliverable Requested: I, II, III, IV, Other (specify)</p> <p>Primary Deliverable Rank: 2</p>					
<p>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</p> <p>Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months</p> <p>Special Instructions/QC Requirements:</p>					
<p>Empty Kit Relinquished by: _____ Date: _____ Method of Shipment:</p> <p>Relinquished by: <i>Karen Havel</i> Date/Time: <i>4/23 1200</i> Company: <i>BEAC</i></p> <p>Relinquished by: <i>FEDEX</i> Date/Time: _____ Company: _____</p> <p>Relinquished by: _____ Date/Time: _____ Company: _____</p>					
<p>Custody Seals Intact: _____ Custody Seal No.: _____</p> <p>Δ Yes Δ No</p> <p>Cooler Temperature(s) °C and Other Remarks:</p>					



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-183578-1

Login Number: 183578

List Number: 2

Creator: Worthington, Sierra M

List Source: Eurofins St. Louis

List Creation: 04/18/23 01:40 PM

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





ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 4/28/2023 12:27:07 PM

JOB DESCRIPTION

Federal CCR Wells - App III

JOB NUMBER

240-183580-1

Eurofins Canton

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
4/28/2023 12:27:07 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
E	Result exceeded calibration range.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Job ID: 240-183580-1

Laboratory: Eurofins Canton

Narrative

Job Narrative
240-183580-1

Comments

No additional comments.

Receipt

The samples were received on 4/14/2023 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 1.1° C, 1.2° C, 1.4° C, 1.6° C, 1.8° C, 1.8° C, 2.0° C, 2.3° C, 2.6° C, 2.8° C, 3.2° C and 18.1° C.

Metals

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

General Chemistry

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

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Method Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CAN
6020B	Metals (ICP/MS)	SW846	EET CAN
2320B-1997	Alkalinity, Total	SM	EET CAN
300.0	Anions, Ion Chromatography	EPA	EET CAN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CAN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CAN

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 CAN = Eurofins Canton, 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 - App III

Job ID: 240-183580-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-183580-1	BAC-10-F-20230411-01	Water	04/11/23 10:03	04/14/23 08:00
240-183580-2	DUP-001-BAC-10-F-20230411-01	Water	04/11/23 10:03	04/14/23 08:00
240-183580-3	BAC-23-F-20230411-01	Water	04/11/23 11:22	04/14/23 08:00
240-183580-4	BAC-08-F-20230411-01	Water	04/11/23 12:27	04/14/23 08:00
240-183580-5	BAC-14-F-20230411-01	Water	04/11/23 14:00	04/14/23 08:00
240-183580-6	BAC-12-F-20230411-01	Water	04/11/23 14:58	04/14/23 08:00
240-183580-7	EB-001-F-20230411-01	Water	04/11/23 15:30	04/14/23 08:00
240-183580-8	BAC-07-F-20230412-01	Water	04/12/23 10:34	04/14/23 08:00
240-183580-9	BAC-18-F-20230412-01	Water	04/12/23 11:31	04/14/23 08:00
240-183580-10	BAC-06-F-20230412-01	Water	04/12/23 13:00	04/14/23 08:00
240-183580-11	BAC-16-F-20230412-01	Water	04/12/23 14:29	04/14/23 08:00
240-183580-12	EB-001-F-20230412-01	Water	04/12/23 15:30	04/14/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-10-F-20230411-01

Lab Sample ID: 240-183580-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	730		100	57	ug/L	1		6010D	Total Recoverable
Calcium	120000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	30000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	56000		1000	330	ug/L	1		6020B	Total Recoverable
Chloride	51		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	270		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	700		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-001-BAC-10-F-20230411-01

Lab Sample ID: 240-183580-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	730		100	57	ug/L	1		6010D	Total Recoverable
Calcium	120000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	29000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	55000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	52		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.22		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	270		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	690		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-23-F-20230411-01

Lab Sample ID: 240-183580-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	280		100	57	ug/L	1		6010D	Total Recoverable
Calcium	130000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	15000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	19000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	44		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.14		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	150		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	500		10	7.8	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-08-F-20230411-01

Lab Sample ID: 240-183580-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	110		100	57	ug/L	1		6010D	Total Recoverable
Calcium	93000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	12000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	12000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	22		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	86		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	350		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-14-F-20230411-01

Lab Sample ID: 240-183580-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2700		100	57	ug/L	1		6010D	Total Recoverable
Calcium	74000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	22000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	34		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.066		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	220		2.0	0.70	mg/L	2		300.0	Total/NA
Total Dissolved Solids	470		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-12-F-20230411-01

Lab Sample ID: 240-183580-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2000		100	57	ug/L	1		6010D	Total Recoverable
Calcium	78000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	18000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	3200		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	29000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	110		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	110		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	59		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.082		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	200		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	460		10	7.8	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: EB-001-F-20230411-01

Lab Sample ID: 240-183580-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity	81		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	81		5.0	2.6	mg/L	1		2320B-1997	Total/NA

Client Sample ID: BAC-07-F-20230412-01

Lab Sample ID: 240-183580-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1100		100	57	ug/L	1		6010D	Total Recoverable
Calcium	91000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Chloride	26		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.075		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		2.0	0.70	mg/L	2		300.0	Total/NA
Total Dissolved Solids	440		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-18-F-20230412-01

Lab Sample ID: 240-183580-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1400		100	57	ug/L	1		6010D	Total Recoverable
Calcium	79000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1200		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	140		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	140		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	25		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.058		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		2.0	0.70	mg/L	2		300.0	Total/NA
Total Dissolved Solids	410		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-06-F-20230412-01

Lab Sample ID: 240-183580-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1800		100	57	ug/L	1		6010D	Total Recoverable
Calcium	110000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	26000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	110		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	110		5.0	2.6	mg/L	1		2320B-1997	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-06-F-20230412-01 (Continued)

Lab Sample ID: 240-183580-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	24		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.098		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	210		2.0	0.70	mg/L	2		300.0	Total/NA
Total Dissolved Solids	550		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-16-F-20230412-01

Lab Sample ID: 240-183580-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1500		100	57	ug/L	1		6010D	Total Recoverable
Calcium	100000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	27		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.060		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	200		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	470		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-001-F-20230412-01

Lab Sample ID: 240-183580-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity	170		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	170		5.0	2.6	mg/L	1		2320B-1997	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-10-F-20230411-01

Lab Sample ID: 240-183580-1

Date Collected: 04/11/23 10:03

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	730		100	57	ug/L		04/18/23 14:00	04/20/23 04:26	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	120000		1000	250	ug/L		04/18/23 14:00	04/19/23 22:19	1
Magnesium	30000		1000	61	ug/L		04/18/23 14:00	04/19/23 22:19	1
Potassium	2700		1000	220	ug/L		04/18/23 14:00	04/19/23 22:19	1
Sodium	56000		1000	330	ug/L		04/18/23 14:00	04/19/23 22:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 16:29	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 16:29	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 16:29	1
Chloride (EPA 300.0)	51		1.0	0.13	mg/L			04/26/23 13:07	1
Fluoride (EPA 300.0)	0.21		0.050	0.024	mg/L			04/26/23 13:07	1
Sulfate (EPA 300.0)	270		5.0	1.7	mg/L			04/26/23 13:27	5
Total Dissolved Solids (SM 2540C)	700		10	7.8	mg/L			04/17/23 10:04	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: DUP-001-BAC-10-F-20230411-01

Lab Sample ID: 240-183580-2

Date Collected: 04/11/23 10:03

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	730		100	57	ug/L		04/18/23 14:00	04/20/23 05:30	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	120000		1000	250	ug/L		04/18/23 14:00	04/19/23 23:08	1
Magnesium	29000		1000	61	ug/L		04/18/23 14:00	04/19/23 23:08	1
Potassium	2600		1000	220	ug/L		04/18/23 14:00	04/19/23 23:08	1
Sodium	55000		1000	330	ug/L		04/18/23 14:00	04/19/23 23:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			04/24/23 16:33	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			04/24/23 16:33	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 16:33	1
Chloride (EPA 300.0)	52		1.0	0.13	mg/L			04/26/23 12:26	1
Fluoride (EPA 300.0)	0.22		0.050	0.024	mg/L			04/26/23 12:26	1
Sulfate (EPA 300.0)	270		5.0	1.7	mg/L			04/26/23 12:47	5
Total Dissolved Solids (SM 2540C)	690		10	7.8	mg/L			04/17/23 10:04	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-23-F-20230411-01

Lab Sample ID: 240-183580-3

Date Collected: 04/11/23 11:22

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	280		100	57	ug/L		04/18/23 14:00	04/20/23 05:35	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130000		1000	250	ug/L		04/18/23 14:00	04/19/23 23:11	1
Magnesium	15000		1000	61	ug/L		04/18/23 14:00	04/19/23 23:11	1
Potassium	1900		1000	220	ug/L		04/18/23 14:00	04/19/23 23:11	1
Sodium	19000		1000	330	ug/L		04/18/23 14:00	04/19/23 23:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			04/24/23 16:37	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			04/24/23 16:37	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 16:37	1
Chloride (EPA 300.0)	44		1.0	0.13	mg/L			04/26/23 12:06	1
Fluoride (EPA 300.0)	0.14		0.050	0.024	mg/L			04/26/23 12:06	1
Sulfate (EPA 300.0)	150		1.0	0.35	mg/L			04/26/23 12:06	1
Total Dissolved Solids (SM 2540C)	500		10	7.8	mg/L			04/17/23 10:04	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-08-F-20230411-01

Lab Sample ID: 240-183580-4

Date Collected: 04/11/23 12:27

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	110		100	57	ug/L		04/18/23 14:00	04/20/23 05:39	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		04/18/23 14:00	04/19/23 23:19	1
Magnesium	12000		1000	61	ug/L		04/18/23 14:00	04/19/23 23:19	1
Potassium	1300		1000	220	ug/L		04/18/23 14:00	04/19/23 23:19	1
Sodium	12000		1000	330	ug/L		04/18/23 14:00	04/19/23 23:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			04/24/23 16:42	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			04/24/23 16:42	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 16:42	1
Chloride (EPA 300.0)	22		1.0	0.13	mg/L			04/26/23 11:06	1
Fluoride (EPA 300.0)	0.13		0.050	0.024	mg/L			04/26/23 11:06	1
Sulfate (EPA 300.0)	86		1.0	0.35	mg/L			04/26/23 11:06	1
Total Dissolved Solids (SM 2540C)	350		10	7.8	mg/L			04/17/23 10:04	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-14-F-20230411-01

Lab Sample ID: 240-183580-5

Date Collected: 04/11/23 14:00

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2700		100	57	ug/L		04/18/23 14:00	04/20/23 05:43	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	74000		1000	250	ug/L		04/18/23 14:00	04/19/23 23:22	1
Magnesium	20000		1000	61	ug/L		04/18/23 14:00	04/19/23 23:22	1
Potassium	1600		1000	220	ug/L		04/18/23 14:00	04/19/23 23:22	1
Sodium	22000		1000	330	ug/L		04/18/23 14:00	04/19/23 23:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			04/24/23 16:48	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			04/24/23 16:48	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 16:48	1
Chloride (EPA 300.0)	34		1.0	0.13	mg/L			04/26/23 10:46	1
Fluoride (EPA 300.0)	0.066		0.050	0.024	mg/L			04/26/23 10:46	1
Sulfate (EPA 300.0)	220		2.0	0.70	mg/L			04/26/23 23:02	2
Total Dissolved Solids (SM 2540C)	470		10	7.8	mg/L			04/17/23 10:04	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-12-F-20230411-01

Lab Sample ID: 240-183580-6

Date Collected: 04/11/23 14:58

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2000		100	57	ug/L		04/18/23 14:00	04/20/23 05:48	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	78000		1000	250	ug/L		04/18/23 14:00	04/19/23 23:24	1
Magnesium	18000		1000	61	ug/L		04/18/23 14:00	04/19/23 23:24	1
Potassium	3200		1000	220	ug/L		04/18/23 14:00	04/19/23 23:24	1
Sodium	29000		1000	330	ug/L		04/18/23 14:00	04/19/23 23:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	110		5.0	2.6	mg/L			04/24/23 16:52	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	110		5.0	2.6	mg/L			04/24/23 16:52	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 16:52	1
Chloride (EPA 300.0)	59		1.0	0.13	mg/L			04/26/23 10:26	1
Fluoride (EPA 300.0)	0.082		0.050	0.024	mg/L			04/26/23 10:26	1
Sulfate (EPA 300.0)	200		1.0	0.35	mg/L			04/26/23 10:26	1
Total Dissolved Solids (SM 2540C)	460		10	7.8	mg/L			04/17/23 10:04	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: EB-001-F-20230411-01

Lab Sample ID: 240-183580-7

Date Collected: 04/11/23 15:30

Matrix: Water

Date Received: 04/14/23 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		04/18/23 14:00	04/20/23 05:52	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		04/18/23 14:00	04/19/23 23:27	1
Magnesium	ND		1000	61	ug/L		04/18/23 14:00	04/19/23 23:27	1
Potassium	ND		1000	220	ug/L		04/18/23 14:00	04/19/23 23:27	1
Sodium	ND		1000	330	ug/L		04/18/23 14:00	04/19/23 23:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	81		5.0	2.6	mg/L			04/24/23 17:04	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	81		5.0	2.6	mg/L			04/24/23 17:04	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 17:04	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			04/26/23 09:25	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			04/26/23 09:25	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			04/26/23 09:25	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			04/17/23 10:04	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-07-F-20230412-01

Lab Sample ID: 240-183580-8

Date Collected: 04/12/23 10:34

Matrix: Water

Date Received: 04/14/23 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		04/18/23 14:00	04/20/23 06:04	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	91000		1000	250	ug/L		04/18/23 14:00	04/19/23 23:30	1
Magnesium	20000		1000	61	ug/L		04/18/23 14:00	04/19/23 23:30	1
Potassium	1300		1000	220	ug/L		04/18/23 14:00	04/19/23 23:30	1
Sodium	16000		1000	330	ug/L		04/18/23 14:00	04/19/23 23:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 17:12	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 17:12	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 17:12	1
Chloride (EPA 300.0)	26		1.0	0.13	mg/L			04/26/23 09:05	1
Fluoride (EPA 300.0)	0.075		0.050	0.024	mg/L			04/26/23 09:05	1
Sulfate (EPA 300.0)	190		2.0	0.70	mg/L			04/26/23 23:24	2
Total Dissolved Solids (SM 2540C)	440		10	7.8	mg/L			04/18/23 10:32	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-18-F-20230412-01

Lab Sample ID: 240-183580-9

Date Collected: 04/12/23 11:31

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1400		100	57	ug/L		04/18/23 14:00	04/20/23 06:09	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	79000		1000	250	ug/L		04/18/23 14:00	04/19/23 23:32	1
Magnesium	20000		1000	61	ug/L		04/18/23 14:00	04/19/23 23:32	1
Potassium	1200		1000	220	ug/L		04/18/23 14:00	04/19/23 23:32	1
Sodium	15000		1000	330	ug/L		04/18/23 14:00	04/19/23 23:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	140		5.0	2.6	mg/L			04/24/23 17:16	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	140		5.0	2.6	mg/L			04/24/23 17:16	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 17:16	1
Chloride (EPA 300.0)	25		1.0	0.13	mg/L			04/26/23 08:45	1
Fluoride (EPA 300.0)	0.058		0.050	0.024	mg/L			04/26/23 08:45	1
Sulfate (EPA 300.0)	190		2.0	0.70	mg/L			04/26/23 23:46	2
Total Dissolved Solids (SM 2540C)	410		10	7.8	mg/L			04/18/23 10:32	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-06-F-20230412-01

Lab Sample ID: 240-183580-10

Date Collected: 04/12/23 13:00

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1800		100	57	ug/L		04/18/23 14:00	04/20/23 06:13	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110000		1000	250	ug/L		04/18/23 14:00	04/19/23 23:35	1
Magnesium	26000		1000	61	ug/L		04/18/23 14:00	04/19/23 23:35	1
Potassium	1400		1000	220	ug/L		04/18/23 14:00	04/19/23 23:35	1
Sodium	16000		1000	330	ug/L		04/18/23 14:00	04/19/23 23:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	110		5.0	2.6	mg/L			04/24/23 17:19	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	110		5.0	2.6	mg/L			04/24/23 17:19	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 17:19	1
Chloride (EPA 300.0)	24		1.0	0.13	mg/L			04/26/23 08:25	1
Fluoride (EPA 300.0)	0.098		0.050	0.024	mg/L			04/26/23 08:25	1
Sulfate (EPA 300.0)	210		2.0	0.70	mg/L			04/27/23 00:07	2
Total Dissolved Solids (SM 2540C)	550		10	7.8	mg/L			04/18/23 11:58	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-16-F-20230412-01

Lab Sample ID: 240-183580-11

Date Collected: 04/12/23 14:29

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1500		100	57	ug/L		04/18/23 14:00	04/20/23 06:17	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	100000		1000	250	ug/L		04/18/23 14:00	04/19/23 23:38	1
Magnesium	21000		1000	61	ug/L		04/18/23 14:00	04/19/23 23:38	1
Potassium	1600		1000	220	ug/L		04/18/23 14:00	04/19/23 23:38	1
Sodium	15000		1000	330	ug/L		04/18/23 14:00	04/19/23 23:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	200		5.0	2.6	mg/L			04/24/23 17:23	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	200		5.0	2.6	mg/L			04/24/23 17:23	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 17:23	1
Chloride (EPA 300.0)	27		1.0	0.13	mg/L			04/26/23 07:24	1
Fluoride (EPA 300.0)	0.060		0.050	0.024	mg/L			04/26/23 07:24	1
Sulfate (EPA 300.0)	200		1.0	0.35	mg/L			04/26/23 07:24	1
Total Dissolved Solids (SM 2540C)	470		10	7.8	mg/L			04/18/23 11:58	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: EB-001-F-20230412-01

Lab Sample ID: 240-183580-12

Date Collected: 04/12/23 15:30

Matrix: Water

Date Received: 04/14/23 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		04/18/23 14:00	04/20/23 06:21	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		04/18/23 14:00	04/19/23 23:40	1
Magnesium	ND		1000	61	ug/L		04/18/23 14:00	04/19/23 23:40	1
Potassium	ND		1000	220	ug/L		04/18/23 14:00	04/19/23 23:40	1
Sodium	ND		1000	330	ug/L		04/18/23 14:00	04/19/23 23:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	170		5.0	2.6	mg/L			04/24/23 17:30	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	170		5.0	2.6	mg/L			04/24/23 17:30	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 17:30	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			04/26/23 07:04	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			04/26/23 07:04	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			04/26/23 07:04	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			04/18/23 11:58	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-569850/1-A
Matrix: Water
Analysis Batch: 570110

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 569850

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		04/18/23 14:00	04/20/23 04:09	1

Lab Sample ID: LCS 240-569850/2-A
Matrix: Water
Analysis Batch: 570110

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 569850

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1010		ug/L		101	80 - 120

Lab Sample ID: 240-183580-1 MS
Matrix: Water
Analysis Batch: 570110

Client Sample ID: BAC-10-F-20230411-01
Prep Type: Total Recoverable
Prep Batch: 569850

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	730		1000	1720		ug/L		99	75 - 125

Lab Sample ID: 240-183580-1 MSD
Matrix: Water
Analysis Batch: 570110

Client Sample ID: BAC-10-F-20230411-01
Prep Type: Total Recoverable
Prep Batch: 569850

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Boron	730		1000	1750		ug/L		101	75 - 125	1	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-569850/1-A
Matrix: Water
Analysis Batch: 570098

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 569850

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		04/18/23 14:00	04/19/23 22:08	1
Magnesium	ND		1000	61	ug/L		04/18/23 14:00	04/19/23 22:08	1
Potassium	ND		1000	220	ug/L		04/18/23 14:00	04/19/23 22:08	1
Sodium	ND		1000	330	ug/L		04/18/23 14:00	04/19/23 22:08	1

Lab Sample ID: LCS 240-569850/3-A
Matrix: Water
Analysis Batch: 570098

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 569850

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	23600		ug/L		94	80 - 120
Magnesium	25000	23500		ug/L		94	80 - 120
Potassium	25000	23700		ug/L		95	80 - 120
Sodium	25000	23400		ug/L		93	80 - 120

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-570651/30
Matrix: Water
Analysis Batch: 570651

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			04/24/23 13:02	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 13:02	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 13:02	1

Lab Sample ID: MB 240-570651/56
Matrix: Water
Analysis Batch: 570651

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			04/24/23 15:17	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 15:17	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 15:17	1

Lab Sample ID: MB 240-570651/83
Matrix: Water
Analysis Batch: 570651

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			04/24/23 17:00	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 17:00	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 17:00	1

Lab Sample ID: LCS 240-570651/55
Matrix: Water
Analysis Batch: 570651

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits

Lab Sample ID: LCS 240-570651/82
Matrix: Water
Analysis Batch: 570651

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits

Lab Sample ID: 240-183580-7 DU
Matrix: Water
Analysis Batch: 570651

Client Sample ID: EB-001-F-20230411-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
	Total Alkalinity	81		ND				
Bicarbonate Alkalinity as CaCO3	81		ND		mg/L		NC	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-570831/3
Matrix: Water
Analysis Batch: 570831

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			04/26/23 06:24	1
Fluoride	ND		0.050	0.024	mg/L			04/26/23 06:24	1
Sulfate	ND		1.0	0.35	mg/L			04/26/23 06:24	1

Lab Sample ID: LCS 240-570831/4
Matrix: Water
Analysis Batch: 570831

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.1		mg/L		102	90 - 110
Fluoride	2.50	2.58		mg/L		103	90 - 110
Sulfate	50.0	51.9		mg/L		104	90 - 110

Lab Sample ID: 240-183580-4 MS
Matrix: Water
Analysis Batch: 570831

Client Sample ID: BAC-08-F-20230411-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	22		50.0	77.0		mg/L		109	80 - 120
Fluoride	0.13		2.50	2.96		mg/L		113	80 - 120
Sulfate	86		50.0	139		mg/L		106	80 - 120

Lab Sample ID: 240-183580-4 MSD
Matrix: Water
Analysis Batch: 570831

Client Sample ID: BAC-08-F-20230411-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	22		50.0	77.7		mg/L		111	80 - 120	1	15
Fluoride	0.13		2.50	3.01		mg/L		115	80 - 120	2	15
Sulfate	86		50.0	140		mg/L		107	80 - 120	0	15

Lab Sample ID: 240-183580-11 MS
Matrix: Water
Analysis Batch: 570831

Client Sample ID: BAC-16-F-20230412-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	27		50.0	81.9		mg/L		110	80 - 120
Fluoride	0.060		2.50	2.87		mg/L		112	80 - 120
Sulfate	200		50.0	245	E	mg/L		99	80 - 120

Lab Sample ID: 240-183580-11 MSD
Matrix: Water
Analysis Batch: 570831

Client Sample ID: BAC-16-F-20230412-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	27		50.0	82.1		mg/L		110	80 - 120	0	15
Fluoride	0.060		2.50	2.89		mg/L		113	80 - 120	1	15
Sulfate	200		50.0	245	E	mg/L		98	80 - 120	0	15

Eurofins Canton

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 240-571000/3
Matrix: Water
Analysis Batch: 571000

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			04/26/23 18:20	1
Fluoride	ND		0.050	0.024	mg/L			04/26/23 18:20	1
Sulfate	ND		1.0	0.35	mg/L			04/26/23 18:20	1

Lab Sample ID: LCS 240-571000/4
Matrix: Water
Analysis Batch: 571000

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	49.0		mg/L		98	90 - 110
Fluoride	2.50	2.59		mg/L		104	90 - 110
Sulfate	50.0	50.3		mg/L		101	90 - 110

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

Lab Sample ID: MB 240-569585/1
Matrix: Water
Analysis Batch: 569585

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			04/17/23 10:04	1

Lab Sample ID: LCS 240-569585/2
Matrix: Water
Analysis Batch: 569585

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	580	554		mg/L		96	80 - 120

Lab Sample ID: MB 240-569762/1
Matrix: Water
Analysis Batch: 569762

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			04/18/23 10:32	1

Lab Sample ID: LCS 240-569762/2
Matrix: Water
Analysis Batch: 569762

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	580	543		mg/L		94	80 - 120

Lab Sample ID: MB 240-569791/1
Matrix: Water
Analysis Batch: 569791

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			04/18/23 11:58	1

Eurofins Canton

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

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

Lab Sample ID: LCS 240-569791/2
Matrix: Water
Analysis Batch: 569791

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	580	550		mg/L		95	80 - 120

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Metals

Prep Batch: 569850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183580-1	BAC-10-F-20230411-01	Total Recoverable	Water	3005A	
240-183580-2	DUP-001-BAC-10-F-20230411-01	Total Recoverable	Water	3005A	
240-183580-3	BAC-23-F-20230411-01	Total Recoverable	Water	3005A	
240-183580-4	BAC-08-F-20230411-01	Total Recoverable	Water	3005A	
240-183580-5	BAC-14-F-20230411-01	Total Recoverable	Water	3005A	
240-183580-6	BAC-12-F-20230411-01	Total Recoverable	Water	3005A	
240-183580-7	EB-001-F-20230411-01	Total Recoverable	Water	3005A	
240-183580-8	BAC-07-F-20230412-01	Total Recoverable	Water	3005A	
240-183580-9	BAC-18-F-20230412-01	Total Recoverable	Water	3005A	
240-183580-10	BAC-06-F-20230412-01	Total Recoverable	Water	3005A	
240-183580-11	BAC-16-F-20230412-01	Total Recoverable	Water	3005A	
240-183580-12	EB-001-F-20230412-01	Total Recoverable	Water	3005A	
MB 240-569850/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-569850/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-569850/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-183580-1 MS	BAC-10-F-20230411-01	Total Recoverable	Water	3005A	
240-183580-1 MSD	BAC-10-F-20230411-01	Total Recoverable	Water	3005A	

Analysis Batch: 570098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183580-1	BAC-10-F-20230411-01	Total Recoverable	Water	6020B	569850
240-183580-2	DUP-001-BAC-10-F-20230411-01	Total Recoverable	Water	6020B	569850
240-183580-3	BAC-23-F-20230411-01	Total Recoverable	Water	6020B	569850
240-183580-4	BAC-08-F-20230411-01	Total Recoverable	Water	6020B	569850
240-183580-5	BAC-14-F-20230411-01	Total Recoverable	Water	6020B	569850
240-183580-6	BAC-12-F-20230411-01	Total Recoverable	Water	6020B	569850
240-183580-7	EB-001-F-20230411-01	Total Recoverable	Water	6020B	569850
240-183580-8	BAC-07-F-20230412-01	Total Recoverable	Water	6020B	569850
240-183580-9	BAC-18-F-20230412-01	Total Recoverable	Water	6020B	569850
240-183580-10	BAC-06-F-20230412-01	Total Recoverable	Water	6020B	569850
240-183580-11	BAC-16-F-20230412-01	Total Recoverable	Water	6020B	569850
240-183580-12	EB-001-F-20230412-01	Total Recoverable	Water	6020B	569850
MB 240-569850/1-A	Method Blank	Total Recoverable	Water	6020B	569850
LCS 240-569850/3-A	Lab Control Sample	Total Recoverable	Water	6020B	569850

Analysis Batch: 570110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183580-1	BAC-10-F-20230411-01	Total Recoverable	Water	6010D	569850
240-183580-2	DUP-001-BAC-10-F-20230411-01	Total Recoverable	Water	6010D	569850
240-183580-3	BAC-23-F-20230411-01	Total Recoverable	Water	6010D	569850
240-183580-4	BAC-08-F-20230411-01	Total Recoverable	Water	6010D	569850
240-183580-5	BAC-14-F-20230411-01	Total Recoverable	Water	6010D	569850
240-183580-6	BAC-12-F-20230411-01	Total Recoverable	Water	6010D	569850
240-183580-7	EB-001-F-20230411-01	Total Recoverable	Water	6010D	569850
240-183580-8	BAC-07-F-20230412-01	Total Recoverable	Water	6010D	569850
240-183580-9	BAC-18-F-20230412-01	Total Recoverable	Water	6010D	569850
240-183580-10	BAC-06-F-20230412-01	Total Recoverable	Water	6010D	569850
240-183580-11	BAC-16-F-20230412-01	Total Recoverable	Water	6010D	569850
240-183580-12	EB-001-F-20230412-01	Total Recoverable	Water	6010D	569850
MB 240-569850/1-A	Method Blank	Total Recoverable	Water	6010D	569850
LCS 240-569850/2-A	Lab Control Sample	Total Recoverable	Water	6010D	569850

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Metals (Continued)

Analysis Batch: 570110 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183580-1 MS	BAC-10-F-20230411-01	Total Recoverable	Water	6010D	569850
240-183580-1 MSD	BAC-10-F-20230411-01	Total Recoverable	Water	6010D	569850

General Chemistry

Analysis Batch: 569585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183580-1	BAC-10-F-20230411-01	Total/NA	Water	SM 2540C	
240-183580-2	DUP-001-BAC-10-F-20230411-01	Total/NA	Water	SM 2540C	
240-183580-3	BAC-23-F-20230411-01	Total/NA	Water	SM 2540C	
240-183580-4	BAC-08-F-20230411-01	Total/NA	Water	SM 2540C	
240-183580-5	BAC-14-F-20230411-01	Total/NA	Water	SM 2540C	
240-183580-6	BAC-12-F-20230411-01	Total/NA	Water	SM 2540C	
240-183580-7	EB-001-F-20230411-01	Total/NA	Water	SM 2540C	
MB 240-569585/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-569585/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 569762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183580-8	BAC-07-F-20230412-01	Total/NA	Water	SM 2540C	
240-183580-9	BAC-18-F-20230412-01	Total/NA	Water	SM 2540C	
MB 240-569762/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-569762/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 569791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183580-10	BAC-06-F-20230412-01	Total/NA	Water	SM 2540C	
240-183580-11	BAC-16-F-20230412-01	Total/NA	Water	SM 2540C	
240-183580-12	EB-001-F-20230412-01	Total/NA	Water	SM 2540C	
MB 240-569791/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-569791/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 570651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183580-1	BAC-10-F-20230411-01	Total/NA	Water	2320B-1997	
240-183580-2	DUP-001-BAC-10-F-20230411-01	Total/NA	Water	2320B-1997	
240-183580-3	BAC-23-F-20230411-01	Total/NA	Water	2320B-1997	
240-183580-4	BAC-08-F-20230411-01	Total/NA	Water	2320B-1997	
240-183580-5	BAC-14-F-20230411-01	Total/NA	Water	2320B-1997	
240-183580-6	BAC-12-F-20230411-01	Total/NA	Water	2320B-1997	
240-183580-7	EB-001-F-20230411-01	Total/NA	Water	2320B-1997	
240-183580-8	BAC-07-F-20230412-01	Total/NA	Water	2320B-1997	
240-183580-9	BAC-18-F-20230412-01	Total/NA	Water	2320B-1997	
240-183580-10	BAC-06-F-20230412-01	Total/NA	Water	2320B-1997	
240-183580-11	BAC-16-F-20230412-01	Total/NA	Water	2320B-1997	
240-183580-12	EB-001-F-20230412-01	Total/NA	Water	2320B-1997	
MB 240-570651/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-570651/56	Method Blank	Total/NA	Water	2320B-1997	
MB 240-570651/83	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-570651/55	Lab Control Sample	Total/NA	Water	2320B-1997	
LCS 240-570651/82	Lab Control Sample	Total/NA	Water	2320B-1997	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

General Chemistry (Continued)

Analysis Batch: 570651 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183580-7 DU	EB-001-F-20230411-01	Total/NA	Water	2320B-1997	

Analysis Batch: 570831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183580-1	BAC-10-F-20230411-01	Total/NA	Water	300.0	
240-183580-1	BAC-10-F-20230411-01	Total/NA	Water	300.0	
240-183580-2	DUP-001-BAC-10-F-20230411-01	Total/NA	Water	300.0	
240-183580-2	DUP-001-BAC-10-F-20230411-01	Total/NA	Water	300.0	
240-183580-3	BAC-23-F-20230411-01	Total/NA	Water	300.0	
240-183580-4	BAC-08-F-20230411-01	Total/NA	Water	300.0	
240-183580-5	BAC-14-F-20230411-01	Total/NA	Water	300.0	
240-183580-6	BAC-12-F-20230411-01	Total/NA	Water	300.0	
240-183580-7	EB-001-F-20230411-01	Total/NA	Water	300.0	
240-183580-8	BAC-07-F-20230412-01	Total/NA	Water	300.0	
240-183580-9	BAC-18-F-20230412-01	Total/NA	Water	300.0	
240-183580-10	BAC-06-F-20230412-01	Total/NA	Water	300.0	
240-183580-11	BAC-16-F-20230412-01	Total/NA	Water	300.0	
240-183580-12	EB-001-F-20230412-01	Total/NA	Water	300.0	
MB 240-570831/3	Method Blank	Total/NA	Water	300.0	
LCS 240-570831/4	Lab Control Sample	Total/NA	Water	300.0	
240-183580-4 MS	BAC-08-F-20230411-01	Total/NA	Water	300.0	
240-183580-4 MSD	BAC-08-F-20230411-01	Total/NA	Water	300.0	
240-183580-11 MS	BAC-16-F-20230412-01	Total/NA	Water	300.0	
240-183580-11 MSD	BAC-16-F-20230412-01	Total/NA	Water	300.0	

Analysis Batch: 571000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183580-5	BAC-14-F-20230411-01	Total/NA	Water	300.0	
240-183580-8	BAC-07-F-20230412-01	Total/NA	Water	300.0	
240-183580-9	BAC-18-F-20230412-01	Total/NA	Water	300.0	
240-183580-10	BAC-06-F-20230412-01	Total/NA	Water	300.0	
MB 240-571000/3	Method Blank	Total/NA	Water	300.0	
LCS 240-571000/4	Lab Control Sample	Total/NA	Water	300.0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-10-F-20230411-01

Lab Sample ID: 240-183580-1

Date Collected: 04/11/23 10:03

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CAN	04/20/23 04:26
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CAN	04/19/23 22:19
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 16:29
Total/NA	Analysis	300.0		1	570831	JMB	EET CAN	04/26/23 13:07
Total/NA	Analysis	300.0		5	570831	JMB	EET CAN	04/26/23 13:27
Total/NA	Analysis	SM 2540C		1	569585	GH	EET CAN	04/17/23 10:04

Client Sample ID: DUP-001-BAC-10-F-20230411-01

Lab Sample ID: 240-183580-2

Date Collected: 04/11/23 10:03

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CAN	04/20/23 05:30
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CAN	04/19/23 23:08
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 16:33
Total/NA	Analysis	300.0		1	570831	JMB	EET CAN	04/26/23 12:26
Total/NA	Analysis	300.0		5	570831	JMB	EET CAN	04/26/23 12:47
Total/NA	Analysis	SM 2540C		1	569585	GH	EET CAN	04/17/23 10:04

Client Sample ID: BAC-23-F-20230411-01

Lab Sample ID: 240-183580-3

Date Collected: 04/11/23 11:22

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CAN	04/20/23 05:35
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CAN	04/19/23 23:11
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 16:37
Total/NA	Analysis	300.0		1	570831	JMB	EET CAN	04/26/23 12:06
Total/NA	Analysis	SM 2540C		1	569585	GH	EET CAN	04/17/23 10:04

Client Sample ID: BAC-08-F-20230411-01

Lab Sample ID: 240-183580-4

Date Collected: 04/11/23 12:27

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CAN	04/20/23 05:39

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-08-F-20230411-01

Lab Sample ID: 240-183580-4

Date Collected: 04/11/23 12:27

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CAN	04/19/23 23:19
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 16:42
Total/NA	Analysis	300.0		1	570831	JMB	EET CAN	04/26/23 11:06
Total/NA	Analysis	SM 2540C		1	569585	GH	EET CAN	04/17/23 10:04

Client Sample ID: BAC-14-F-20230411-01

Lab Sample ID: 240-183580-5

Date Collected: 04/11/23 14:00

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CAN	04/20/23 05:43
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CAN	04/19/23 23:22
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 16:48
Total/NA	Analysis	300.0		2	571000	JMB	EET CAN	04/26/23 23:02
Total/NA	Analysis	300.0		1	570831	JMB	EET CAN	04/26/23 10:46
Total/NA	Analysis	SM 2540C		1	569585	GH	EET CAN	04/17/23 10:04

Client Sample ID: BAC-12-F-20230411-01

Lab Sample ID: 240-183580-6

Date Collected: 04/11/23 14:58

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CAN	04/20/23 05:48
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CAN	04/19/23 23:24
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 16:52
Total/NA	Analysis	300.0		1	570831	JMB	EET CAN	04/26/23 10:26
Total/NA	Analysis	SM 2540C		1	569585	GH	EET CAN	04/17/23 10:04

Client Sample ID: EB-001-F-20230411-01

Lab Sample ID: 240-183580-7

Date Collected: 04/11/23 15:30

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CAN	04/20/23 05:52
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CAN	04/19/23 23:27
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 17:04
Total/NA	Analysis	300.0		1	570831	JMB	EET CAN	04/26/23 09:25

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: EB-001-F-20230411-01

Lab Sample ID: 240-183580-7

Date Collected: 04/11/23 15:30

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2540C		1	569585	GH	EET CAN	04/17/23 10:04

Client Sample ID: BAC-07-F-20230412-01

Lab Sample ID: 240-183580-8

Date Collected: 04/12/23 10:34

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CAN	04/20/23 06:04
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CAN	04/19/23 23:30
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 17:12
Total/NA	Analysis	300.0		2	571000	JMB	EET CAN	04/26/23 23:24
Total/NA	Analysis	300.0		1	570831	JMB	EET CAN	04/26/23 09:05
Total/NA	Analysis	SM 2540C		1	569762	GH	EET CAN	04/18/23 10:32

Client Sample ID: BAC-18-F-20230412-01

Lab Sample ID: 240-183580-9

Date Collected: 04/12/23 11:31

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CAN	04/20/23 06:09
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CAN	04/19/23 23:32
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 17:16
Total/NA	Analysis	300.0		2	571000	JMB	EET CAN	04/26/23 23:46
Total/NA	Analysis	300.0		1	570831	JMB	EET CAN	04/26/23 08:45
Total/NA	Analysis	SM 2540C		1	569762	GH	EET CAN	04/18/23 10:32

Client Sample ID: BAC-06-F-20230412-01

Lab Sample ID: 240-183580-10

Date Collected: 04/12/23 13:00

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CAN	04/20/23 06:13
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CAN	04/19/23 23:35
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 17:19
Total/NA	Analysis	300.0		2	571000	JMB	EET CAN	04/27/23 00:07
Total/NA	Analysis	300.0		1	570831	JMB	EET CAN	04/26/23 08:25
Total/NA	Analysis	SM 2540C		1	569791	GH	EET CAN	04/18/23 11:58

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-16-F-20230412-01

Lab Sample ID: 240-183580-11

Date Collected: 04/12/23 14:29

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CAN	04/20/23 06:17
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CAN	04/19/23 23:38
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 17:23
Total/NA	Analysis	300.0		1	570831	JMB	EET CAN	04/26/23 07:24
Total/NA	Analysis	SM 2540C		1	569791	GH	EET CAN	04/18/23 11:58

Client Sample ID: EB-001-F-20230412-01

Lab Sample ID: 240-183580-12

Date Collected: 04/12/23 15:30

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CAN	04/20/23 06:21
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CAN	04/19/23 23:40
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 17:30
Total/NA	Analysis	300.0		1	570831	JMB	EET CAN	04/26/23 07:04
Total/NA	Analysis	SM 2540C		1	569791	GH	EET CAN	04/18/23 11:58

Laboratory References:

EET CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23 *
Connecticut	State	PH-0590	06-29-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-28-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23 *
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-23 *
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.



Client Information		Sampler: <u>Bobby Cashe</u>		Lab PM: Cisneros, Roxanne		Carrier Tracking No(s):		COC No: 240-93465-34577.1	
Client Contact: Taylor Huffman		Phone: 746-373-4308		E-Mail: roxanne.cisneros@Eurofins.com		State of Origin:		Page: <u>Page 1 of 2</u>	
Company: Lightstone Generation Gavin Power LLC		PWSID:		Due Date Requested:		Analysis Requested		Job #: <u>Pg 1 of 2</u>	
Address: 7397 OH-7		City: Cheshire		TAT Requested (days):		Preservation Codes:		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - EDTA L - EDA Other:	
State, Zip: OH, 45620		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		PO #: 2935505		Perform MS/MSD (Yes or No)		Total Number of Containers	
Phone: 740-925-3171(Tel)		WO #: <u>24019633</u>		Project #: <u>24019633</u>		Field Filtered Sample (Yes or No)		Special Instructions/Note:	
Email: <u>taylor.huffman@lightstonegen.com</u>		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=other)	
Project Name: Federal CCR Wells - App III		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=other)	
Site:		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=other)	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=other)	
BAC-10-F-20230411-01		4-11-23		1003		G		W	
DUP-001-BAC-10-F-20230411-01		4-11-23		1003		G		W	
BAC-23-F-20230411-01		4-11-23		1122		G		W	
BAC-08-F-20230411-01		4-11-23		1227		G		W	
BAC-14-F-20230411-01		4-11-23		1400		G		W	
BAC-12-F-20230411-01		4-11-23		1458		G		W	
EB-001-F-20230411-01		4-11-23		1530		G		W	
BAC-07-F-20230412-01		4-12-23		1034		G		W	
BAC-18-F-20230412-01		4-12-23		1131		G		W	
BAC-06-F-20230412-01		4-12-23		1300		G		W	
BAC-10-F-20230412-01		4-12-23		1429		G		W	
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Date:		Time:		Method of Shipment:	
Deliverable Requested: I, II, III, IV, Other (specify)		Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by: <u>Bobby Cashe</u>		Date/Time: 4-13-23/0840		Company: <u>Kemura</u>		Date/Time: 4-13-23/1120		Company: <u>ETA</u>	
Relinquished by: <u>Bobby Cashe</u>		Date/Time: 4-13-23/1200		Company: <u>ETA</u>		Date/Time: 4-13-23/1423		Company: <u>ETA</u>	
Relinquished by: <u>Bobby Cashe</u>		Date/Time:		Company:		Date/Time:		Company:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	

Client Information Client Contact: Bobby Castle Phone: 740-373-4308 E-Mail: roxanne.cisneros@Eurofinsnet.com PWSID:		Lab PM: Cisneros, Roxanne E-Mail: roxanne.cisneros@Eurofinsnet.com Carrier Tracking No(s): State of Origin:		COC No: 240-93465-34577.1 Page: Page 1 of 2 Job #: Pg 2 of 2	
Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: 2935505 WO #:		Analysis Requested		Preservation Codes: M - Hexane N - None O - AshNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Address: Lightstone Generation Gavin Power LLC 7397 OH-7 City: Cheshire State, Zip: OH, 45620 Phone: 740-925-3171(Tel) Email: taylor.huffman@lightstonegen.com Project #: 24019633 Federal CCR Wells - App III Site:		Perform IES/MSD (Yes or No) Field Filtered Sample (Yes or No) 6010B, 6020 2540C, Calcd, 300.0, 28D 2320B - Alkalinity		Total Number of Containers	
Sample Identification EB-001-F-100230412-01		Sample Date 4-12-23		Sample Time 1530	
Sample Type (C=comp, G=grab) G		Preservation Code: W		Matrix (Water, Specific, Comminut, BT-Tissue, Analy)	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)					
Empty Kit Relinquished by: Relinquished by: Bobby Castle Relinquished by: Michelle Relinquished by:					
Date/Time: 4-13-23 0840 Date/Time: 4-13-23 1700 Date/Time:		Date/Time: 4-13-23 1130 Date/Time: 4-13-23 800 Date/Time:		Company: KEARON Company: 570 Company: ESTAK Company:	
Relinquished by: Bobby Castle Relinquished by: Michelle Relinquished by:		Method of Shipment:		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months	
Custody Seal No.: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks:		Special Instructions/OC Requirements:	




Eurofins - Canton Sample Receipt Form/Narrative
Barberton Facility

Login # : _____

Client Lightstone Site Name _____ Cooler unpacked by: Rachelle Haide
 Cooler Received on 4 14 23 Opened on 4 14 23
 FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off Eurofins Courier Other _____

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

Eurofins Cooler # E C 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 # 22 (CF +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 1
 - 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 NA
 - 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# HC203864
14. Were VOAs on the COC? Yes No NA
15. Were air bubbles >6 mm in any VOA vials? Yes No NA  ← Larger than this.
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No NA
17. Was a LL Hg or Me Hg trip blank present? _____ Yes No NA

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: _____



Temperature readings:

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-10-F-20230411-01	240-183580-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-001-BAC-10-F-20230411-01	240-183580-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-23-F-20230411-01	240-183580-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-08-F-20230411-01	240-183580-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-14-F-20230411-01	240-183580-C-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-12-F-20230411-01	240-183580-C-6	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230411-01	240-183580-C-7	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-07-F-20230412-01	240-183580-C-8	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-18-F-20230412-01	240-183580-C-9	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-06-F-20230412-01	240-183580-C-10	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-16-F-20230412-01	240-183580-C-11	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230412-01	240-183580-C-12	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____

Eurofins - Canton Sample Receipt Multiple Cooler Form							
Cooler Description (Circle)				IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
EC	Client	<u>Box</u>	Other	IR GUN #: <u>22</u>	<u>18.1</u>	<u>18.1</u>	Wet Ice <u>Blue Ice</u> Dry Ice Water <u>None</u>
<u>EC</u>	Client	Box	Other	IR GUN #: <u>22</u>	<u>2.6</u>	<u>2.6</u>	<u>Wet Ice</u> Blue Ice Dry Ice Water None
<u>EC</u>	Client	Box	Other	IR GUN #: <u>22</u>	<u>2.8</u>	<u>2.8</u>	<u>Wet Ice</u> Blue Ice Dry Ice Water None
<u>EC</u>	Client	Box	Other	IR GUN #: <u>22</u>	<u>1.8</u>	<u>1.8</u>	<u>Wet Ice</u> Blue Ice Dry Ice Water None
<u>EC</u>	Client	Box	Other	IR GUN #: <u>22</u>	<u>2.0</u>	<u>2.0</u>	<u>Wet Ice</u> Blue Ice Dry Ice Water None
<u>EC</u>	Client	Box	Other	IR GUN #: <u>22</u>	<u>1.6</u>	<u>1.6</u>	<u>Wet Ice</u> Blue Ice Dry Ice Water None
<u>EC</u>	Client	Box	Other	IR GUN #: <u>22</u>	<u>1.4</u>	<u>1.4</u>	<u>Wet Ice</u> Blue Ice Dry Ice Water None
<u>EC</u>	Client	Box	Other	IR GUN #: <u>22</u>	<u>2.3</u>	<u>2.3</u>	<u>Wet Ice</u> Blue Ice Dry Ice Water None
<u>EC</u>	Client	Box	Other	IR GUN #: <u>22</u>	<u>1.8</u>	<u>1.8</u>	<u>Wet Ice</u> Blue Ice Dry Ice Water None
<u>EC</u>	Client	Box	Other	IR GUN #: <u>22</u>	<u>1.1</u>	<u>1.1</u>	<u>Wet Ice</u> Blue Ice Dry Ice Water None
<u>EC</u>	Client	Box	Other	IR GUN #: <u>22</u>	<u>1.2</u>	<u>1.2</u>	<u>Wet Ice</u> Blue Ice Dry Ice Water None
<u>EC</u>	Client	Box	Other	IR GUN #: <u>22</u>	<u>3.2</u>	<u>3.2</u>	<u>Wet Ice</u> Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: <u>22</u>			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC	Client	Box	Other	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



ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 7/17/2023 1:24:36 PM

JOB DESCRIPTION

Federal CCR Wells - App III & App IV

JOB NUMBER

240-187232-1

Eurofins Cleveland

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
7/17/2023 1:24:36 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

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.

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.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Job ID: 240-187232-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-187232-1

Comments

No additional comments.

Receipt

The samples were received on 6/17/2023 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 9 coolers at receipt time were 0.8° C, 1.4° C, 1.6° C, 1.6° C, 1.8° C, 2.4° C, 2.6° C, 2.6° C and 2.6° C.

RAD

Methods 9315: Radium-226 prep batch 160-616969: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-21-F-A4-20230612-01 (240-187232-1), DUP-001-BAC-21-F-A4-20230612-01 (240-187232-2), BAC-22-F-A4-20230612-01 (240-187232-3), BAC-23-F-A4-20230612-01 (240-187232-4), BAC-08-F-A4-20230612-01 (240-187232-5), EB-001-F-A4-20230612-01 (240-187232-6), BAC-07-F-A4-20230613-01 (240-187232-7), BAC-07-F-A4-20230613-01 (240-187232-7[MSJ]), BAC-07-F-A4-20230613-01 (240-187232-7[MSD]), BAC-18-F-A4-20230613-01 (240-187232-8), BAC-06-F-A4-20230613-01 (240-187232-9), (LCS 160-616969/2-A) and (MB 160-616969/1-A)

Method 9320: Radium-228 prep batch 160-616970: The following sample(s) did not meet the requested limit (RL) due to the reduced sample volume attributed to the presence of matrix interference. During preparation the analyst visually noted matrix effects. The data have been reported with this narrative. BAC-21-F-A4-20230612-01 (240-187232-1), DUP-001-BAC-21-F-A4-20230612-01 (240-187232-2) and BAC-18-F-A4-20230613-01 (240-187232-8)

Methods 9320: Radium-228 prep batch 160-616970: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-21-F-A4-20230612-01 (240-187232-1), DUP-001-BAC-21-F-A4-20230612-01 (240-187232-2), BAC-22-F-A4-20230612-01 (240-187232-3), BAC-23-F-A4-20230612-01 (240-187232-4), BAC-08-F-A4-20230612-01 (240-187232-5), EB-001-F-A4-20230612-01 (240-187232-6), BAC-07-F-A4-20230613-01 (240-187232-7), BAC-07-F-A4-20230613-01 (240-187232-7[MSJ]), BAC-07-F-A4-20230613-01 (240-187232-7[MSD]), BAC-18-F-A4-20230613-01 (240-187232-8), BAC-06-F-A4-20230613-01 (240-187232-9), (LCS 160-616970/2-A) and (MB 160-616970/1-A)

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

Metals

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

General Chemistry

Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for the following sample associated with analytical batch 240-579935 were outside control limits: (240-187232-A-1 MS). The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for the following sample associated with analytical batch 240-579935 were outside control limits: BAC-21-F-A4-20230612-01 (240-187232-1). The associated laboratory control sample (LCS) recovery met acceptance criteria.

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 - App III & App IV

Job ID: 240-187232-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CLE
SM 2540C	Solids, Total Dissolved (TDS)	SM	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 - App III & App IV

Job ID: 240-187232-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-187232-1	BAC-21-F-A4-20230612-01	Water	06/12/23 10:53	06/17/23 08:00
240-187232-2	DUP-001-BAC-21-F-A4-20230612-01	Water	06/12/23 10:53	06/17/23 08:00
240-187232-3	BAC-22-F-A4-20230612-01	Water	06/12/23 12:34	06/17/23 08:00
240-187232-4	BAC-23-F-A4-20230612-01	Water	06/12/23 13:26	06/17/23 08:00
240-187232-5	BAC-08-F-A4-20230612-01	Water	06/12/23 14:23	06/17/23 08:00
240-187232-6	EB-001-F-A4-20230612-01	Water	06/12/23 15:00	06/17/23 08:00
240-187232-7	BAC-07-F-A4-20230613-01	Water	06/13/23 11:35	06/17/23 08:00
240-187232-8	BAC-18-F-A4-20230613-01	Water	06/13/23 13:18	06/17/23 08:00
240-187232-9	BAC-06-F-A4-20230613-01	Water	06/13/23 14:06	06/17/23 08:00
240-187232-10	BAC-12-F-A3-20230614-01	Water	06/14/23 12:10	06/17/23 08:00
240-187232-11	BAC-116-F-A3-20230614-01	Water	06/14/23 13:03	06/17/23 08:00
240-187232-12	EB-001-F-A3-20230614-01	Water	06/14/23 15:20	06/17/23 08:00



Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-21-F-A4-20230612-01

Lab Sample ID: 240-187232-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.7		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	180		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	4.7	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.2		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	3.3		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	5.9	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	15000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	2.3	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	28000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	250		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	250		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.087	F1	0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: DUP-001-BAC-21-F-A4-20230612-01

Lab Sample ID: 240-187232-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.5		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	190		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	5.7		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.5		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	4.2		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	5.9	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	16000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.2	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	29000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.079		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-22-F-A4-20230612-01

Lab Sample ID: 240-187232-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.5	J	5.0	0.75	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 - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-22-F-A4-20230612-01 (Continued)

Lab Sample ID: 240-187232-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	140		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	1.9	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.3		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.4		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	3.6	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	3000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	21000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.081		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-23-F-A4-20230612-01

Lab Sample ID: 240-187232-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.4	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	120		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.90	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Magnesium	14000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	17000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.13		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-08-F-A4-20230612-01

Lab Sample ID: 240-187232-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.2	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	140		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	2.2	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	12000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	2.1	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	1500		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 - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-08-F-A4-20230612-01 (Continued)

Lab Sample ID: 240-187232-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	13000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	210		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	210		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.12		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: EB-001-F-A4-20230612-01

Lab Sample ID: 240-187232-6

No Detections.

Client Sample ID: BAC-07-F-A4-20230613-01

Lab Sample ID: 240-187232-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.79	J ^2	2.0	0.57	ug/L	1		6020B	Total Recoverable
Barium	37		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.5		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	4.4	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	18000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.5	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	1200		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	14000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.42	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	120		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	120		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.11		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-18-F-A4-20230613-01

Lab Sample ID: 240-187232-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	29		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.9		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.57	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	4.1	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	19000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	94		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	94		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.053		0.050	0.024	mg/L	1		300.0-1993 R2.1	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 - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-06-F-A4-20230613-01

Lab Sample ID: 240-187232-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	72		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	3.2		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	3.4	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1200		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	13000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.091		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-12-F-A3-20230614-01

Lab Sample ID: 240-187232-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1900		100	57	ug/L	1		6010D	Total Recoverable
Calcium	84000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	3100		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	32000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	96		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	96		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	66		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.068		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	490		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-116-F-A3-20230614-01

Lab Sample ID: 240-187232-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1600		100	57	ug/L	1		6010D	Total Recoverable
Calcium	120000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	25000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	17000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	26		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.054		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	180		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	480		10	7.8	mg/L	1		SM 2540C	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 - App III & App IV

Job ID: 240-187232-1

Client Sample ID: EB-001-F-A3-20230614-01

Lab Sample ID: 240-187232-12

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-21-F-A4-20230612-01

Lab Sample ID: 240-187232-1

Date Collected: 06/12/23 10:53

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 18:39	1
Arsenic	5.7		5.0	0.75	ug/L		06/19/23 14:00	06/20/23 18:39	1
Barium	180		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 18:39	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 18:39	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:39	1
Chromium	4.7 J		5.0	1.2	ug/L		06/19/23 14:00	06/20/23 18:39	1
Cobalt	2.2		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 18:39	1
Lead	3.3		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 18:39	1
Lithium	5.9 J		8.0	1.7	ug/L		06/19/23 14:00	06/20/23 18:39	1
Magnesium	15000		1000	61	ug/L		06/19/23 14:00	06/20/23 18:39	1
Molybdenum	2.3 J		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 18:39	1
Potassium	2600		1000	220	ug/L		06/19/23 14:00	06/20/23 18:39	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 18:39	1
Sodium	28000		1000	330	ug/L		06/19/23 14:00	06/20/23 18:39	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:39	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		06/19/23 14:00	06/20/23 16:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	250		5.0	2.6	mg/L			06/20/23 17:27	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	250		5.0	2.6	mg/L			06/20/23 17:27	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 17:27	1
Fluoride (EPA 300.0-1993 R2.1)	0.087 F1		0.050	0.024	mg/L			07/07/23 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	0.650		0.300	0.306	1.00	0.358	pCi/L	06/21/23 10:14	07/14/23 14:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	47.1		30 - 110					06/21/23 10:14	07/14/23 14:16	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	1.67 G		0.984	0.996	1.00	1.43	pCi/L	06/21/23 10:17	07/10/23 16:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	47.1		30 - 110					06/21/23 10:17	07/10/23 16:00	1
Y Carrier	84.9		30 - 110					06/21/23 10:17	07/10/23 16:00	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-21-F-A4-20230612-01

Lab Sample ID: 240-187232-1

Date Collected: 06/12/23 10:53

Matrix: Water

Date Received: 06/17/23 08:00

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	2.32		1.03	1.04	5.00	1.43	pCi/L		07/17/23 12:05	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: DUP-001-BAC-21-F-A4-20230612-01

Lab Sample ID: 240-187232-2

Date Collected: 06/12/23 10:53

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 18:42	1
Arsenic	7.5		5.0	0.75	ug/L		06/19/23 14:00	06/20/23 18:42	1
Barium	190		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 18:42	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 18:42	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:42	1
Chromium	5.7		5.0	1.2	ug/L		06/19/23 14:00	06/20/23 18:42	1
Cobalt	2.5		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 18:42	1
Lead	4.2		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 18:42	1
Lithium	5.9 J		8.0	1.7	ug/L		06/19/23 14:00	06/20/23 18:42	1
Magnesium	16000		1000	61	ug/L		06/19/23 14:00	06/20/23 18:42	1
Molybdenum	1.2 J		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 18:42	1
Potassium	2700		1000	220	ug/L		06/19/23 14:00	06/20/23 18:42	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 18:42	1
Sodium	29000		1000	330	ug/L		06/19/23 14:00	06/20/23 18:42	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:42	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		06/19/23 14:00	06/20/23 16:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			06/20/23 17:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			06/20/23 17:31	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 17:31	1
Fluoride (EPA 300.0-1993 R2.1)	0.079		0.050	0.024	mg/L			07/07/23 20:41	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.419	U	0.463	0.465	1.00	0.750	pCi/L	06/21/23 10:14	07/14/23 14:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	37.2		30 - 110					06/21/23 10:14	07/14/23 14:16	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	1.47	U G	1.68	1.69	1.00	2.76	pCi/L	06/21/23 10:17	07/10/23 16:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	37.2		30 - 110					06/21/23 10:17	07/10/23 16:01	1
Y Carrier	84.5		30 - 110					06/21/23 10:17	07/10/23 16:01	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: DUP-001-BAC-21-F-A4-20230612-01

Lab Sample ID: 240-187232-2

Date Collected: 06/12/23 10:53

Matrix: Water

Date Received: 06/17/23 08:00

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	1.89	U	1.74	1.75	5.00	2.76	pCi/L		07/17/23 12:05	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-22-F-A4-20230612-01

Lab Sample ID: 240-187232-3

Date Collected: 06/12/23 12:34

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 18:45	1
Arsenic	2.5	J	5.0	0.75	ug/L		06/19/23 14:00	06/20/23 18:45	1
Barium	140		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 18:45	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 18:45	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:45	1
Chromium	1.9	J	5.0	1.2	ug/L		06/19/23 14:00	06/20/23 18:45	1
Cobalt	1.3		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 18:45	1
Lead	1.4		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 18:45	1
Lithium	3.6	J	8.0	1.7	ug/L		06/19/23 14:00	06/20/23 18:45	1
Magnesium	20000		1000	61	ug/L		06/19/23 14:00	06/20/23 18:45	1
Molybdenum	ND		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 18:45	1
Potassium	3000		1000	220	ug/L		06/19/23 14:00	06/20/23 18:45	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 18:45	1
Sodium	21000		1000	330	ug/L		06/19/23 14:00	06/20/23 18:45	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:45	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		06/19/23 14:00	06/20/23 16:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230		5.0	2.6	mg/L			06/20/23 17:35	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230		5.0	2.6	mg/L			06/20/23 17:35	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 17:35	1
Fluoride (EPA 300.0-1993 R2.1)	0.081		0.050	0.024	mg/L			07/07/23 21:03	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	0.345		0.172	0.174	1.00	0.213	pCi/L	06/21/23 10:14	07/14/23 14:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.6		30 - 110					06/21/23 10:14	07/14/23 14:16	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	0.470	U	0.544	0.545	1.00	0.894	pCi/L	06/21/23 10:17	07/10/23 16:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.6		30 - 110					06/21/23 10:17	07/10/23 16:01	1
Y Carrier	81.1		30 - 110					06/21/23 10:17	07/10/23 16:01	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-22-F-A4-20230612-01

Lab Sample ID: 240-187232-3

Date Collected: 06/12/23 12:34

Matrix: Water

Date Received: 06/17/23 08:00

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	0.815	U	0.571	0.572	5.00	0.894	pCi/L		07/17/23 12:05	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-23-F-A4-20230612-01

Lab Sample ID: 240-187232-4

Date Collected: 06/12/23 13:26

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 18:47	1
Arsenic	1.4	J	5.0	0.75	ug/L		06/19/23 14:00	06/20/23 18:47	1
Barium	120		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 18:47	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 18:47	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:47	1
Chromium	ND		5.0	1.2	ug/L		06/19/23 14:00	06/20/23 18:47	1
Cobalt	0.90	J	1.0	0.19	ug/L		06/19/23 14:00	06/20/23 18:47	1
Lead	ND		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 18:47	1
Lithium	ND		8.0	1.7	ug/L		06/19/23 14:00	06/20/23 18:47	1
Magnesium	14000		1000	61	ug/L		06/19/23 14:00	06/20/23 18:47	1
Molybdenum	ND		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 18:47	1
Potassium	1800		1000	220	ug/L		06/19/23 14:00	06/20/23 18:47	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 18:47	1
Sodium	17000		1000	330	ug/L		06/19/23 14:00	06/20/23 18:47	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:47	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		06/19/23 14:00	06/20/23 16:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230		5.0	2.6	mg/L			06/20/23 17:39	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230		5.0	2.6	mg/L			06/20/23 17:39	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 17:39	1
Fluoride (EPA 300.0-1993 R2.1)	0.13		0.050	0.024	mg/L			07/07/23 21:24	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.227		0.128	0.130	1.00	0.167	pCi/L	06/21/23 10:14	07/14/23 14:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.0		30 - 110					06/21/23 10:14	07/14/23 14:16	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.339	U	0.347	0.348	1.00	0.559	pCi/L	06/21/23 10:17	07/10/23 16:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.0		30 - 110					06/21/23 10:17	07/10/23 16:01	1
Y Carrier	86.4		30 - 110					06/21/23 10:17	07/10/23 16:01	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-23-F-A4-20230612-01

Lab Sample ID: 240-187232-4

Date Collected: 06/12/23 13:26

Matrix: Water

Date Received: 06/17/23 08:00

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	0.566		0.370	0.371	5.00	0.559	pCi/L		07/17/23 12:05	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-08-F-A4-20230612-01

Lab Sample ID: 240-187232-5

Date Collected: 06/12/23 14:23

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 18:55	1
Arsenic	2.2	J	5.0	0.75	ug/L		06/19/23 14:00	06/20/23 18:55	1
Barium	140		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 18:55	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 18:55	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:55	1
Chromium	ND		5.0	1.2	ug/L		06/19/23 14:00	06/20/23 18:55	1
Cobalt	2.1		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 18:55	1
Lead	ND		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 18:55	1
Lithium	2.2	J	8.0	1.7	ug/L		06/19/23 14:00	06/20/23 18:55	1
Magnesium	12000		1000	61	ug/L		06/19/23 14:00	06/20/23 18:55	1
Molybdenum	2.1	J	5.0	1.1	ug/L		06/19/23 14:00	06/20/23 18:55	1
Potassium	1500		1000	220	ug/L		06/19/23 14:00	06/20/23 18:55	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 18:55	1
Sodium	13000		1000	330	ug/L		06/19/23 14:00	06/20/23 18:55	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:55	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		06/19/23 14:00	06/20/23 16:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	210		5.0	2.6	mg/L			06/20/23 17:43	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	210		5.0	2.6	mg/L			06/20/23 17:43	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 17:43	1
Fluoride (EPA 300.0-1993 R2.1)	0.12		0.050	0.024	mg/L			07/07/23 21:46	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	0.0425	U	0.0977	0.0978	1.00	0.179	pCi/L	06/21/23 10:14	07/17/23 09:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.6		30 - 110					06/21/23 10:14	07/17/23 09:29	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	0.296	U	0.480	0.481	1.00	0.821	pCi/L	06/21/23 10:17	07/10/23 16:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.6		30 - 110					06/21/23 10:17	07/10/23 16:01	1
Y Carrier	84.5		30 - 110					06/21/23 10:17	07/10/23 16:01	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-08-F-A4-20230612-01

Lab Sample ID: 240-187232-5

Date Collected: 06/12/23 14:23

Matrix: Water

Date Received: 06/17/23 08:00

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	0.338	U	0.490	0.491	5.00	0.821	pCi/L		07/17/23 12:05	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: EB-001-F-A4-20230612-01

Lab Sample ID: 240-187232-6

Date Collected: 06/12/23 15:00

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 18:58	1
Arsenic	ND		5.0	0.75	ug/L		06/19/23 14:00	06/20/23 18:58	1
Barium	ND		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 18:58	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 18:58	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:58	1
Chromium	ND		5.0	1.2	ug/L		06/19/23 14:00	06/20/23 18:58	1
Cobalt	ND		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 18:58	1
Lead	ND		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 18:58	1
Lithium	ND		8.0	1.7	ug/L		06/19/23 14:00	06/20/23 18:58	1
Magnesium	ND		1000	61	ug/L		06/19/23 14:00	06/20/23 18:58	1
Molybdenum	ND		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 18:58	1
Potassium	ND		1000	220	ug/L		06/19/23 14:00	06/20/23 18:58	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 18:58	1
Sodium	ND		1000	330	ug/L		06/19/23 14:00	06/20/23 18:58	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:58	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		06/19/23 14:00	06/20/23 16:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 17:47	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 17:47	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 17:47	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			07/07/23 22:08	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.00889	U	0.0560	0.0560	1.00	0.112	pCi/L	06/21/23 10:14	07/17/23 09:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.1		30 - 110					06/21/23 10:14	07/17/23 09:29	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.378	U	0.333	0.335	1.00	0.523	pCi/L	06/21/23 10:17	07/10/23 16:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.1		30 - 110					06/21/23 10:17	07/10/23 16:03	1
Y Carrier	84.5		30 - 110					06/21/23 10:17	07/10/23 16:03	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: EB-001-F-A4-20230612-01

Lab Sample ID: 240-187232-6

Date Collected: 06/12/23 15:00

Matrix: Water

Date Received: 06/17/23 08:00

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	0.386	U	0.338	0.340	5.00	0.523	pCi/L		07/17/23 12:05	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-07-F-A4-20230613-01

Lab Sample ID: 240-187232-7

Date Collected: 06/13/23 11:35

Matrix: Water

Date Received: 06/17/23 08:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.79	J ^2	2.0	0.57	ug/L		06/19/23 14:00	06/20/23 18:10	1
Arsenic	ND		5.0	0.75	ug/L		06/19/23 14:00	06/20/23 18:10	1
Barium	37		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 18:10	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 18:10	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:10	1
Chromium	ND		5.0	1.2	ug/L		06/19/23 14:00	06/20/23 18:10	1
Cobalt	1.5		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 18:10	1
Lead	ND		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 18:10	1
Lithium	4.4	J	8.0	1.7	ug/L		06/19/23 14:00	06/20/23 18:10	1
Magnesium	18000		1000	61	ug/L		06/19/23 14:00	06/20/23 18:10	1
Molybdenum	1.5	J	5.0	1.1	ug/L		06/19/23 14:00	06/20/23 18:10	1
Potassium	1200		1000	220	ug/L		06/19/23 14:00	06/20/23 18:10	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 18:10	1
Sodium	14000		1000	330	ug/L		06/19/23 14:00	06/20/23 18:10	1
Thallium	0.42	J	1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:10	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		06/19/23 14:00	06/20/23 16:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	120		5.0	2.6	mg/L			06/23/23 19:52	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	120		5.0	2.6	mg/L			06/23/23 19:52	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/23/23 19:52	1
Fluoride (EPA 300.0-1993 R2.1)	0.11		0.050	0.024	mg/L			07/07/23 23:13	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	0.00868	U	0.0512	0.0512	1.00	0.105	pCi/L	06/21/23 10:14	07/17/23 09:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.0		30 - 110					06/21/23 10:14	07/17/23 09:30	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	1.58		0.555	0.574	1.00	0.679	pCi/L	06/21/23 10:17	07/10/23 16:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.0		30 - 110					06/21/23 10:17	07/10/23 16:03	1
Y Carrier	75.9		30 - 110					06/21/23 10:17	07/10/23 16:03	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-07-F-A4-20230613-01

Lab Sample ID: 240-187232-7

Date Collected: 06/13/23 11:35

Matrix: Water

Date Received: 06/17/23 08:00

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	1.59		0.557	0.576	5.00	0.679	pCi/L		07/17/23 12:05	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-18-F-A4-20230613-01

Lab Sample ID: 240-187232-8

Date Collected: 06/13/23 13:18

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 19:01	1
Arsenic	ND		5.0	0.75	ug/L		06/19/23 14:00	06/20/23 19:01	1
Barium	29		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 19:01	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 19:01	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:01	1
Chromium	ND		5.0	1.2	ug/L		06/19/23 14:00	06/20/23 19:01	1
Cobalt	1.9		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 19:01	1
Lead	0.57 J		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 19:01	1
Lithium	4.1 J		8.0	1.7	ug/L		06/19/23 14:00	06/20/23 19:01	1
Magnesium	19000		1000	61	ug/L		06/19/23 14:00	06/20/23 19:01	1
Molybdenum	ND		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 19:01	1
Potassium	1300		1000	220	ug/L		06/19/23 14:00	06/20/23 19:01	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 19:01	1
Sodium	15000		1000	330	ug/L		06/19/23 14:00	06/20/23 19:01	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:01	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		06/19/23 14:00	06/20/23 17:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	94		5.0	2.6	mg/L			06/23/23 20:00	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	94		5.0	2.6	mg/L			06/23/23 20:00	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/23/23 20:00	1
Fluoride (EPA 300.0-1993 R2.1)	0.053		0.050	0.024	mg/L			07/11/23 02:18	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	0.178		0.122	0.123	1.00	0.160	pCi/L	06/21/23 10:14	07/17/23 09:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	69.5		30 - 110					06/21/23 10:14	07/17/23 09:31	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	-0.331	U G	0.613	0.613	1.00	1.20	pCi/L	06/21/23 10:17	07/10/23 16:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	69.5		30 - 110					06/21/23 10:17	07/10/23 16:04	1
Y Carrier	83.7		30 - 110					06/21/23 10:17	07/10/23 16:04	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-18-F-A4-20230613-01

Lab Sample ID: 240-187232-8

Date Collected: 06/13/23 13:18

Matrix: Water

Date Received: 06/17/23 08:00

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	-0.153	U	0.625	0.625	5.00	1.20	pCi/L		07/17/23 12:05	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-06-F-A4-20230613-01

Lab Sample ID: 240-187232-9

Date Collected: 06/13/23 14:06

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 19:03	1
Arsenic	ND		5.0	0.75	ug/L		06/19/23 14:00	06/20/23 19:03	1
Barium	72		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 19:03	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 19:03	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:03	1
Chromium	ND		5.0	1.2	ug/L		06/19/23 14:00	06/20/23 19:03	1
Cobalt	3.2		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 19:03	1
Lead	ND		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 19:03	1
Lithium	3.4 J		8.0	1.7	ug/L		06/19/23 14:00	06/20/23 19:03	1
Magnesium	22000		1000	61	ug/L		06/19/23 14:00	06/20/23 19:03	1
Molybdenum	ND		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 19:03	1
Potassium	1200		1000	220	ug/L		06/19/23 14:00	06/20/23 19:03	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 19:03	1
Sodium	13000		1000	330	ug/L		06/19/23 14:00	06/20/23 19:03	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:03	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		06/19/23 14:00	06/20/23 17:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	200		5.0	2.6	mg/L			06/23/23 20:04	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	200		5.0	2.6	mg/L			06/23/23 20:04	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/23/23 20:04	1
Fluoride (EPA 300.0-1993 R2.1)	0.091		0.050	0.024	mg/L			07/11/23 03:23	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.177		0.0960	0.0973	1.00	0.112	pCi/L	06/21/23 10:14	07/17/23 09:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.6		30 - 110					06/21/23 10:14	07/17/23 09:31	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	7.36		0.960	1.17	1.00	0.750	pCi/L	06/21/23 10:17	07/10/23 16:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.6		30 - 110					06/21/23 10:17	07/10/23 16:06	1
Y Carrier	86.0		30 - 110					06/21/23 10:17	07/10/23 16:06	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-06-F-A4-20230613-01

Lab Sample ID: 240-187232-9

Date Collected: 06/13/23 14:06

Matrix: Water

Date Received: 06/17/23 08:00

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	7.53		0.965	1.17	5.00	0.750	pCi/L		07/17/23 12:05	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-12-F-A3-20230614-01

Lab Sample ID: 240-187232-10

Date Collected: 06/14/23 12:10

Matrix: Water

Date Received: 06/17/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1900		100	57	ug/L		06/20/23 14:00	06/21/23 21:24	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	84000		1000	250	ug/L		06/20/23 14:00	06/21/23 13:35	1
Magnesium	20000		1000	61	ug/L		06/20/23 14:00	06/21/23 13:35	1
Potassium	3100		1000	220	ug/L		06/20/23 14:00	06/21/23 13:35	1
Sodium	32000		1000	330	ug/L		06/20/23 14:00	06/21/23 13:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	96		5.0	2.6	mg/L			06/23/23 20:07	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	96		5.0	2.6	mg/L			06/23/23 20:07	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/23/23 20:07	1
Chloride (EPA 300.0)	66		1.0	0.13	mg/L			07/11/23 04:49	1
Fluoride (EPA 300.0)	0.068		0.050	0.024	mg/L			07/11/23 04:49	1
Sulfate (EPA 300.0)	190		1.0	0.35	mg/L			07/11/23 04:49	1
Total Dissolved Solids (SM 2540C)	490		10	7.8	mg/L			06/21/23 15:44	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-116-F-A3-20230614-01

Lab Sample ID: 240-187232-11

Date Collected: 06/14/23 13:03

Matrix: Water

Date Received: 06/17/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1600		100	57	ug/L		06/20/23 14:00	06/21/23 21:28	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	120000		1000	250	ug/L		06/20/23 14:00	06/21/23 13:39	1
Magnesium	25000		1000	61	ug/L		06/20/23 14:00	06/21/23 13:39	1
Potassium	1900		1000	220	ug/L		06/20/23 14:00	06/21/23 13:39	1
Sodium	17000		1000	330	ug/L		06/20/23 14:00	06/21/23 13:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	160		5.0	2.6	mg/L			06/23/23 20:11	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	160		5.0	2.6	mg/L			06/23/23 20:11	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/23/23 20:11	1
Chloride (EPA 300.0)	26		1.0	0.13	mg/L			07/11/23 05:55	1
Fluoride (EPA 300.0)	0.054		0.050	0.024	mg/L			07/11/23 05:55	1
Sulfate (EPA 300.0)	180		1.0	0.35	mg/L			07/11/23 05:55	1
Total Dissolved Solids (SM 2540C)	480		10	7.8	mg/L			06/21/23 15:44	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: EB-001-F-A3-20230614-01

Lab Sample ID: 240-187232-12

Date Collected: 06/14/23 15:20

Matrix: Water

Date Received: 06/17/23 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		06/20/23 14:00	06/21/23 21:32	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		06/20/23 14:00	06/21/23 13:44	1
Magnesium	ND		1000	61	ug/L		06/20/23 14:00	06/21/23 13:44	1
Potassium	ND		1000	220	ug/L		06/20/23 14:00	06/21/23 13:44	1
Sodium	ND		1000	330	ug/L		06/20/23 14:00	06/21/23 13:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/23/23 20:15	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/23/23 20:15	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/23/23 20:15	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			07/11/23 06:16	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			07/11/23 06:16	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			07/11/23 06:16	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			06/21/23 15:44	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (30-110)	
240-187232-1	BAC-21-F-A4-20230612-01	47.1	
240-187232-2	DUP-001-BAC-21-F-A4-20230612-01	37.2	
240-187232-3	BAC-22-F-A4-20230612-01	91.6	
240-187232-4	BAC-23-F-A4-20230612-01	83.0	
240-187232-5	BAC-08-F-A4-20230612-01	78.6	
240-187232-6	EB-001-F-A4-20230612-01	92.1	
240-187232-7	BAC-07-F-A4-20230613-01	84.0	
240-187232-7 MS	BAC-07-F-A4-20230613-01	80.9	
240-187232-7 MSD	BAC-07-F-A4-20230613-01	84.0	
240-187232-8	BAC-18-F-A4-20230613-01	69.5	
240-187232-9	BAC-06-F-A4-20230613-01	79.6	
LCS 160-616969/2-A	Lab Control Sample	97.2	
MB 160-616969/1-A	Method Blank	89.8	

Tracer/Carrier Legend
Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (30-110)	Y (30-110)
240-187232-1	BAC-21-F-A4-20230612-01	47.1	84.9
240-187232-2	DUP-001-BAC-21-F-A4-20230612-01	37.2	84.5
240-187232-3	BAC-22-F-A4-20230612-01	91.6	81.1
240-187232-4	BAC-23-F-A4-20230612-01	83.0	86.4
240-187232-5	BAC-08-F-A4-20230612-01	78.6	84.5
240-187232-6	EB-001-F-A4-20230612-01	92.1	84.5
240-187232-7	BAC-07-F-A4-20230613-01	84.0	75.9
240-187232-7 MS	BAC-07-F-A4-20230613-01	80.9	77.8
240-187232-7 MSD	BAC-07-F-A4-20230613-01	84.0	80.0
240-187232-8	BAC-18-F-A4-20230613-01	69.5	83.7
240-187232-9	BAC-06-F-A4-20230613-01	79.6	86.0
LCS 160-616970/2-A	Lab Control Sample	97.2	81.1
MB 160-616970/1-A	Method Blank	89.8	80.0

Tracer/Carrier Legend
Ba = Ba Carrier
Y = Y Carrier

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-577826/1-A
Matrix: Water
Analysis Batch: 578108

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 577826

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		06/20/23 14:00	06/21/23 20:24	1

Lab Sample ID: LCS 240-577826/2-A
Matrix: Water
Analysis Batch: 578108

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 577826

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 240-577692/1-A
Matrix: Water
Analysis Batch: 577918

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 577692

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		06/19/23 14:00	06/20/23 18:05	1
Arsenic	ND		5.0	0.75	ug/L		06/19/23 14:00	06/20/23 18:05	1
Barium	ND		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 18:05	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 18:05	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:05	1
Chromium	ND		5.0	1.2	ug/L		06/19/23 14:00	06/20/23 18:05	1
Cobalt	ND		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 18:05	1
Lead	ND		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 18:05	1
Lithium	ND		8.0	1.7	ug/L		06/19/23 14:00	06/20/23 18:05	1
Magnesium	ND		1000	61	ug/L		06/19/23 14:00	06/20/23 18:05	1
Molybdenum	ND		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 18:05	1
Potassium	ND		1000	220	ug/L		06/19/23 14:00	06/20/23 18:05	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 18:05	1
Sodium	ND		1000	330	ug/L		06/19/23 14:00	06/20/23 18:05	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:05	1

Lab Sample ID: LCS 240-577692/2-A
Matrix: Water
Analysis Batch: 577918

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 577692

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	105		ug/L		105	80 - 120
Arsenic	1000	959		ug/L		96	80 - 120
Barium	1000	922		ug/L		92	80 - 120
Beryllium	500	483		ug/L		97	80 - 120
Cadmium	500	469		ug/L		94	80 - 120
Chromium	500	481		ug/L		96	80 - 120
Cobalt	500	476		ug/L		95	80 - 120
Lead	500	476		ug/L		95	80 - 120
Lithium	500	466		ug/L		93	80 - 120
Magnesium	25000	24600		ug/L		98	80 - 120
Molybdenum	500	479		ug/L		96	80 - 120
Potassium	25000	24600		ug/L		98	80 - 120

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

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

Lab Sample ID: LCS 240-577692/2-A
Matrix: Water
Analysis Batch: 577918

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 577692

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Selenium	1000	920		ug/L		92	80 - 120
Sodium	25000	24700		ug/L		99	80 - 120
Thallium	1000	938		ug/L		94	80 - 120

Lab Sample ID: 240-187232-7 MS
Matrix: Water
Analysis Batch: 577918

Client Sample ID: BAC-07-F-A4-20230613-01
Prep Type: Total Recoverable
Prep Batch: 577692

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.79	J ^2	100	101		ug/L		100	80 - 120
Arsenic	ND		1000	919		ug/L		92	80 - 120
Barium	37		1000	918		ug/L		88	80 - 120
Beryllium	ND		500	437		ug/L		87	80 - 120
Cadmium	ND		500	442		ug/L		88	80 - 120
Chromium	ND		500	462		ug/L		92	80 - 120
Cobalt	1.5		500	451		ug/L		90	80 - 120
Lead	ND		500	457		ug/L		91	80 - 120
Lithium	4.4	J	500	432		ug/L		85	80 - 120
Magnesium	18000		25000	42300		ug/L		97	80 - 120
Molybdenum	1.5	J	500	463		ug/L		92	80 - 120
Potassium	1200		25000	24800		ug/L		94	80 - 120
Selenium	ND		1000	874		ug/L		87	80 - 120
Sodium	14000		25000	38300		ug/L		97	80 - 120
Thallium	0.42	J	1000	898		ug/L		90	80 - 120

Lab Sample ID: 240-187232-7 MSD
Matrix: Water
Analysis Batch: 577918

Client Sample ID: BAC-07-F-A4-20230613-01
Prep Type: Total Recoverable
Prep Batch: 577692

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Antimony	0.79	J ^2	100	91.8		ug/L		91	80 - 120	9	20
Arsenic	ND		1000	834		ug/L		83	80 - 120	10	20
Barium	37		1000	838		ug/L		80	80 - 120	9	20
Beryllium	ND		500	407		ug/L		81	80 - 120	7	20
Cadmium	ND		500	404		ug/L		81	80 - 120	9	20
Chromium	ND		500	418		ug/L		84	80 - 120	10	20
Cobalt	1.5		500	408		ug/L		81	80 - 120	10	20
Lead	ND		500	413		ug/L		83	80 - 120	10	20
Lithium	4.4	J	500	403		ug/L		80	80 - 120	7	20
Magnesium	18000		25000	39000		ug/L		83	80 - 120	8	20
Molybdenum	1.5	J	500	421		ug/L		84	80 - 120	9	20
Potassium	1200		25000	22800		ug/L		86	80 - 120	9	20
Selenium	ND		1000	796		ug/L		80	80 - 120	9	20
Sodium	14000		25000	35200		ug/L		85	80 - 120	8	20
Thallium	0.42	J	1000	811		ug/L		81	80 - 120	10	20

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

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

Lab Sample ID: MB 240-577826/1-A
Matrix: Water
Analysis Batch: 578100

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 577826

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Calcium	ND		1000	250	ug/L		06/20/23 14:00	06/21/23 12:22	1
Magnesium	ND		1000	61	ug/L		06/20/23 14:00	06/21/23 12:22	1
Potassium	ND		1000	220	ug/L		06/20/23 14:00	06/21/23 12:22	1
Sodium	ND		1000	330	ug/L		06/20/23 14:00	06/21/23 12:22	1

Lab Sample ID: LCS 240-577826/3-A
Matrix: Water
Analysis Batch: 578100

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 577826

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Magnesium	25000	25400		ug/L		102	80 - 120
Potassium	25000	25300		ug/L		101	80 - 120
Sodium	25000	25100		ug/L		100	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-577694/1-A
Matrix: Water
Analysis Batch: 577919

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 577694

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.20	0.13	ug/L		06/19/23 14:00	06/20/23 16:24	1

Lab Sample ID: LCS 240-577694/2-A
Matrix: Water
Analysis Batch: 577919

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 577694

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits

Lab Sample ID: 240-187232-7 MS
Matrix: Water
Analysis Batch: 577919

Client Sample ID: BAC-07-F-A4-20230613-01
Prep Type: Total/NA
Prep Batch: 577694

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits

Lab Sample ID: 240-187232-7 MSD
Matrix: Water
Analysis Batch: 577919

Client Sample ID: BAC-07-F-A4-20230613-01
Prep Type: Total/NA
Prep Batch: 577694

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-578219/30
Matrix: Water
Analysis Batch: 578219

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			06/20/23 16:17	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			06/20/23 16:17	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			06/20/23 16:17	1

Lab Sample ID: LCS 240-578219/29
Matrix: Water
Analysis Batch: 578219

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	86.3		mg/L		107	86 - 123

Lab Sample ID: MB 240-578607/4
Matrix: Water
Analysis Batch: 578607

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			06/23/23 19:49	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			06/23/23 19:49	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			06/23/23 19:49	1

Lab Sample ID: LCS 240-578607/3
Matrix: Water
Analysis Batch: 578607

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	80.2		mg/L		99	86 - 123

Lab Sample ID: 240-187232-7 DU
Matrix: Water
Analysis Batch: 578607

Client Sample ID: BAC-07-F-A4-20230613-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	120		121		mg/L		0.6	20
Bicarbonate Alkalinity as CaCO3	120		121		mg/L		0.6	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-580125/3
Matrix: Water
Analysis Batch: 580125

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			07/11/23 01:34	1
Fluoride	ND		0.050	0.024	mg/L			07/11/23 01:34	1
Sulfate	ND		1.0	0.35	mg/L			07/11/23 01:34	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 240-580125/4
 Matrix: Water
 Analysis Batch: 580125

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	48.7		mg/L		97	90 - 110
Fluoride	2.50	2.51		mg/L		100	90 - 110
Sulfate	50.0	49.2		mg/L		98	90 - 110

Lab Sample ID: 240-187232-8 MS
 Matrix: Water
 Analysis Batch: 580125

Client Sample ID: BAC-18-F-A4-20230613-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25		50.0	77.7		mg/L		106	80 - 120
Fluoride	0.053		2.50	2.88		mg/L		113	80 - 120

Lab Sample ID: 240-187232-8 MSD
 Matrix: Water
 Analysis Batch: 580125

Client Sample ID: BAC-18-F-A4-20230613-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	25		50.0	77.9		mg/L		107	80 - 120	0	15
Fluoride	0.053		2.50	2.91		mg/L		114	80 - 120	1	15

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-579935/3
 Matrix: Water
 Analysis Batch: 579935

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			07/07/23 18:53	1

Lab Sample ID: LCS 240-579935/4
 Matrix: Water
 Analysis Batch: 579935

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.56		mg/L		102	90 - 110

Lab Sample ID: 240-187232-1 MS
 Matrix: Water
 Analysis Batch: 579935

Client Sample ID: BAC-21-F-A4-20230612-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.087	F1	2.50	3.36	F1	mg/L		131	80 - 120

Lab Sample ID: 240-187232-1 MSD
 Matrix: Water
 Analysis Batch: 579935

Client Sample ID: BAC-21-F-A4-20230612-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.087	F1	2.50	3.37	F1	mg/L		131	80 - 120	0	15

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-187232-7 MS
 Matrix: Water
 Analysis Batch: 579935

Client Sample ID: BAC-07-F-A4-20230613-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.11		2.50	2.97		mg/L		115	80 - 120

Lab Sample ID: 240-187232-7 MSD
 Matrix: Water
 Analysis Batch: 579935

Client Sample ID: BAC-07-F-A4-20230613-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.11		2.50	2.99		mg/L		116	80 - 120	1	15

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

Lab Sample ID: MB 240-578050/1
 Matrix: Water
 Analysis Batch: 578050

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			06/21/23 15:44	1

Lab Sample ID: LCS 240-578050/2
 Matrix: Water
 Analysis Batch: 578050

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	518	488		mg/L		94	80 - 120

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-616969/1-A
 Matrix: Water
 Analysis Batch: 620350

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 616969

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.04601	U	0.0784	0.0785	1.00	0.138	pCi/L	06/21/23 10:14	07/14/23 14:16	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.8		30 - 110					06/21/23 10:14	07/14/23 14:16	1

Lab Sample ID: LCS 160-616969/2-A
 Matrix: Water
 Analysis Batch: 620350

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 616969

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	11.3	9.997		1.09	1.00	0.145	pCi/L	88	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	97.2		30 - 110						

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: 240-187232-7 MS
Matrix: Water
Analysis Batch: 620395

Client Sample ID: BAC-07-F-A4-20230613-01
Prep Type: Total/NA
Prep Batch: 616969

Analyte	Sample	Sample	Spike	MS	MS	Total	RL	MDC	Unit	%Rec	%Rec	Limits
	Result	Qual		Result	Qual							
Radium-226	0.00868	U	11.3	10.43		1.12	1.00	0.143	pCi/L	92	60 - 140	
MS MS												
Carrier	%Yield	Qualifier	Limits									
Ba Carrier	80.9		30 - 110									

Lab Sample ID: 240-187232-7 MSD
Matrix: Water
Analysis Batch: 620395

Client Sample ID: BAC-07-F-A4-20230613-01
Prep Type: Total/NA
Prep Batch: 616969

Analyte	Sample	Sample	Spike	MSD	MSD	Total	RL	MDC	Unit	%Rec	%Rec	RER	Limit
	Result	Qual		Result	Qual								
Radium-226	0.00868	U	11.3	10.62		1.14	1.00	0.0981	pCi/L	94	60 - 140	0.08	1
MSD MSD													
Carrier	%Yield	Qualifier	Limits										
Ba Carrier	84.0		30 - 110										

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-616970/1-A
Matrix: Water
Analysis Batch: 619638

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 616970

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-228	-0.04969	U	0.305	0.305	1.00	0.589	pCi/L	06/21/23 10:17	07/10/23 16:00	1
MB MB										
Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac				
Ba Carrier	89.8		30 - 110	06/21/23 10:17	07/10/23 16:00	1				
Y Carrier	80.0		30 - 110	06/21/23 10:17	07/10/23 16:00	1				

Lab Sample ID: LCS 160-616970/2-A
Matrix: Water
Analysis Batch: 619638

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 616970

Analyte	Spike	LCS	LCS	Total	RL	MDC	Unit	%Rec	%Rec	Limits
		Result	Qual							
Radium-228	8.05	9.804		1.34	1.00	0.608	pCi/L	122	75 - 125	
LCS LCS										
Carrier	%Yield	Qualifier	Limits							
Ba Carrier	97.2		30 - 110							
Y Carrier	81.1		30 - 110							

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

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

Lab Sample ID: 240-187232-7 MS

Matrix: Water

Analysis Batch: 619619

Client Sample ID: BAC-07-F-A4-20230613-01

Prep Type: Total/NA

Prep Batch: 616970

Analyte	Sample	Sample	Spike	MS	MS	Total	RL	MDC	Unit	%Rec	%Rec	Limits
	Result	Qual		Result	Qual	Uncert. (2σ+/-)						
Radium-228	1.58		8.06	9.099		1.36	1.00	0.686	pCi/L	93		60 - 140
MS MS												
Carrier	%Yield	Qualifier	Limits									
Ba Carrier	80.9		30 - 110									
Y Carrier	77.8		30 - 110									

Lab Sample ID: 240-187232-7 MSD

Matrix: Water

Analysis Batch: 619619

Client Sample ID: BAC-07-F-A4-20230613-01

Prep Type: Total/NA

Prep Batch: 616970

Analyte	Sample	Sample	Spike	MSD	MSD	Total	RL	MDC	Unit	%Rec	%Rec	Limits	RER	Limit
	Result	Qual		Result	Qual	Uncert. (2σ+/-)								
Radium-228	1.58		8.01	8.935		1.30	1.00	0.536	pCi/L	92		60 - 140	0.06	1
MSD MSD														
Carrier	%Yield	Qualifier	Limits											
Ba Carrier	84.0		30 - 110											
Y Carrier	80.0		30 - 110											

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Metals

Prep Batch: 577692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-1	BAC-21-F-A4-20230612-01	Total Recoverable	Water	3005A	
240-187232-2	DUP-001-BAC-21-F-A4-20230612-01	Total Recoverable	Water	3005A	
240-187232-3	BAC-22-F-A4-20230612-01	Total Recoverable	Water	3005A	
240-187232-4	BAC-23-F-A4-20230612-01	Total Recoverable	Water	3005A	
240-187232-5	BAC-08-F-A4-20230612-01	Total Recoverable	Water	3005A	
240-187232-6	EB-001-F-A4-20230612-01	Total Recoverable	Water	3005A	
240-187232-7	BAC-07-F-A4-20230613-01	Total Recoverable	Water	3005A	
240-187232-8	BAC-18-F-A4-20230613-01	Total Recoverable	Water	3005A	
240-187232-9	BAC-06-F-A4-20230613-01	Total Recoverable	Water	3005A	
MB 240-577692/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-577692/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-187232-7 MS	BAC-07-F-A4-20230613-01	Total Recoverable	Water	3005A	
240-187232-7 MSD	BAC-07-F-A4-20230613-01	Total Recoverable	Water	3005A	

Prep Batch: 577694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-1	BAC-21-F-A4-20230612-01	Total/NA	Water	7470A	
240-187232-2	DUP-001-BAC-21-F-A4-20230612-01	Total/NA	Water	7470A	
240-187232-3	BAC-22-F-A4-20230612-01	Total/NA	Water	7470A	
240-187232-4	BAC-23-F-A4-20230612-01	Total/NA	Water	7470A	
240-187232-5	BAC-08-F-A4-20230612-01	Total/NA	Water	7470A	
240-187232-6	EB-001-F-A4-20230612-01	Total/NA	Water	7470A	
240-187232-7	BAC-07-F-A4-20230613-01	Total/NA	Water	7470A	
240-187232-8	BAC-18-F-A4-20230613-01	Total/NA	Water	7470A	
240-187232-9	BAC-06-F-A4-20230613-01	Total/NA	Water	7470A	
MB 240-577694/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-577694/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-187232-7 MS	BAC-07-F-A4-20230613-01	Total/NA	Water	7470A	
240-187232-7 MSD	BAC-07-F-A4-20230613-01	Total/NA	Water	7470A	

Prep Batch: 577826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-10	BAC-12-F-A3-20230614-01	Total Recoverable	Water	3005A	
240-187232-11	BAC-116-F-A3-20230614-01	Total Recoverable	Water	3005A	
240-187232-12	EB-001-F-A3-20230614-01	Total Recoverable	Water	3005A	
MB 240-577826/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-577826/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-577826/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 577918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-1	BAC-21-F-A4-20230612-01	Total Recoverable	Water	6020B	577692
240-187232-2	DUP-001-BAC-21-F-A4-20230612-01	Total Recoverable	Water	6020B	577692
240-187232-3	BAC-22-F-A4-20230612-01	Total Recoverable	Water	6020B	577692
240-187232-4	BAC-23-F-A4-20230612-01	Total Recoverable	Water	6020B	577692
240-187232-5	BAC-08-F-A4-20230612-01	Total Recoverable	Water	6020B	577692
240-187232-6	EB-001-F-A4-20230612-01	Total Recoverable	Water	6020B	577692
240-187232-7	BAC-07-F-A4-20230613-01	Total Recoverable	Water	6020B	577692
240-187232-8	BAC-18-F-A4-20230613-01	Total Recoverable	Water	6020B	577692
240-187232-9	BAC-06-F-A4-20230613-01	Total Recoverable	Water	6020B	577692
MB 240-577692/1-A	Method Blank	Total Recoverable	Water	6020B	577692

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Metals (Continued)

Analysis Batch: 577918 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-577692/2-A	Lab Control Sample	Total Recoverable	Water	6020B	577692
240-187232-7 MS	BAC-07-F-A4-20230613-01	Total Recoverable	Water	6020B	577692
240-187232-7 MSD	BAC-07-F-A4-20230613-01	Total Recoverable	Water	6020B	577692

Analysis Batch: 577919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-1	BAC-21-F-A4-20230612-01	Total/NA	Water	7470A	577694
240-187232-2	DUP-001-BAC-21-F-A4-20230612-01	Total/NA	Water	7470A	577694
240-187232-3	BAC-22-F-A4-20230612-01	Total/NA	Water	7470A	577694
240-187232-4	BAC-23-F-A4-20230612-01	Total/NA	Water	7470A	577694
240-187232-5	BAC-08-F-A4-20230612-01	Total/NA	Water	7470A	577694
240-187232-6	EB-001-F-A4-20230612-01	Total/NA	Water	7470A	577694
240-187232-7	BAC-07-F-A4-20230613-01	Total/NA	Water	7470A	577694
240-187232-8	BAC-18-F-A4-20230613-01	Total/NA	Water	7470A	577694
240-187232-9	BAC-06-F-A4-20230613-01	Total/NA	Water	7470A	577694
MB 240-577694/1-A	Method Blank	Total/NA	Water	7470A	577694
LCS 240-577694/2-A	Lab Control Sample	Total/NA	Water	7470A	577694
240-187232-7 MS	BAC-07-F-A4-20230613-01	Total/NA	Water	7470A	577694
240-187232-7 MSD	BAC-07-F-A4-20230613-01	Total/NA	Water	7470A	577694

Analysis Batch: 578100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-10	BAC-12-F-A3-20230614-01	Total Recoverable	Water	6020B	577826
240-187232-11	BAC-116-F-A3-20230614-01	Total Recoverable	Water	6020B	577826
240-187232-12	EB-001-F-A3-20230614-01	Total Recoverable	Water	6020B	577826
MB 240-577826/1-A	Method Blank	Total Recoverable	Water	6020B	577826
LCS 240-577826/3-A	Lab Control Sample	Total Recoverable	Water	6020B	577826

Analysis Batch: 578108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-10	BAC-12-F-A3-20230614-01	Total Recoverable	Water	6010D	577826
240-187232-11	BAC-116-F-A3-20230614-01	Total Recoverable	Water	6010D	577826
240-187232-12	EB-001-F-A3-20230614-01	Total Recoverable	Water	6010D	577826
MB 240-577826/1-A	Method Blank	Total Recoverable	Water	6010D	577826
LCS 240-577826/2-A	Lab Control Sample	Total Recoverable	Water	6010D	577826

General Chemistry

Analysis Batch: 578050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-10	BAC-12-F-A3-20230614-01	Total/NA	Water	SM 2540C	
240-187232-11	BAC-116-F-A3-20230614-01	Total/NA	Water	SM 2540C	
240-187232-12	EB-001-F-A3-20230614-01	Total/NA	Water	SM 2540C	
MB 240-578050/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-578050/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 578219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-1	BAC-21-F-A4-20230612-01	Total/NA	Water	2320B-1997	
240-187232-2	DUP-001-BAC-21-F-A4-20230612-01	Total/NA	Water	2320B-1997	
240-187232-3	BAC-22-F-A4-20230612-01	Total/NA	Water	2320B-1997	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

General Chemistry (Continued)

Analysis Batch: 578219 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-4	BAC-23-F-A4-20230612-01	Total/NA	Water	2320B-1997	
240-187232-5	BAC-08-F-A4-20230612-01	Total/NA	Water	2320B-1997	
240-187232-6	EB-001-F-A4-20230612-01	Total/NA	Water	2320B-1997	
MB 240-578219/30	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-578219/29	Lab Control Sample	Total/NA	Water	2320B-1997	

Analysis Batch: 578607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-7	BAC-07-F-A4-20230613-01	Total/NA	Water	2320B-1997	
240-187232-8	BAC-18-F-A4-20230613-01	Total/NA	Water	2320B-1997	
240-187232-9	BAC-06-F-A4-20230613-01	Total/NA	Water	2320B-1997	
240-187232-10	BAC-12-F-A3-20230614-01	Total/NA	Water	2320B-1997	
240-187232-11	BAC-116-F-A3-20230614-01	Total/NA	Water	2320B-1997	
240-187232-12	EB-001-F-A3-20230614-01	Total/NA	Water	2320B-1997	
MB 240-578607/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-578607/3	Lab Control Sample	Total/NA	Water	2320B-1997	
240-187232-7 DU	BAC-07-F-A4-20230613-01	Total/NA	Water	2320B-1997	

Analysis Batch: 579935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-1	BAC-21-F-A4-20230612-01	Total/NA	Water	300.0-1993 R2.1	
240-187232-2	DUP-001-BAC-21-F-A4-20230612-01	Total/NA	Water	300.0-1993 R2.1	
240-187232-3	BAC-22-F-A4-20230612-01	Total/NA	Water	300.0-1993 R2.1	
240-187232-4	BAC-23-F-A4-20230612-01	Total/NA	Water	300.0-1993 R2.1	
240-187232-5	BAC-08-F-A4-20230612-01	Total/NA	Water	300.0-1993 R2.1	
240-187232-6	EB-001-F-A4-20230612-01	Total/NA	Water	300.0-1993 R2.1	
240-187232-7	BAC-07-F-A4-20230613-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-579935/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-579935/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-187232-1 MS	BAC-21-F-A4-20230612-01	Total/NA	Water	300.0-1993 R2.1	
240-187232-1 MSD	BAC-21-F-A4-20230612-01	Total/NA	Water	300.0-1993 R2.1	
240-187232-7 MS	BAC-07-F-A4-20230613-01	Total/NA	Water	300.0-1993 R2.1	
240-187232-7 MSD	BAC-07-F-A4-20230613-01	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 580125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-8	BAC-18-F-A4-20230613-01	Total/NA	Water	300.0-1993 R2.1	
240-187232-9	BAC-06-F-A4-20230613-01	Total/NA	Water	300.0-1993 R2.1	
240-187232-10	BAC-12-F-A3-20230614-01	Total/NA	Water	300.0	
240-187232-11	BAC-116-F-A3-20230614-01	Total/NA	Water	300.0	
240-187232-12	EB-001-F-A3-20230614-01	Total/NA	Water	300.0	
MB 240-580125/3	Method Blank	Total/NA	Water	300.0	
LCS 240-580125/4	Lab Control Sample	Total/NA	Water	300.0	
240-187232-8 MS	BAC-18-F-A4-20230613-01	Total/NA	Water	300.0	
240-187232-8 MSD	BAC-18-F-A4-20230613-01	Total/NA	Water	300.0	

Rad

Prep Batch: 616969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-1	BAC-21-F-A4-20230612-01	Total/NA	Water	PrecSep-21	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Rad (Continued)

Prep Batch: 616969 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-2	DUP-001-BAC-21-F-A4-20230612-01	Total/NA	Water	PrecSep-21	
240-187232-3	BAC-22-F-A4-20230612-01	Total/NA	Water	PrecSep-21	
240-187232-4	BAC-23-F-A4-20230612-01	Total/NA	Water	PrecSep-21	
240-187232-5	BAC-08-F-A4-20230612-01	Total/NA	Water	PrecSep-21	
240-187232-6	EB-001-F-A4-20230612-01	Total/NA	Water	PrecSep-21	
240-187232-7	BAC-07-F-A4-20230613-01	Total/NA	Water	PrecSep-21	
240-187232-8	BAC-18-F-A4-20230613-01	Total/NA	Water	PrecSep-21	
240-187232-9	BAC-06-F-A4-20230613-01	Total/NA	Water	PrecSep-21	
MB 160-616969/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-616969/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
240-187232-7 MS	BAC-07-F-A4-20230613-01	Total/NA	Water	PrecSep-21	
240-187232-7 MSD	BAC-07-F-A4-20230613-01	Total/NA	Water	PrecSep-21	

Prep Batch: 616970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-1	BAC-21-F-A4-20230612-01	Total/NA	Water	PrecSep_0	
240-187232-2	DUP-001-BAC-21-F-A4-20230612-01	Total/NA	Water	PrecSep_0	
240-187232-3	BAC-22-F-A4-20230612-01	Total/NA	Water	PrecSep_0	
240-187232-4	BAC-23-F-A4-20230612-01	Total/NA	Water	PrecSep_0	
240-187232-5	BAC-08-F-A4-20230612-01	Total/NA	Water	PrecSep_0	
240-187232-6	EB-001-F-A4-20230612-01	Total/NA	Water	PrecSep_0	
240-187232-7	BAC-07-F-A4-20230613-01	Total/NA	Water	PrecSep_0	
240-187232-8	BAC-18-F-A4-20230613-01	Total/NA	Water	PrecSep_0	
240-187232-9	BAC-06-F-A4-20230613-01	Total/NA	Water	PrecSep_0	
MB 160-616970/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-616970/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
240-187232-7 MS	BAC-07-F-A4-20230613-01	Total/NA	Water	PrecSep_0	
240-187232-7 MSD	BAC-07-F-A4-20230613-01	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-21-F-A4-20230612-01

Lab Sample ID: 240-187232-1

Date Collected: 06/12/23 10:53

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577692	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 18:39
Total/NA	Prep	7470A			577694	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 16:49
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 17:27
Total/NA	Analysis	300.0-1993 R2.1		1	579935	ALT	EET CLE	07/07/23 19:36
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620350	SCB	EET SL	07/14/23 14:16
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619638	SCB	EET SL	07/10/23 16:00
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 12:05

Client Sample ID: DUP-001-BAC-21-F-A4-20230612-01

Lab Sample ID: 240-187232-2

Date Collected: 06/12/23 10:53

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577692	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 18:42
Total/NA	Prep	7470A			577694	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 16:51
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 17:31
Total/NA	Analysis	300.0-1993 R2.1		1	579935	ALT	EET CLE	07/07/23 20:41
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620350	SCB	EET SL	07/14/23 14:16
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619638	SCB	EET SL	07/10/23 16:01
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 12:05

Client Sample ID: BAC-22-F-A4-20230612-01

Lab Sample ID: 240-187232-3

Date Collected: 06/12/23 12:34

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577692	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 18:45
Total/NA	Prep	7470A			577694	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 16:53
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 17:35
Total/NA	Analysis	300.0-1993 R2.1		1	579935	ALT	EET CLE	07/07/23 21:03
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620350	SCB	EET SL	07/14/23 14:16
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619638	SCB	EET SL	07/10/23 16:01

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-22-F-A4-20230612-01

Lab Sample ID: 240-187232-3

Date Collected: 06/12/23 12:34

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 12:05

Client Sample ID: BAC-23-F-A4-20230612-01

Lab Sample ID: 240-187232-4

Date Collected: 06/12/23 13:26

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577692	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 18:47
Total/NA	Prep	7470A			577694	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 16:55
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 17:39
Total/NA	Analysis	300.0-1993 R2.1		1	579935	ALT	EET CLE	07/07/23 21:24
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620350	SCB	EET SL	07/14/23 14:16
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619638	SCB	EET SL	07/10/23 16:01
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 12:05

Client Sample ID: BAC-08-F-A4-20230612-01

Lab Sample ID: 240-187232-5

Date Collected: 06/12/23 14:23

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577692	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 18:55
Total/NA	Prep	7470A			577694	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 16:57
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 17:43
Total/NA	Analysis	300.0-1993 R2.1		1	579935	ALT	EET CLE	07/07/23 21:46
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620395	SCB	EET SL	07/17/23 09:29
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619638	SCB	EET SL	07/10/23 16:01
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 12:05

Client Sample ID: EB-001-F-A4-20230612-01

Lab Sample ID: 240-187232-6

Date Collected: 06/12/23 15:00

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577692	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 18:58
Total/NA	Prep	7470A			577694	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 16:59

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: EB-001-F-A4-20230612-01

Lab Sample ID: 240-187232-6

Date Collected: 06/12/23 15:00

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 17:47
Total/NA	Analysis	300.0-1993 R2.1		1	579935	ALT	EET CLE	07/07/23 22:08
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620395	SCB	EET SL	07/17/23 09:29
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619619	SCB	EET SL	07/10/23 16:03
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 12:05

Client Sample ID: BAC-07-F-A4-20230613-01

Lab Sample ID: 240-187232-7

Date Collected: 06/13/23 11:35

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577692	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 18:10
Total/NA	Prep	7470A			577694	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 16:28
Total/NA	Analysis	2320B-1997		1	578607	JWW	EET CLE	06/23/23 19:52
Total/NA	Analysis	300.0-1993 R2.1		1	579935	ALT	EET CLE	07/07/23 23:13
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620395	SCB	EET SL	07/17/23 09:30
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619619	SCB	EET SL	07/10/23 16:03
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 12:05

Client Sample ID: BAC-18-F-A4-20230613-01

Lab Sample ID: 240-187232-8

Date Collected: 06/13/23 13:18

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577692	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 19:01
Total/NA	Prep	7470A			577694	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 17:01
Total/NA	Analysis	2320B-1997		1	578607	JWW	EET CLE	06/23/23 20:00
Total/NA	Analysis	300.0-1993 R2.1		1	580125	ALT	EET CLE	07/11/23 02:18
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620395	SCB	EET SL	07/17/23 09:31
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619619	SCB	EET SL	07/10/23 16:04
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 12:05

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-06-F-A4-20230613-01

Lab Sample ID: 240-187232-9

Date Collected: 06/13/23 14:06

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577692	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 19:03
Total/NA	Prep	7470A			577694	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 17:03
Total/NA	Analysis	2320B-1997		1	578607	JWW	EET CLE	06/23/23 20:04
Total/NA	Analysis	300.0-1993 R2.1		1	580125	ALT	EET CLE	07/11/23 03:23
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620395	SCB	EET SL	07/17/23 09:31
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619620	FLC	EET SL	07/10/23 16:06
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 12:05

Client Sample ID: BAC-12-F-A3-20230614-01

Lab Sample ID: 240-187232-10

Date Collected: 06/14/23 12:10

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 21:24
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 13:35
Total/NA	Analysis	2320B-1997		1	578607	JWW	EET CLE	06/23/23 20:07
Total/NA	Analysis	300.0		1	580125	ALT	EET CLE	07/11/23 04:49
Total/NA	Analysis	SM 2540C		1	578050	GH	EET CLE	06/21/23 15:44

Client Sample ID: BAC-116-F-A3-20230614-01

Lab Sample ID: 240-187232-11

Date Collected: 06/14/23 13:03

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 21:28
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 13:39
Total/NA	Analysis	2320B-1997		1	578607	JWW	EET CLE	06/23/23 20:11
Total/NA	Analysis	300.0		1	580125	ALT	EET CLE	07/11/23 05:55
Total/NA	Analysis	SM 2540C		1	578050	GH	EET CLE	06/21/23 15:44

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: EB-001-F-A3-20230614-01

Lab Sample ID: 240-187232-12

Date Collected: 06/14/23 15:20

Matrix: Water

Date Received: 06/17/23 08:00

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 21:32
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 13:44
Total/NA	Analysis	2320B-1997		1	578607	JWW	EET CLE	06/23/23 20:15
Total/NA	Analysis	300.0		1	580125	ALT	EET CLE	07/11/23 06:16
Total/NA	Analysis	SM 2540C		1	578050	GH	EET CLE	06/21/23 15:44

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
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

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
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-23 *
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-23 *
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-24
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-23
MI - RadChem Recognition	State	9005	06-30-23 *
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-23
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

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 Dakota	State	R-207	06-30-23 *
Oklahoma	NELAP	9997	08-31-23
Oregon	NELAP	4157	09-01-23
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23 *
Texas	NELAP	T104704193	07-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO000542021-14	07-31-23
Virginia	NELAP	10310	06-15-25
Washington	State	C592	08-30-23
West Virginia DEP	State	381	10-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Client Information		Sampler: Bobby Cssto		Lab PM: Cisneros, Roxanne		Carrier Tracking No(s): 240-93466-34578.1	
Client Contact: Taylor Huffman		Phone: 740-373-4308		E-Mail: roxanne.cisneros@eurofins.com		Page: Pg 1 of 2	
Company: Lightstone Generation Gavin Power LLC		PWSID:		State of Origin:		COC No: 240-93466-34578.1	
Address: 7397 OH-7		Due Date Requested:		Analysis Requested		Job #:	
City: Cheshire		TAT Requested (days):		Form HEMSD (Yes or No)		Preservation Codes:	
State, Zip: OH, 45620		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		Field Filtered Sample (Yes or No)		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)	
Phone: 740-925-3171(Tel)		PO #: 2935505		300.0 28D - Fluoride		Other:	
Email: taylor.huffman@lightstonegen.com		WO #: 24019633		6020, 7470A		Special Instructions/Note:	
Project Name: Federal CCR Wells - App IV		Project #: 24019633		9315_Ra226, 9320_Ra228, Ra226Ra228, GPC		Total Number of containers	
Site: Grain Plant		SSOW#:		D N D		X	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
BAC-21-F-A4-20230612-01		6-12-23		1053		6 Water	
DUP-001-BAC-21-F-A4-20230612-01		6-12-23		1053		6 Water	
BAC-22-F-A4-20230612-01		6-12-23		1234		6 Water	
BAC-23-F-A4-20230612-01		6-12-23		1326		6 Water	
BAC-08-F-A4-20230612-01		6-12-23		1423		6 Water	
EB-001-F-A4-20230612-01		6-12-23		1500		6 W	
BAC-07-F-A4-20230613-01		6-13-23		1135		6 W	
BAC-07-F-A4-20230613-01		6-13-23		1135		6 W	
BAC-07-F-A4-20230613-01		6-13-23		1135		6 W	
BAC-18-F-A4-20230613-01		6-13-23		1318		6 W	
BAC-06-F-A4-20230613-01		6-13-23		1406		6 W	
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Date:		Time:	
<input type="checkbox"/> Empty Kit Relinquished by:		Deliverable Requested: I, II, III, IV, Other (specify)		6-16-23/0915		Company: ESM	
Relinquished by: Bobby Cssto		Relinquished by: Leah M. Smith		6-16-23 1200		Company: CE TNC	
Relinquished by:		Relinquished by:		6-16-23 1200		Company:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Company:	



Client Information		Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): 240-93465-34577.1
Company: Lightstone Generation Gavin Power LLC		E-Mail: roxanne.cisneros@Eurofinsel.com	State of Origin:
Address: 7397 OH-7		COC No: 240-93465-34577.1	
City: Cheshire		Page: <i>Page 1 of 2</i>	
State/Zip: OH, 45620		Job #:	
Phone: 740-925-3171(Tel)		Preservation Codes:	
Email: taylor.huffman@lightstonegen.com		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 Other:	
Project Name: Federal CCR Wells - App III		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Site:		Total Number of Containers: <input checked="" type="checkbox"/>	
Due Date Requested:		Special Instructions/Note:	
TAT Requested (days):		Analysis Requested	
Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> <input type="checkbox"/>	
PO #: 2935505		Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> <input type="checkbox"/>	
WO #: 24019633		2320B - Alkalinity <input type="checkbox"/> <input checked="" type="checkbox"/>	
Project #: 24019633		2540C - Calcd. 300.0, 28D <input type="checkbox"/> <input checked="" type="checkbox"/>	
SSOW#:		6010B, 6020 <input type="checkbox"/> <input checked="" type="checkbox"/>	
Sample Identification		D N N	
Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Solid, Other)
6-14-23	1210	G W	W
6-14-23	1303	G W	W
6-14-23	1520	G W	W
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)			
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Special Instructions/QC Requirements:			
Empty Kit Relinquished by:		Time:	
Relinquished by: <i>Taylor Huffman</i>		Date: 6-16-23 / 0915	
Relinquished by: <i>Taylor Huffman</i>		Date/Time: 6-16-23 / 0915	
Relinquished by: <i>Taylor Huffman</i>		Date/Time: 6-16-23 / 1200	
Custody Seals Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks:	
Custody Seal No.:		Received by: <i>Sean M. Smith</i>	
Company: <i>Lightstone</i>		Date/Time: 6-16-23 / 1050	
Company: <i>Lightstone</i>		Date/Time: 6-17-23 / 800	
Company: <i>Lightstone</i>		Date/Time:	



Eurofins - Canton Sample Receipt Form/Narrative Login # : _____
Barberton Facility

Client Lightstone Generation Gasin Panel Site Name _____ Cooler unpacked by: Leah M. Smith
Cooler Received on 06-17-23 Opened on 06-17-23
FedEx: 1st Grd Exp UPS FAS Clipper 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 # 22 (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 NA
-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# 10BDH4321
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: _____

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container		Preservative	
			pH	Temp	Added (mls)	Lot #
BAC-21-F-A4-20230612-01	240-187232-C-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-21-F-A4-20230612-01	240-187232-D-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-21-F-A4-20230612-01	240-187232-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-001-BAC-21-F-A4-20230612-01	240-187232-C-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-001-BAC-21-F-A4-20230612-01	240-187232-D-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-001-BAC-21-F-A4-20230612-01	240-187232-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-22-F-A4-20230612-01	240-187232-C-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-22-F-A4-20230612-01	240-187232-D-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-22-F-A4-20230612-01	240-187232-E-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-23-F-A4-20230612-01	240-187232-C-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-23-F-A4-20230612-01	240-187232-D-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-23-F-A4-20230612-01	240-187232-E-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-08-F-A4-20230612-01	240-187232-C-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-08-F-A4-20230612-01	240-187232-D-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-08-F-A4-20230612-01	240-187232-E-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230612-01	240-187232-C-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230612-01	240-187232-D-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230612-01	240-187232-E-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-A4-20230613-01	240-187232-G-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-A4-20230613-01	240-187232-H-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-A4-20230613-01	240-187232-I-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-A4-20230613-01	240-187232-J-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-A4-20230613-01	240-187232-K-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-A4-20230613-01	240-187232-L-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-A4-20230613-01	240-187232-M-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-A4-20230613-01	240-187232-N-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-A4-20230613-01	240-187232-O-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-18-F-A4-20230613-01	240-187232-C-8	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-18-F-A4-20230613-01	240-187232-D-8	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-18-F-A4-20230613-01	240-187232-E-8	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-A4-20230613-01	240-187232-C-9	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-A4-20230613-01	240-187232-D-9	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-A4-20230613-01	240-187232-E-9	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

Client Sample ID

Lab ID

Container Type

Container
pH Temp

Preservative
Added (mls) Lot #

BAC-12-F-A3-20230614-01	240-187232-C-10	Plastic 1 liter - Nitric Acid
BAC-116-F-A3-20230614-01	240-187232-C-11	Plastic 1 liter - Nitric Acid
EB-001-F-A3-20230614-01	240-187232-C-12	Plastic 1 liter - Nitric Acid

<2	_____	_____	_____
<2	_____	_____	_____
<2	_____	_____	_____

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Carrier Tracking No(s):	COC No:												
Client Contact: Shipping/Receiving		Phone:	Cisneros, Roxanne		240-169563.1												
Company: TesLamerica Laboratories, Inc.		E-Mail:	roxanne.cisneros@eurofins.com	State of Origin:	Page 1 of 2												
Address: 13715 Rider Trail North,		Accreditations Required (See note):		Job #:	240-187232-1												
City: Earth City	Due Date Requested: 7/3/2023	<p style="text-align: center;">Analysis Requested</p> <table border="1"> <tr> <th>Field Filtered Sample (Yes or No)</th> <th>Form MS/MSD (Yes or No)</th> <th>9315_Ra226/PreSep_21 Radium-226 (GFC)</th> <th>9320_Ra226/PreSep_0 Radium-226 (GFC)</th> <th>Ra226Ra228_GFC/ Combined Radium-226 and Radium-228</th> <th>Total Number of Containers</th> </tr> <tr> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> </tr> </table>				Field Filtered Sample (Yes or No)	Form MS/MSD (Yes or No)	9315_Ra226/PreSep_21 Radium-226 (GFC)	9320_Ra226/PreSep_0 Radium-226 (GFC)	Ra226Ra228_GFC/ Combined Radium-226 and Radium-228	Total Number of Containers	X	X	X	X	X	X
Field Filtered Sample (Yes or No)	Form MS/MSD (Yes or No)					9315_Ra226/PreSep_21 Radium-226 (GFC)	9320_Ra226/PreSep_0 Radium-226 (GFC)	Ra226Ra228_GFC/ Combined Radium-226 and Radium-228	Total Number of Containers								
X	X	X	X	X	X												
State, Zip: MO, 63045	TAT Requested (days):																
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:																
Email:	WO #:																
Project Name: Federal GWM Wells	Project #: 24019633																
Site:	SSOW#:																
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=soil, BT=biological, A=air)	Preservation Code:	Special Instructions/Note:											
BAC-21-F-A4-20230612-01 (240-187232-1)	6/12/23	10:53 Eastern	Water	Water		Recount of TAR after 21 day ingrowth if > action limit; save planchet											
DUP-001-BAC-21-F-A4-20230612-01 (240-187232-2)	6/12/23	10:53 Eastern	Water	Water		Recount of TAR after 21 day ingrowth if > action limit; save planchet											
BAC-22-F-A4-20230612-01 (240-187232-3)	6/12/23	12:34 Eastern	Water	Water		Recount of TAR after 21 day ingrowth if > action limit; save planchet											
BAC-23-F-A4-20230612-01 (240-187232-4)	6/12/23	13:26 Eastern	Water	Water		Recount of TAR after 21 day ingrowth if > action limit; save planchet											
BAC-08-F-A4-20230612-01 (240-187232-5)	6/12/23	14:23 Eastern	Water	Water		Recount of TAR after 21 day ingrowth if > action limit; save planchet											
EB-001-F-A4-20230612-01 (240-187232-6)	6/12/23	15:00 Eastern	Water	Water		Recount of TAR after 21 day ingrowth if > action limit; save planchet											
BAC-07-F-A4-20230613-01 (240-187232-7)	6/13/23	11:35 Eastern	Water	Water		Recount of TAR after 21 day ingrowth if > action limit; save planchet											
BAC-07-F-A4-20230613-01 (240-187232-7MS)	6/13/23	11:35 Eastern	MS	Water		Recount of TAR after 21 day ingrowth if > action limit; save planchet											
BAC-07-F-A4-20230613-01 (240-187232-7MSD)	6/13/23	11:35 Eastern	MSD	Water		Recount of TAR after 21 day ingrowth if > action limit; save planchet											

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

Empty Kit Relinquished by: _____ Date: _____ Method of Shipment: _____
 Relinquished by: *Rachel Hancock* Date/Time: *6/9/23 8:30* Company: *PEALS*
 Relinquished by: *Shanay-Dargatzis* Date/Time: *6/20/23 08:05* Company: *STAR*
 Relinquished by: _____ Date/Time: _____ Company: _____

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



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-187232-1

Login Number: 187232

List Number: 2

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

List Creation: 06/20/23 01:36 PM

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





ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 7/17/2023 2:08:41 PM

JOB DESCRIPTION

Federal CCR Wells - App III & App IV

JOB NUMBER

240-187259-1

Eurofins Cleveland

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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7/17/2023 2:08:41 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

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
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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Job ID: 240-187259-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-187259-1

Receipt

The samples were received on 6/17/2023 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 9 coolers at receipt time were 0.8°C, 1.4°C, 1.6°C, 1.6°C, 1.8°C, 2.4°C, 2.6°C, 2.6°C and 2.6°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 9315_Ra226: Radium-226 prep batch 160-616969: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. EB-001-F-A4-20230613-01 (240-187259-12), BAC-10-F-A4-20230614-01 (240-187259-13), BAC-14-F-A4-20230614-01 (240-187259-14), DUP-002-BAC-14-F-A4-20230614-01 (240-187259-15), BAC-12-F-A4-20230614-01 (240-187259-16), BAC-16-F-A4-20230614-01 (240-187259-17), EB-001-F-A4-20230614-01 (240-187259-18), (LCS 160-616969/2-A), (MB 160-616969/1-A)

Method 9320_Ra228: Radium-228 prep batch 160-616970: The following sample(s) did not meet the requested limit (RL) due to the reduced sample volume attributed to the presence of matrix interference. During preparation the analyst visually noted matrix effects. The data have been reported with this narrative. BAC-10-F-A4-20230614-01 (240-187259-13), BAC-14-F-A4-20230614-01 (240-187259-14) and BAC-12-F-A4-20230614-01 (240-187259-16)

Method 9320_Ra228: Radium-228 prep batch 160-616970: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. EB-001-F-A4-20230613-01 (240-187259-12), BAC-10-F-A4-20230614-01 (240-187259-13), BAC-14-F-A4-20230614-01 (240-187259-14), DUP-002-BAC-14-F-A4-20230614-01 (240-187259-15), BAC-12-F-A4-20230614-01 (240-187259-16), BAC-16-F-A4-20230614-01 (240-187259-17), EB-001-F-A4-20230614-01 (240-187259-18), (LCS 160-616970/2-A), (MB 160-616970/1-A)

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 - App III & App IV

Job ID: 240-187259-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CLE
SM 2540C	Solids, Total Dissolved (TDS)	SM	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 - App III & App IV

Job ID: 240-187259-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-187259-1	BAC-21-F-A3-20230612-01	Water	06/12/23 10:53	06/17/23 08:00
240-187259-2	DUP-001-BAC-21-F-A3-20230612-01	Water	06/12/23 10:53	06/17/23 08:00
240-187259-3	BAC-22-F-A3-20230612-01	Water	06/12/23 12:34	06/17/23 08:00
240-187259-4	BAC-23-F-A3-20230612-01	Water	06/12/23 13:26	06/17/23 08:00
240-187259-5	BAC-08-F-A3-20230612-01	Water	06/12/23 14:23	06/17/23 08:00
240-187259-6	EB-001-F-A3-20230612-01	Water	06/12/23 15:00	06/17/23 08:00
240-187259-7	BAC-18-F-A3-20230613-01	Water	06/13/23 13:18	06/17/23 08:00
240-187259-8	EB-001-F-A3-20230613-01	Water	06/13/23 16:00	06/17/23 08:00
240-187259-9	BAC-10-F-A3-20230614-01	Water	06/14/23 09:49	06/17/23 08:00
240-187259-10	BAC-14-F-A3-20230614-01	Water	06/14/23 10:55	06/17/23 08:00
240-187259-11	DUP-002-BAC-14-F-A3-20230614-01	Water	06/14/23 10:55	06/17/23 08:00
240-187259-12	EB-001-F-A4-20230613-01	Water	06/13/23 16:00	06/17/23 08:00
240-187259-13	BAC-10-F-A4-20230614-01	Water	06/14/23 09:49	06/17/23 08:00
240-187259-14	BAC-14-F-A4-20230614-01	Water	06/14/23 10:55	06/17/23 08:00
240-187259-15	DUP-002-BAC-14-F-A4-20230614-01	Water	06/14/23 10:55	06/17/23 08:00
240-187259-16	BAC-12-F-A4-20230614-01	Water	06/14/23 12:10	06/17/23 08:00
240-187259-17	BAC-16-F-A4-20230614-01	Water	06/14/23 13:03	06/17/23 08:00
240-187259-18	EB-001-F-A4-20230614-01	Water	06/14/23 15:20	06/17/23 08:00



Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-21-F-A3-20230612-01

Lab Sample ID: 240-187259-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	420		100	57	ug/L	1		6010D	Total Recoverable
Calcium	140000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	16000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	30000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	250		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	250		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	73		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.075		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	130		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	550		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-001-BAC-21-F-A3-20230612-01

Lab Sample ID: 240-187259-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	420		100	57	ug/L	1		6010D	Total Recoverable
Calcium	140000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	16000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	31000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	68		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.078		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	120		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	540		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-22-F-A3-20230612-01

Lab Sample ID: 240-187259-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	230		100	57	ug/L	1		6010D	Total Recoverable
Calcium	160000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	19000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	3100		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	21000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	33		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.082		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	230		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	600		10	7.8	mg/L	1		SM 2540C	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 - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-23-F-A3-20230612-01

Lab Sample ID: 240-187259-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	270		100	57	ug/L	1		6010D	Total Recoverable
Calcium	130000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	15000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	19000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	43		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	140		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	500		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-08-F-A3-20230612-01

Lab Sample ID: 240-187259-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	110		100	57	ug/L	1		6010D	Total Recoverable
Calcium	96000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	13000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	13000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	210		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	210		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	23		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	80		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	350		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-001-F-A3-20230612-01

Lab Sample ID: 240-187259-6

No Detections.

Client Sample ID: BAC-18-F-A3-20230613-01

Lab Sample ID: 240-187259-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1500		100	57	ug/L	1		6010D	Total Recoverable
Calcium	83000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	17000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	95		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	95		5.0	2.6	mg/L	1		2320B-1997	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 - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-18-F-A3-20230613-01 (Continued)

Lab Sample ID: 240-187259-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	25		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.051		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	180		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	400		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-001-F-A3-20230613-01

Lab Sample ID: 240-187259-8

No Detections.

Client Sample ID: BAC-10-F-A3-20230614-01

Lab Sample ID: 240-187259-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	450		100	57	ug/L	1		6010D	Total Recoverable
Calcium	100000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	25000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	43000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	41		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.15		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	170		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	510		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-14-F-A3-20230614-01

Lab Sample ID: 240-187259-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2800		100	57	ug/L	1		6010D	Total Recoverable
Calcium	76000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	23000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	97		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	97		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	31		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.057		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	230		10	3.5	mg/L	10		300.0	Total/NA
Total Dissolved Solids	450		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-002-BAC-14-F-A3-20230614-01

Lab Sample ID: 240-187259-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2900		100	57	ug/L	1		6010D	Total Recoverable
Calcium	77000		1000	250	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 - App III & App IV

Job ID: 240-187259-1

Client Sample ID: DUP-002-BAC-14-F-A3-20230614-01
 (Continued)

Lab Sample ID: 240-187259-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	22000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	23000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	97		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	97		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	31		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.057		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	230		10	3.5	mg/L	10		300.0	Total/NA
Total Dissolved Solids	450		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-001-F-A4-20230613-01

Lab Sample ID: 240-187259-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.86	J ^2	2.0	0.57	ug/L	1		6020B	Total Recoverable
Thallium	0.46	J	1.0	0.20	ug/L	1		6020B	Total Recoverable

Client Sample ID: BAC-10-F-A4-20230614-01

Lab Sample ID: 240-187259-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.0	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	41		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	2.8	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.8		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	3.1	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	24000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	41000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.22	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	210		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	210		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.15		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-14-F-A4-20230614-01

Lab Sample ID: 240-187259-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.3	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	100		5.0	2.2	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 - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-14-F-A4-20230614-01 (Continued)

Lab Sample ID: 240-187259-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	1.4	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.0		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.0		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	4.4	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	23000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	97		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	97		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.057		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: DUP-002-BAC-14-F-A4-20230614-01

Lab Sample ID: 240-187259-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.2	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	100		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	1.4	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.1		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	4.6	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	23000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	88		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	88		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.058		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-12-F-A4-20230614-01

Lab Sample ID: 240-187259-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	10		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	150		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.22	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Chromium	5.8		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	11		1.0	0.19	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 - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-12-F-A4-20230614-01 (Continued)

Lab Sample ID: 240-187259-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	9.2		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	9.3		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.5	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	3300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	33000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	98		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	98		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.069		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-16-F-A4-20230614-01

Lab Sample ID: 240-187259-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	51		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	1.3	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.8		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.83	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	3.8	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	23000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	170		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	170		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.054		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: EB-001-F-A4-20230614-01

Lab Sample ID: 240-187259-18

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-21-F-A3-20230612-01

Lab Sample ID: 240-187259-1

Date Collected: 06/12/23 10:53

Matrix: Water

Date Received: 06/17/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	420		100	57	ug/L		06/20/23 14:00	06/21/23 21:45	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	140000		1000	250	ug/L		06/20/23 14:00	06/21/23 13:48	1
Magnesium	16000		1000	61	ug/L		06/20/23 14:00	06/21/23 13:48	1
Potassium	2700		1000	220	ug/L		06/20/23 14:00	06/21/23 13:48	1
Sodium	30000		1000	330	ug/L		06/20/23 14:00	06/21/23 13:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	250		5.0	2.6	mg/L			06/20/23 17:51	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	250		5.0	2.6	mg/L			06/20/23 17:51	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 17:51	1
Chloride (EPA 300.0)	73		1.0	0.13	mg/L			07/08/23 00:18	1
Fluoride (EPA 300.0)	0.075		0.050	0.024	mg/L			07/08/23 00:18	1
Sulfate (EPA 300.0)	130		1.0	0.35	mg/L			07/08/23 00:18	1
Total Dissolved Solids (SM 2540C)	550		10	7.8	mg/L			06/19/23 14:54	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: DUP-001-BAC-21-F-A3-20230612-01

Lab Sample ID: 240-187259-2

Date Collected: 06/12/23 10:53

Matrix: Water

Date Received: 06/17/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	420		100	57	ug/L		06/20/23 14:00	06/21/23 21:49	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	140000		1000	250	ug/L		06/20/23 14:00	06/21/23 13:53	1
Magnesium	16000		1000	61	ug/L		06/20/23 14:00	06/21/23 13:53	1
Potassium	2900		1000	220	ug/L		06/20/23 14:00	06/21/23 13:53	1
Sodium	31000		1000	330	ug/L		06/20/23 14:00	06/21/23 13:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			06/20/23 17:55	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			06/20/23 17:55	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 17:55	1
Chloride (EPA 300.0)	68		1.0	0.13	mg/L			07/08/23 01:01	1
Fluoride (EPA 300.0)	0.078		0.050	0.024	mg/L			07/08/23 01:01	1
Sulfate (EPA 300.0)	120		1.0	0.35	mg/L			07/08/23 01:01	1
Total Dissolved Solids (SM 2540C)	540		10	7.8	mg/L			06/19/23 14:54	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-22-F-A3-20230612-01

Lab Sample ID: 240-187259-3

Date Collected: 06/12/23 12:34

Matrix: Water

Date Received: 06/17/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	230		100	57	ug/L		06/20/23 14:00	06/21/23 21:54	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	160000		1000	250	ug/L		06/20/23 14:00	06/21/23 13:57	1
Magnesium	19000		1000	61	ug/L		06/20/23 14:00	06/21/23 13:57	1
Potassium	3100		1000	220	ug/L		06/20/23 14:00	06/21/23 13:57	1
Sodium	21000		1000	330	ug/L		06/20/23 14:00	06/21/23 13:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230		5.0	2.6	mg/L			06/20/23 18:18	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230		5.0	2.6	mg/L			06/20/23 18:18	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:18	1
Chloride (EPA 300.0)	33		1.0	0.13	mg/L			07/08/23 01:44	1
Fluoride (EPA 300.0)	0.082		0.050	0.024	mg/L			07/08/23 01:44	1
Sulfate (EPA 300.0)	230		5.0	1.7	mg/L			07/08/23 02:06	5
Total Dissolved Solids (SM 2540C)	600		10	7.8	mg/L			06/19/23 14:54	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-23-F-A3-20230612-01

Lab Sample ID: 240-187259-4

Date Collected: 06/12/23 13:26

Matrix: Water

Date Received: 06/17/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	270		100	57	ug/L		06/20/23 14:00	06/21/23 21:58	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130000		1000	250	ug/L		06/20/23 14:00	06/21/23 14:11	1
Magnesium	15000		1000	61	ug/L		06/20/23 14:00	06/21/23 14:11	1
Potassium	2000		1000	220	ug/L		06/20/23 14:00	06/21/23 14:11	1
Sodium	19000		1000	330	ug/L		06/20/23 14:00	06/21/23 14:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			06/20/23 18:10	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			06/20/23 18:10	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:10	1
Chloride (EPA 300.0)	43		1.0	0.13	mg/L			07/08/23 02:28	1
Fluoride (EPA 300.0)	0.13		0.050	0.024	mg/L			07/08/23 02:28	1
Sulfate (EPA 300.0)	140		1.0	0.35	mg/L			07/08/23 02:28	1
Total Dissolved Solids (SM 2540C)	500		10	7.8	mg/L			06/19/23 14:54	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-08-F-A3-20230612-01

Lab Sample ID: 240-187259-5

Date Collected: 06/12/23 14:23

Matrix: Water

Date Received: 06/17/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	110		100	57	ug/L		06/20/23 14:00	06/21/23 22:02	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	96000		1000	250	ug/L		06/20/23 14:00	06/21/23 14:15	1
Magnesium	13000		1000	61	ug/L		06/20/23 14:00	06/21/23 14:15	1
Potassium	1600		1000	220	ug/L		06/20/23 14:00	06/21/23 14:15	1
Sodium	13000		1000	330	ug/L		06/20/23 14:00	06/21/23 14:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	210		5.0	2.6	mg/L			06/20/23 18:22	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	210		5.0	2.6	mg/L			06/20/23 18:22	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:22	1
Chloride (EPA 300.0)	23		1.0	0.13	mg/L			07/08/23 03:54	1
Fluoride (EPA 300.0)	0.12		0.050	0.024	mg/L			07/08/23 03:54	1
Sulfate (EPA 300.0)	80		1.0	0.35	mg/L			07/08/23 03:54	1
Total Dissolved Solids (SM 2540C)	350		10	7.8	mg/L			06/19/23 14:54	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: EB-001-F-A3-20230612-01

Lab Sample ID: 240-187259-6

Date Collected: 06/12/23 15:00

Matrix: Water

Date Received: 06/17/23 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		06/20/23 14:00	06/21/23 22:07	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		06/20/23 14:00	06/21/23 14:20	1
Magnesium	ND		1000	61	ug/L		06/20/23 14:00	06/21/23 14:20	1
Potassium	ND		1000	220	ug/L		06/20/23 14:00	06/21/23 14:20	1
Sodium	ND		1000	330	ug/L		06/20/23 14:00	06/21/23 14:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:26	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:26	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:26	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			07/08/23 04:16	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			07/08/23 04:16	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			07/08/23 04:16	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			06/19/23 14:54	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-18-F-A3-20230613-01

Lab Sample ID: 240-187259-7

Date Collected: 06/13/23 13:18

Matrix: Water

Date Received: 06/17/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1500		100	57	ug/L		06/20/23 14:00	06/21/23 22:11	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	83000		1000	250	ug/L		06/20/23 14:00	06/21/23 14:25	1
Magnesium	21000		1000	61	ug/L		06/20/23 14:00	06/21/23 14:25	1
Potassium	1400		1000	220	ug/L		06/20/23 14:00	06/21/23 14:25	1
Sodium	17000		1000	330	ug/L		06/20/23 14:00	06/21/23 14:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	95		5.0	2.6	mg/L			06/20/23 18:29	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	95		5.0	2.6	mg/L			06/20/23 18:29	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:29	1
Chloride (EPA 300.0)	25		1.0	0.13	mg/L			07/11/23 03:45	1
Fluoride (EPA 300.0)	0.051		0.050	0.024	mg/L			07/11/23 03:45	1
Sulfate (EPA 300.0)	180		1.0	0.35	mg/L			07/11/23 03:45	1
Total Dissolved Solids (SM 2540C)	400		10	7.8	mg/L			06/20/23 14:55	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: EB-001-F-A3-20230613-01

Lab Sample ID: 240-187259-8

Date Collected: 06/13/23 16:00

Matrix: Water

Date Received: 06/17/23 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		06/20/23 14:00	06/21/23 22:15	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		06/20/23 14:00	06/21/23 14:29	1
Magnesium	ND		1000	61	ug/L		06/20/23 14:00	06/21/23 14:29	1
Potassium	ND		1000	220	ug/L		06/20/23 14:00	06/21/23 14:29	1
Sodium	ND		1000	330	ug/L		06/20/23 14:00	06/21/23 14:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:33	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:33	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:33	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			07/11/23 04:06	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			07/11/23 04:06	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			07/11/23 04:06	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			06/20/23 14:55	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-10-F-A3-20230614-01

Lab Sample ID: 240-187259-9

Date Collected: 06/14/23 09:49

Matrix: Water

Date Received: 06/17/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	450		100	57	ug/L		06/20/23 14:00	06/21/23 22:20	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	100000		1000	250	ug/L		06/20/23 14:00	06/21/23 14:34	1
Magnesium	25000		1000	61	ug/L		06/20/23 14:00	06/21/23 14:34	1
Potassium	1800		1000	220	ug/L		06/20/23 14:00	06/21/23 14:34	1
Sodium	43000		1000	330	ug/L		06/20/23 14:00	06/21/23 14:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	200		5.0	2.6	mg/L			06/20/23 18:37	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	200		5.0	2.6	mg/L			06/20/23 18:37	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:37	1
Chloride (EPA 300.0)	41		1.0	0.13	mg/L			07/11/23 08:26	1
Fluoride (EPA 300.0)	0.15		0.050	0.024	mg/L			07/11/23 08:26	1
Sulfate (EPA 300.0)	170		1.0	0.35	mg/L			07/11/23 08:26	1
Total Dissolved Solids (SM 2540C)	510		10	7.8	mg/L			06/21/23 15:44	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-14-F-A3-20230614-01

Lab Sample ID: 240-187259-10

Date Collected: 06/14/23 10:55

Matrix: Water

Date Received: 06/17/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2800		100	57	ug/L		06/20/23 14:00	06/21/23 22:24	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	76000		1000	250	ug/L		06/20/23 14:00	06/21/23 14:38	1
Magnesium	22000		1000	61	ug/L		06/20/23 14:00	06/21/23 14:38	1
Potassium	1700		1000	220	ug/L		06/20/23 14:00	06/21/23 14:38	1
Sodium	23000		1000	330	ug/L		06/20/23 14:00	06/21/23 14:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	97		5.0	2.6	mg/L			06/20/23 18:41	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	97		5.0	2.6	mg/L			06/20/23 18:41	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:41	1
Chloride (EPA 300.0)	31		1.0	0.13	mg/L			07/11/23 09:09	1
Fluoride (EPA 300.0)	0.057		0.050	0.024	mg/L			07/11/23 09:09	1
Sulfate (EPA 300.0)	230		10	3.5	mg/L			07/12/23 15:04	10
Total Dissolved Solids (SM 2540C)	450		10	7.8	mg/L			06/21/23 15:44	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: DUP-002-BAC-14-F-A3-20230614-01

Lab Sample ID: 240-187259-11

Date Collected: 06/14/23 10:55

Matrix: Water

Date Received: 06/17/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2900		100	57	ug/L		06/20/23 14:00	06/21/23 22:37	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	77000		1000	250	ug/L		06/20/23 14:00	06/21/23 14:43	1
Magnesium	22000		1000	61	ug/L		06/20/23 14:00	06/21/23 14:43	1
Potassium	1700		1000	220	ug/L		06/20/23 14:00	06/21/23 14:43	1
Sodium	23000		1000	330	ug/L		06/20/23 14:00	06/21/23 14:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	97		5.0	2.6	mg/L			06/20/23 18:44	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	97		5.0	2.6	mg/L			06/20/23 18:44	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:44	1
Chloride (EPA 300.0)	31		1.0	0.13	mg/L			07/11/23 10:15	1
Fluoride (EPA 300.0)	0.057		0.050	0.024	mg/L			07/11/23 10:15	1
Sulfate (EPA 300.0)	230		10	3.5	mg/L			07/12/23 15:24	10
Total Dissolved Solids (SM 2540C)	450		10	7.8	mg/L			06/21/23 15:44	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: EB-001-F-A4-20230613-01

Lab Sample ID: 240-187259-12

Date Collected: 06/13/23 16:00

Matrix: Water

Date Received: 06/17/23 08:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.86	J ^2	2.0	0.57	ug/L		06/19/23 14:00	06/20/23 19:11	1
Arsenic	ND		5.0	0.75	ug/L		06/19/23 14:00	06/20/23 19:11	1
Barium	ND		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 19:11	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 19:11	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:11	1
Chromium	ND		5.0	1.2	ug/L		06/19/23 14:00	06/20/23 19:11	1
Cobalt	ND		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 19:11	1
Lead	ND		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 19:11	1
Lithium	ND		8.0	1.7	ug/L		06/19/23 14:00	06/20/23 19:11	1
Magnesium	ND		1000	61	ug/L		06/19/23 14:00	06/20/23 19:11	1
Molybdenum	ND		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 19:11	1
Potassium	ND		1000	220	ug/L		06/19/23 14:00	06/20/23 19:11	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 19:11	1
Sodium	ND		1000	330	ug/L		06/19/23 14:00	06/20/23 19:11	1
Thallium	0.46	J	1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:11	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		06/19/23 14:00	06/20/23 17:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:50	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:50	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:50	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			07/11/23 04:28	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	0.0484	U	0.0678	0.0680	1.00	0.115	pCi/L	06/21/23 10:14	07/17/23 09:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.5		30 - 110					06/21/23 10:14	07/17/23 09:31	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	0.120	U	0.340	0.340	1.00	0.604	pCi/L	06/21/23 10:17	07/10/23 16:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.5		30 - 110					06/21/23 10:17	07/10/23 16:06	1
Y Carrier	84.5		30 - 110					06/21/23 10:17	07/10/23 16:06	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: EB-001-F-A4-20230613-01

Lab Sample ID: 240-187259-12

Date Collected: 06/13/23 16:00

Matrix: Water

Date Received: 06/17/23 08:00

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	0.169	U	0.347	0.347	5.00	0.604	pCi/L		07/17/23 12:05	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-10-F-A4-20230614-01

Lab Sample ID: 240-187259-13

Date Collected: 06/14/23 09:49

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 19:32	1
Arsenic	2.0	J	5.0	0.75	ug/L		06/19/23 14:00	06/20/23 19:32	1
Barium	41		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 19:32	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 19:32	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:32	1
Chromium	2.8	J	5.0	1.2	ug/L		06/19/23 14:00	06/20/23 19:32	1
Cobalt	2.1		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 19:32	1
Lead	1.8		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 19:32	1
Lithium	3.1	J	8.0	1.7	ug/L		06/19/23 14:00	06/20/23 19:32	1
Magnesium	24000		1000	61	ug/L		06/19/23 14:00	06/20/23 19:32	1
Molybdenum	ND		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 19:32	1
Potassium	1700		1000	220	ug/L		06/19/23 14:00	06/20/23 19:32	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 19:32	1
Sodium	41000		1000	330	ug/L		06/19/23 14:00	06/20/23 19:32	1
Thallium	0.22	J	1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:32	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		06/19/23 14:00	06/20/23 17:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	210		5.0	2.6	mg/L			06/20/23 19:01	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	210		5.0	2.6	mg/L			06/20/23 19:01	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 19:01	1
Fluoride (EPA 300.0-1993 R2.1)	0.15		0.050	0.024	mg/L			07/11/23 10:36	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0864	U	0.188	0.188	1.00	0.345	pCi/L	06/21/23 10:14	07/17/23 09:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	52.7		30 - 110					06/21/23 10:14	07/17/23 09:32	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.866	U G	1.22	1.23	1.00	2.06	pCi/L	06/21/23 10:17	07/10/23 16:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	52.7		30 - 110					06/21/23 10:17	07/10/23 16:07	1
Y Carrier	82.6		30 - 110					06/21/23 10:17	07/10/23 16:07	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-10-F-A4-20230614-01

Lab Sample ID: 240-187259-13

Date Collected: 06/14/23 09:49

Matrix: Water

Date Received: 06/17/23 08:00

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	0.952	U	1.23	1.24	5.00	2.06	pCi/L		07/17/23 12:05	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-14-F-A4-20230614-01

Lab Sample ID: 240-187259-14

Date Collected: 06/14/23 10:55

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 19:35	1
Arsenic	3.3	J	5.0	0.75	ug/L		06/19/23 14:00	06/20/23 19:35	1
Barium	100		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 19:35	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 19:35	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:35	1
Chromium	1.4	J	5.0	1.2	ug/L		06/19/23 14:00	06/20/23 19:35	1
Cobalt	2.0		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 19:35	1
Lead	1.0		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 19:35	1
Lithium	4.4	J	8.0	1.7	ug/L		06/19/23 14:00	06/20/23 19:35	1
Magnesium	21000		1000	61	ug/L		06/19/23 14:00	06/20/23 19:35	1
Molybdenum	ND		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 19:35	1
Potassium	1600		1000	220	ug/L		06/19/23 14:00	06/20/23 19:35	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 19:35	1
Sodium	23000		1000	330	ug/L		06/19/23 14:00	06/20/23 19:35	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:35	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		06/19/23 14:00	06/20/23 17:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	97		5.0	2.6	mg/L			06/20/23 18:54	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	97		5.0	2.6	mg/L			06/20/23 18:54	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:54	1
Fluoride (EPA 300.0-1993 R2.1)	0.057		0.050	0.024	mg/L			07/11/23 10:58	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.199	U	0.163	0.164	1.00	0.242	pCi/L	06/21/23 10:14	07/17/23 09:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	59.5		30 - 110					06/21/23 10:14	07/17/23 09:34	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.341	U G	0.665	0.666	1.00	1.15	pCi/L	06/21/23 10:17	07/10/23 16:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	59.5		30 - 110					06/21/23 10:17	07/10/23 16:07	1
Y Carrier	87.1		30 - 110					06/21/23 10:17	07/10/23 16:07	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-14-F-A4-20230614-01

Lab Sample ID: 240-187259-14

Date Collected: 06/14/23 10:55

Matrix: Water

Date Received: 06/17/23 08:00

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	U	0.685	0.686	5.00	1.15	pCi/L		07/17/23 12:05	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: DUP-002-BAC-14-F-A4-20230614-01

Lab Sample ID: 240-187259-15

Date Collected: 06/14/23 10:55

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 19:38	1
Arsenic	3.2	J	5.0	0.75	ug/L		06/19/23 14:00	06/20/23 19:38	1
Barium	100		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 19:38	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 19:38	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:38	1
Chromium	1.4	J	5.0	1.2	ug/L		06/19/23 14:00	06/20/23 19:38	1
Cobalt	2.1		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 19:38	1
Lead	1.1		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 19:38	1
Lithium	4.6	J	8.0	1.7	ug/L		06/19/23 14:00	06/20/23 19:38	1
Magnesium	22000		1000	61	ug/L		06/19/23 14:00	06/20/23 19:38	1
Molybdenum	ND		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 19:38	1
Potassium	1600		1000	220	ug/L		06/19/23 14:00	06/20/23 19:38	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 19:38	1
Sodium	23000		1000	330	ug/L		06/19/23 14:00	06/20/23 19:38	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:38	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		06/19/23 14:00	06/20/23 17:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	88		5.0	2.6	mg/L			06/20/23 19:05	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	88		5.0	2.6	mg/L			06/20/23 19:05	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 19:05	1
Fluoride (EPA 300.0-1993 R2.1)	0.058		0.050	0.024	mg/L			07/11/23 11:20	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	0.196		0.136	0.138	1.00	0.195	pCi/L	06/21/23 10:14	07/17/23 09:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		30 - 110					06/21/23 10:14	07/17/23 09:34	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	0.506	U	0.464	0.466	1.00	0.732	pCi/L	06/21/23 10:17	07/10/23 16:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		30 - 110					06/21/23 10:17	07/10/23 16:07	1
Y Carrier	85.2		30 - 110					06/21/23 10:17	07/10/23 16:07	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: DUP-002-BAC-14-F-A4-20230614-01

Lab Sample ID: 240-187259-15

Date Collected: 06/14/23 10:55

Matrix: Water

Date Received: 06/17/23 08:00

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	0.702	U	0.484	0.486	5.00	0.732	pCi/L		07/17/23 13:20	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-12-F-A4-20230614-01

Lab Sample ID: 240-187259-16

Date Collected: 06/14/23 12:10

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 19:40	1
Arsenic	10		5.0	0.75	ug/L		06/19/23 14:00	06/20/23 19:40	1
Barium	150		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 19:40	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 19:40	1
Cadmium	0.22	J	1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:40	1
Chromium	5.8		5.0	1.2	ug/L		06/19/23 14:00	06/20/23 19:40	1
Cobalt	11		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 19:40	1
Lead	9.2		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 19:40	1
Lithium	9.3		8.0	1.7	ug/L		06/19/23 14:00	06/20/23 19:40	1
Magnesium	20000		1000	61	ug/L		06/19/23 14:00	06/20/23 19:40	1
Molybdenum	1.5	J	5.0	1.1	ug/L		06/19/23 14:00	06/20/23 19:40	1
Potassium	3300		1000	220	ug/L		06/19/23 14:00	06/20/23 19:40	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 19:40	1
Sodium	33000		1000	330	ug/L		06/19/23 14:00	06/20/23 19:40	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:40	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		06/19/23 14:00	06/20/23 17:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	98		5.0	2.6	mg/L			06/20/23 19:09	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	98		5.0	2.6	mg/L			06/20/23 19:09	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 19:09	1
Fluoride (EPA 300.0-1993 R2.1)	0.069		0.050	0.024	mg/L			07/11/23 11:41	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	0.363		0.222	0.224	1.00	0.301	pCi/L	06/21/23 10:14	07/17/23 09:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.7		30 - 110					06/21/23 10:14	07/17/23 09:34	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	0.729	U G	0.755	0.758	1.00	1.22	pCi/L	06/21/23 10:17	07/10/23 16:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.7		30 - 110					06/21/23 10:17	07/10/23 16:07	1
Y Carrier	81.9		30 - 110					06/21/23 10:17	07/10/23 16:07	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-12-F-A4-20230614-01

Lab Sample ID: 240-187259-16

Date Collected: 06/14/23 12:10

Matrix: Water

Date Received: 06/17/23 08:00

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	U	0.787	0.790	5.00	1.22	pCi/L		07/17/23 13:20	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-16-F-A4-20230614-01

Lab Sample ID: 240-187259-17

Date Collected: 06/14/23 13:03

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 19:43	1
Arsenic	ND		5.0	0.75	ug/L		06/19/23 14:00	06/20/23 19:43	1
Barium	51		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 19:43	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 19:43	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:43	1
Chromium	1.3	J	5.0	1.2	ug/L		06/19/23 14:00	06/20/23 19:43	1
Cobalt	1.8		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 19:43	1
Lead	0.83	J	1.0	0.45	ug/L		06/19/23 14:00	06/20/23 19:43	1
Lithium	3.8	J	8.0	1.7	ug/L		06/19/23 14:00	06/20/23 19:43	1
Magnesium	23000		1000	61	ug/L		06/19/23 14:00	06/20/23 19:43	1
Molybdenum	ND		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 19:43	1
Potassium	1700		1000	220	ug/L		06/19/23 14:00	06/20/23 19:43	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 19:43	1
Sodium	16000		1000	330	ug/L		06/19/23 14:00	06/20/23 19:43	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:43	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		06/19/23 14:00	06/20/23 17:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	170		5.0	2.6	mg/L			06/20/23 19:12	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	170		5.0	2.6	mg/L			06/20/23 19:12	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 19:12	1
Fluoride (EPA 300.0-1993 R2.1)	0.054		0.050	0.024	mg/L			07/11/23 12:03	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0532	U	0.0821	0.0822	1.00	0.142	pCi/L	06/21/23 10:14	07/17/23 09:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		30 - 110					06/21/23 10:14	07/17/23 09:38	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.420	U	0.476	0.477	1.00	0.780	pCi/L	06/21/23 10:17	07/10/23 16:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		30 - 110					06/21/23 10:17	07/10/23 16:07	1
Y Carrier	85.6		30 - 110					06/21/23 10:17	07/10/23 16:07	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-16-F-A4-20230614-01

Lab Sample ID: 240-187259-17

Date Collected: 06/14/23 13:03

Matrix: Water

Date Received: 06/17/23 08:00

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	0.473	U	0.483	0.484	5.00	0.780	pCi/L		07/17/23 13:20	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: EB-001-F-A4-20230614-01

Lab Sample ID: 240-187259-18

Date Collected: 06/14/23 15:20

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 19:46	1
Arsenic	ND		5.0	0.75	ug/L		06/19/23 14:00	06/20/23 19:46	1
Barium	ND		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 19:46	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 19:46	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:46	1
Chromium	ND		5.0	1.2	ug/L		06/19/23 14:00	06/20/23 19:46	1
Cobalt	ND		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 19:46	1
Lead	ND		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 19:46	1
Lithium	ND		8.0	1.7	ug/L		06/19/23 14:00	06/20/23 19:46	1
Magnesium	ND		1000	61	ug/L		06/19/23 14:00	06/20/23 19:46	1
Molybdenum	ND		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 19:46	1
Potassium	ND		1000	220	ug/L		06/19/23 14:00	06/20/23 19:46	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 19:46	1
Sodium	ND		1000	330	ug/L		06/19/23 14:00	06/20/23 19:46	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:46	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		06/19/23 14:00	06/20/23 17:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 19:16	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 19:16	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 19:16	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			07/11/23 12:25	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0322	U	0.0804	0.0804	1.00	0.145	pCi/L	06/21/23 10:14	07/17/23 09:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.4		30 - 110					06/21/23 10:14	07/17/23 09:35	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.0584	U	0.319	0.319	1.00	0.578	pCi/L	06/21/23 10:17	07/10/23 16:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.4		30 - 110					06/21/23 10:17	07/10/23 16:07	1
Y Carrier	81.9		30 - 110					06/21/23 10:17	07/10/23 16:07	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: EB-001-F-A4-20230614-01

Lab Sample ID: 240-187259-18

Date Collected: 06/14/23 15:20

Matrix: Water

Date Received: 06/17/23 08:00

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	0.0907	U	0.329	0.329	5.00	0.578	pCi/L		07/17/23 13:20	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
240-187259-12	EB-001-F-A4-20230613-01	88.5	
240-187259-13	BAC-10-F-A4-20230614-01	52.7	
240-187259-14	BAC-14-F-A4-20230614-01	59.5	
240-187259-15	DUP-002-BAC-14-F-A4-20230614-01	88.0	
240-187259-16	BAC-12-F-A4-20230614-01	80.7	
240-187259-17	BAC-16-F-A4-20230614-01	94.1	
240-187259-18	EB-001-F-A4-20230614-01	95.4	
LCS 160-616969/2-A	Lab Control Sample	97.2	
MB 160-616969/1-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)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-187259-12	EB-001-F-A4-20230613-01	88.5	84.5
240-187259-13	BAC-10-F-A4-20230614-01	52.7	82.6
240-187259-14	BAC-14-F-A4-20230614-01	59.5	87.1
240-187259-15	DUP-002-BAC-14-F-A4-20230614-01	88.0	85.2
240-187259-16	BAC-12-F-A4-20230614-01	80.7	81.9
240-187259-17	BAC-16-F-A4-20230614-01	94.1	85.6
240-187259-18	EB-001-F-A4-20230614-01	95.4	81.9
LCS 160-616970/2-A	Lab Control Sample	97.2	81.1
MB 160-616970/1-A	Method Blank	89.8	80.0

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-577826/1-A
Matrix: Water
Analysis Batch: 578108

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 577826

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		06/20/23 14:00	06/21/23 20:24	1

Lab Sample ID: LCS 240-577826/2-A
Matrix: Water
Analysis Batch: 578108

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 577826

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 240-577687/1-A
Matrix: Water
Analysis Batch: 577918

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 577687

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		06/19/23 14:00	06/20/23 19:06	1
Arsenic	ND		5.0	0.75	ug/L		06/19/23 14:00	06/20/23 19:06	1
Barium	ND		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 19:06	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 19:06	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:06	1
Chromium	ND		5.0	1.2	ug/L		06/19/23 14:00	06/20/23 19:06	1
Cobalt	ND		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 19:06	1
Lead	ND		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 19:06	1
Lithium	ND		8.0	1.7	ug/L		06/19/23 14:00	06/20/23 19:06	1
Magnesium	ND		1000	61	ug/L		06/19/23 14:00	06/20/23 19:06	1
Molybdenum	ND		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 19:06	1
Potassium	ND		1000	220	ug/L		06/19/23 14:00	06/20/23 19:06	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 19:06	1
Sodium	ND		1000	330	ug/L		06/19/23 14:00	06/20/23 19:06	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:06	1

Lab Sample ID: LCS 240-577687/2-A
Matrix: Water
Analysis Batch: 577918

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 577687

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	109		ug/L		109	80 - 120
Arsenic	1000	990		ug/L		99	80 - 120
Barium	1000	958		ug/L		96	80 - 120
Beryllium	500	494		ug/L		99	80 - 120
Cadmium	500	487		ug/L		97	80 - 120
Chromium	500	507		ug/L		101	80 - 120
Cobalt	500	494		ug/L		99	80 - 120
Lead	500	501		ug/L		100	80 - 120
Lithium	500	476		ug/L		95	80 - 120
Magnesium	25000	25800		ug/L		103	80 - 120
Molybdenum	500	501		ug/L		100	80 - 120
Potassium	25000	25900		ug/L		103	80 - 120

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

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

Lab Sample ID: LCS 240-577687/2-A
Matrix: Water
Analysis Batch: 577918

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 577687

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Selenium	1000	964		ug/L		96	80 - 120
Sodium	25000	25800		ug/L		103	80 - 120
Thallium	1000	989		ug/L		99	80 - 120

Lab Sample ID: 240-187259-12 MS
Matrix: Water
Analysis Batch: 577918

Client Sample ID: EB-001-F-A4-20230613-01
Prep Type: Total Recoverable
Prep Batch: 577687

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.86	J ^2	100	110		ug/L		109	80 - 120
Arsenic	ND		1000	973		ug/L		97	80 - 120
Barium	ND		1000	938		ug/L		94	80 - 120
Beryllium	ND		500	489		ug/L		98	80 - 120
Cadmium	ND		500	479		ug/L		96	80 - 120
Chromium	ND		500	499		ug/L		100	80 - 120
Cobalt	ND		500	482		ug/L		96	80 - 120
Lead	ND		500	495		ug/L		99	80 - 120
Lithium	ND		500	474		ug/L		95	80 - 120
Magnesium	ND		25000	25500		ug/L		102	80 - 120
Molybdenum	ND		500	498		ug/L		100	80 - 120
Potassium	ND		25000	25200		ug/L		101	80 - 120
Selenium	ND		1000	949		ug/L		95	80 - 120
Sodium	ND		25000	25400		ug/L		102	80 - 120
Thallium	0.46	J	1000	975		ug/L		97	80 - 120

Lab Sample ID: 240-187259-12 MSD
Matrix: Water
Analysis Batch: 577918

Client Sample ID: EB-001-F-A4-20230613-01
Prep Type: Total Recoverable
Prep Batch: 577687

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Antimony	0.86	J ^2	100	109		ug/L		109	80 - 120	0	20
Arsenic	ND		1000	990		ug/L		99	80 - 120	2	20
Barium	ND		1000	959		ug/L		96	80 - 120	2	20
Beryllium	ND		500	496		ug/L		99	80 - 120	1	20
Cadmium	ND		500	485		ug/L		97	80 - 120	1	20
Chromium	ND		500	507		ug/L		101	80 - 120	2	20
Cobalt	ND		500	493		ug/L		99	80 - 120	2	20
Lead	ND		500	502		ug/L		100	80 - 120	1	20
Lithium	ND		500	477		ug/L		95	80 - 120	1	20
Magnesium	ND		25000	25700		ug/L		103	80 - 120	1	20
Molybdenum	ND		500	503		ug/L		101	80 - 120	1	20
Potassium	ND		25000	25600		ug/L		102	80 - 120	1	20
Selenium	ND		1000	963		ug/L		96	80 - 120	1	20
Sodium	ND		25000	25700		ug/L		103	80 - 120	1	20
Thallium	0.46	J	1000	989		ug/L		99	80 - 120	1	20

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

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

Lab Sample ID: MB 240-577826/1-A
Matrix: Water
Analysis Batch: 578100

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 577826

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Calcium	ND		1000	250	ug/L		06/20/23 14:00	06/21/23 12:22	1
Magnesium	ND		1000	61	ug/L		06/20/23 14:00	06/21/23 12:22	1
Potassium	ND		1000	220	ug/L		06/20/23 14:00	06/21/23 12:22	1
Sodium	ND		1000	330	ug/L		06/20/23 14:00	06/21/23 12:22	1

Lab Sample ID: LCS 240-577826/3-A
Matrix: Water
Analysis Batch: 578100

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 577826

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Magnesium	25000	25400		ug/L		102	80 - 120
Potassium	25000	25300		ug/L		101	80 - 120
Sodium	25000	25100		ug/L		100	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-577689/1-A
Matrix: Water
Analysis Batch: 577919

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 577689

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.20	0.13	ug/L		06/19/23 14:00	06/20/23 17:09	1

Lab Sample ID: LCS 240-577689/2-A
Matrix: Water
Analysis Batch: 577919

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 577689

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits

Lab Sample ID: 240-187259-12 MS
Matrix: Water
Analysis Batch: 577919

Client Sample ID: EB-001-F-A4-20230613-01
Prep Type: Total/NA
Prep Batch: 577689

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits

Lab Sample ID: 240-187259-12 MSD
Matrix: Water
Analysis Batch: 577919

Client Sample ID: EB-001-F-A4-20230613-01
Prep Type: Total/NA
Prep Batch: 577689

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-578219/30
Matrix: Water
Analysis Batch: 578219

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			06/20/23 16:17	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			06/20/23 16:17	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			06/20/23 16:17	1

Lab Sample ID: MB 240-578219/56
Matrix: Water
Analysis Batch: 578219

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			06/20/23 18:03	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			06/20/23 18:03	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			06/20/23 18:03	1

Lab Sample ID: LCS 240-578219/29
Matrix: Water
Analysis Batch: 578219

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	86.3		mg/L		107	86 - 123

Lab Sample ID: LCS 240-578219/55
Matrix: Water
Analysis Batch: 578219

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	86.3		mg/L		107	86 - 123

Lab Sample ID: 240-187259-4 DU
Matrix: Water
Analysis Batch: 578219

Client Sample ID: BAC-23-F-A3-20230612-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Alkalinity	240		237		mg/L		0.1	20
Bicarbonate Alkalinity as CaCO3	240		237		mg/L		0.1	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Lab Sample ID: 240-187259-14 DU
Matrix: Water
Analysis Batch: 578219

Client Sample ID: BAC-14-F-A4-20230614-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Alkalinity	97		86.5		mg/L		12	20
Bicarbonate Alkalinity as CaCO3	97		86.5		mg/L		12	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-579935/3
Matrix: Water
Analysis Batch: 579935

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			07/07/23 18:53	1
Fluoride	ND		0.050	0.024	mg/L			07/07/23 18:53	1
Sulfate	ND		1.0	0.35	mg/L			07/07/23 18:53	1

Lab Sample ID: LCS 240-579935/4
Matrix: Water
Analysis Batch: 579935

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	2.56		mg/L		102	90 - 110
Sulfate	50.0	50.2		mg/L		100	90 - 110

Lab Sample ID: MB 240-580125/3
Matrix: Water
Analysis Batch: 580125

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			07/11/23 01:34	1
Fluoride	ND		0.050	0.024	mg/L			07/11/23 01:34	1
Sulfate	ND		1.0	0.35	mg/L			07/11/23 01:34	1

Lab Sample ID: LCS 240-580125/4
Matrix: Water
Analysis Batch: 580125

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	48.7		mg/L		97	90 - 110
Fluoride	2.50	2.51		mg/L		100	90 - 110
Sulfate	50.0	49.2		mg/L		98	90 - 110

Lab Sample ID: MB 240-580390/3
Matrix: Water
Analysis Batch: 580390

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			07/12/23 14:03	1
Fluoride	ND		0.050	0.024	mg/L			07/12/23 14:03	1
Sulfate	ND		1.0	0.35	mg/L			07/12/23 14:03	1

Lab Sample ID: LCS 240-580390/4
Matrix: Water
Analysis Batch: 580390

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	50.1		mg/L		100	90 - 110
Fluoride	2.50	2.60		mg/L		104	90 - 110
Sulfate	50.0	50.5		mg/L		101	90 - 110

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

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

Lab Sample ID: MB 240-577721/1
Matrix: Water
Analysis Batch: 577721

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			06/19/23 14:54	1

Lab Sample ID: LCS 240-577721/2
Matrix: Water
Analysis Batch: 577721

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	518	484		mg/L		93	80 - 120

Lab Sample ID: 240-187259-1 DU
Matrix: Water
Analysis Batch: 577721

Client Sample ID: BAC-21-F-A3-20230612-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	550		545		mg/L		1	20

Lab Sample ID: MB 240-577886/1
Matrix: Water
Analysis Batch: 577886

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			06/20/23 14:55	1

Lab Sample ID: LCS 240-577886/2
Matrix: Water
Analysis Batch: 577886

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	518	496		mg/L		96	80 - 120

Lab Sample ID: MB 240-578050/1
Matrix: Water
Analysis Batch: 578050

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			06/21/23 15:44	1

Lab Sample ID: LCS 240-578050/2
Matrix: Water
Analysis Batch: 578050

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	518	488		mg/L		94	80 - 120

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-616969/1-A
Matrix: Water
Analysis Batch: 620350

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 616969

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.04601	U	0.0784	0.0785	1.00	0.138	pCi/L	06/21/23 10:14	07/14/23 14:16	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
%Yield	Qualifier									
Ba Carrier	89.8		30 - 110			06/21/23 10:14	07/14/23 14:16	1		

Lab Sample ID: LCS 160-616969/2-A
Matrix: Water
Analysis Batch: 620350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 616969

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	9.997		1.09	1.00	0.145	pCi/L	88	75 - 125
Carrier	LCS LCS		Limits			Prepared	Analyzed	Dil Fac	
%Yield	Qualifier								
Ba Carrier	97.2		30 - 110						

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-616970/1-A
Matrix: Water
Analysis Batch: 619638

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 616970

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	-0.04969	U	0.305	0.305	1.00	0.589	pCi/L	06/21/23 10:17	07/10/23 16:00	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
%Yield	Qualifier									
Ba Carrier	89.8		30 - 110			06/21/23 10:17	07/10/23 16:00	1		
Y Carrier	80.0		30 - 110			06/21/23 10:17	07/10/23 16:00	1		

Lab Sample ID: LCS 160-616970/2-A
Matrix: Water
Analysis Batch: 619638

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 616970

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-228	8.05	9.804		1.34	1.00	0.608	pCi/L	122	75 - 125
Carrier	LCS LCS		Limits			Prepared	Analyzed	Dil Fac	
%Yield	Qualifier								
Ba Carrier	97.2		30 - 110						
Y Carrier	81.1		30 - 110						

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Metals

Prep Batch: 577687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-12	EB-001-F-A4-20230613-01	Total Recoverable	Water	3005A	
240-187259-13	BAC-10-F-A4-20230614-01	Total Recoverable	Water	3005A	
240-187259-14	BAC-14-F-A4-20230614-01	Total Recoverable	Water	3005A	
240-187259-15	DUP-002-BAC-14-F-A4-20230614-01	Total Recoverable	Water	3005A	
240-187259-16	BAC-12-F-A4-20230614-01	Total Recoverable	Water	3005A	
240-187259-17	BAC-16-F-A4-20230614-01	Total Recoverable	Water	3005A	
240-187259-18	EB-001-F-A4-20230614-01	Total Recoverable	Water	3005A	
MB 240-577687/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-577687/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-187259-12 MS	EB-001-F-A4-20230613-01	Total Recoverable	Water	3005A	
240-187259-12 MSD	EB-001-F-A4-20230613-01	Total Recoverable	Water	3005A	

Prep Batch: 577689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-12	EB-001-F-A4-20230613-01	Total/NA	Water	7470A	
240-187259-13	BAC-10-F-A4-20230614-01	Total/NA	Water	7470A	
240-187259-14	BAC-14-F-A4-20230614-01	Total/NA	Water	7470A	
240-187259-15	DUP-002-BAC-14-F-A4-20230614-01	Total/NA	Water	7470A	
240-187259-16	BAC-12-F-A4-20230614-01	Total/NA	Water	7470A	
240-187259-17	BAC-16-F-A4-20230614-01	Total/NA	Water	7470A	
240-187259-18	EB-001-F-A4-20230614-01	Total/NA	Water	7470A	
MB 240-577689/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-577689/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-187259-12 MS	EB-001-F-A4-20230613-01	Total/NA	Water	7470A	
240-187259-12 MSD	EB-001-F-A4-20230613-01	Total/NA	Water	7470A	

Prep Batch: 577826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-1	BAC-21-F-A3-20230612-01	Total Recoverable	Water	3005A	
240-187259-2	DUP-001-BAC-21-F-A3-20230612-01	Total Recoverable	Water	3005A	
240-187259-3	BAC-22-F-A3-20230612-01	Total Recoverable	Water	3005A	
240-187259-4	BAC-23-F-A3-20230612-01	Total Recoverable	Water	3005A	
240-187259-5	BAC-08-F-A3-20230612-01	Total Recoverable	Water	3005A	
240-187259-6	EB-001-F-A3-20230612-01	Total Recoverable	Water	3005A	
240-187259-7	BAC-18-F-A3-20230613-01	Total Recoverable	Water	3005A	
240-187259-8	EB-001-F-A3-20230613-01	Total Recoverable	Water	3005A	
240-187259-9	BAC-10-F-A3-20230614-01	Total Recoverable	Water	3005A	
240-187259-10	BAC-14-F-A3-20230614-01	Total Recoverable	Water	3005A	
240-187259-11	DUP-002-BAC-14-F-A3-20230614-01	Total Recoverable	Water	3005A	
MB 240-577826/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-577826/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-577826/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 577918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-12	EB-001-F-A4-20230613-01	Total Recoverable	Water	6020B	577687
240-187259-13	BAC-10-F-A4-20230614-01	Total Recoverable	Water	6020B	577687
240-187259-14	BAC-14-F-A4-20230614-01	Total Recoverable	Water	6020B	577687
240-187259-15	DUP-002-BAC-14-F-A4-20230614-01	Total Recoverable	Water	6020B	577687
240-187259-16	BAC-12-F-A4-20230614-01	Total Recoverable	Water	6020B	577687
240-187259-17	BAC-16-F-A4-20230614-01	Total Recoverable	Water	6020B	577687

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Metals (Continued)

Analysis Batch: 577918 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-18	EB-001-F-A4-20230614-01	Total Recoverable	Water	6020B	577687
MB 240-577687/1-A	Method Blank	Total Recoverable	Water	6020B	577687
LCS 240-577687/2-A	Lab Control Sample	Total Recoverable	Water	6020B	577687
240-187259-12 MS	EB-001-F-A4-20230613-01	Total Recoverable	Water	6020B	577687
240-187259-12 MSD	EB-001-F-A4-20230613-01	Total Recoverable	Water	6020B	577687

Analysis Batch: 577919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-12	EB-001-F-A4-20230613-01	Total/NA	Water	7470A	577689
240-187259-13	BAC-10-F-A4-20230614-01	Total/NA	Water	7470A	577689
240-187259-14	BAC-14-F-A4-20230614-01	Total/NA	Water	7470A	577689
240-187259-15	DUP-002-BAC-14-F-A4-20230614-01	Total/NA	Water	7470A	577689
240-187259-16	BAC-12-F-A4-20230614-01	Total/NA	Water	7470A	577689
240-187259-17	BAC-16-F-A4-20230614-01	Total/NA	Water	7470A	577689
240-187259-18	EB-001-F-A4-20230614-01	Total/NA	Water	7470A	577689
MB 240-577689/1-A	Method Blank	Total/NA	Water	7470A	577689
LCS 240-577689/2-A	Lab Control Sample	Total/NA	Water	7470A	577689
240-187259-12 MS	EB-001-F-A4-20230613-01	Total/NA	Water	7470A	577689
240-187259-12 MSD	EB-001-F-A4-20230613-01	Total/NA	Water	7470A	577689

Analysis Batch: 578100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-1	BAC-21-F-A3-20230612-01	Total Recoverable	Water	6020B	577826
240-187259-2	DUP-001-BAC-21-F-A3-20230612-01	Total Recoverable	Water	6020B	577826
240-187259-3	BAC-22-F-A3-20230612-01	Total Recoverable	Water	6020B	577826
240-187259-4	BAC-23-F-A3-20230612-01	Total Recoverable	Water	6020B	577826
240-187259-5	BAC-08-F-A3-20230612-01	Total Recoverable	Water	6020B	577826
240-187259-6	EB-001-F-A3-20230612-01	Total Recoverable	Water	6020B	577826
240-187259-7	BAC-18-F-A3-20230613-01	Total Recoverable	Water	6020B	577826
240-187259-8	EB-001-F-A3-20230613-01	Total Recoverable	Water	6020B	577826
240-187259-9	BAC-10-F-A3-20230614-01	Total Recoverable	Water	6020B	577826
240-187259-10	BAC-14-F-A3-20230614-01	Total Recoverable	Water	6020B	577826
240-187259-11	DUP-002-BAC-14-F-A3-20230614-01	Total Recoverable	Water	6020B	577826
MB 240-577826/1-A	Method Blank	Total Recoverable	Water	6020B	577826
LCS 240-577826/3-A	Lab Control Sample	Total Recoverable	Water	6020B	577826

Analysis Batch: 578108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-1	BAC-21-F-A3-20230612-01	Total Recoverable	Water	6010D	577826
240-187259-2	DUP-001-BAC-21-F-A3-20230612-01	Total Recoverable	Water	6010D	577826
240-187259-3	BAC-22-F-A3-20230612-01	Total Recoverable	Water	6010D	577826
240-187259-4	BAC-23-F-A3-20230612-01	Total Recoverable	Water	6010D	577826
240-187259-5	BAC-08-F-A3-20230612-01	Total Recoverable	Water	6010D	577826
240-187259-6	EB-001-F-A3-20230612-01	Total Recoverable	Water	6010D	577826
240-187259-7	BAC-18-F-A3-20230613-01	Total Recoverable	Water	6010D	577826
240-187259-8	EB-001-F-A3-20230613-01	Total Recoverable	Water	6010D	577826
240-187259-9	BAC-10-F-A3-20230614-01	Total Recoverable	Water	6010D	577826
240-187259-10	BAC-14-F-A3-20230614-01	Total Recoverable	Water	6010D	577826
240-187259-11	DUP-002-BAC-14-F-A3-20230614-01	Total Recoverable	Water	6010D	577826
MB 240-577826/1-A	Method Blank	Total Recoverable	Water	6010D	577826
LCS 240-577826/2-A	Lab Control Sample	Total Recoverable	Water	6010D	577826

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

General Chemistry

Analysis Batch: 577721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-1	BAC-21-F-A3-20230612-01	Total/NA	Water	SM 2540C	
240-187259-2	DUP-001-BAC-21-F-A3-20230612-01	Total/NA	Water	SM 2540C	
240-187259-3	BAC-22-F-A3-20230612-01	Total/NA	Water	SM 2540C	
240-187259-4	BAC-23-F-A3-20230612-01	Total/NA	Water	SM 2540C	
240-187259-5	BAC-08-F-A3-20230612-01	Total/NA	Water	SM 2540C	
240-187259-6	EB-001-F-A3-20230612-01	Total/NA	Water	SM 2540C	
MB 240-577721/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-577721/2	Lab Control Sample	Total/NA	Water	SM 2540C	
240-187259-1 DU	BAC-21-F-A3-20230612-01	Total/NA	Water	SM 2540C	

Analysis Batch: 577886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-7	BAC-18-F-A3-20230613-01	Total/NA	Water	SM 2540C	
240-187259-8	EB-001-F-A3-20230613-01	Total/NA	Water	SM 2540C	
MB 240-577886/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-577886/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 578050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-9	BAC-10-F-A3-20230614-01	Total/NA	Water	SM 2540C	
240-187259-10	BAC-14-F-A3-20230614-01	Total/NA	Water	SM 2540C	
240-187259-11	DUP-002-BAC-14-F-A3-20230614-01	Total/NA	Water	SM 2540C	
MB 240-578050/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-578050/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 578219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-1	BAC-21-F-A3-20230612-01	Total/NA	Water	2320B-1997	
240-187259-2	DUP-001-BAC-21-F-A3-20230612-01	Total/NA	Water	2320B-1997	
240-187259-3	BAC-22-F-A3-20230612-01	Total/NA	Water	2320B-1997	
240-187259-4	BAC-23-F-A3-20230612-01	Total/NA	Water	2320B-1997	
240-187259-5	BAC-08-F-A3-20230612-01	Total/NA	Water	2320B-1997	
240-187259-6	EB-001-F-A3-20230612-01	Total/NA	Water	2320B-1997	
240-187259-7	BAC-18-F-A3-20230613-01	Total/NA	Water	2320B-1997	
240-187259-8	EB-001-F-A3-20230613-01	Total/NA	Water	2320B-1997	
240-187259-9	BAC-10-F-A3-20230614-01	Total/NA	Water	2320B-1997	
240-187259-10	BAC-14-F-A3-20230614-01	Total/NA	Water	2320B-1997	
240-187259-11	DUP-002-BAC-14-F-A3-20230614-01	Total/NA	Water	2320B-1997	
240-187259-12	EB-001-F-A4-20230613-01	Total/NA	Water	2320B-1997	
240-187259-13	BAC-10-F-A4-20230614-01	Total/NA	Water	2320B-1997	
240-187259-14	BAC-14-F-A4-20230614-01	Total/NA	Water	2320B-1997	
240-187259-15	DUP-002-BAC-14-F-A4-20230614-01	Total/NA	Water	2320B-1997	
240-187259-16	BAC-12-F-A4-20230614-01	Total/NA	Water	2320B-1997	
240-187259-17	BAC-16-F-A4-20230614-01	Total/NA	Water	2320B-1997	
240-187259-18	EB-001-F-A4-20230614-01	Total/NA	Water	2320B-1997	
MB 240-578219/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-578219/56	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-578219/29	Lab Control Sample	Total/NA	Water	2320B-1997	
LCS 240-578219/55	Lab Control Sample	Total/NA	Water	2320B-1997	
240-187259-4 DU	BAC-23-F-A3-20230612-01	Total/NA	Water	2320B-1997	
240-187259-14 DU	BAC-14-F-A4-20230614-01	Total/NA	Water	2320B-1997	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

General Chemistry

Analysis Batch: 579935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-1	BAC-21-F-A3-20230612-01	Total/NA	Water	300.0	
240-187259-2	DUP-001-BAC-21-F-A3-20230612-01	Total/NA	Water	300.0	
240-187259-3	BAC-22-F-A3-20230612-01	Total/NA	Water	300.0	
240-187259-3	BAC-22-F-A3-20230612-01	Total/NA	Water	300.0	
240-187259-4	BAC-23-F-A3-20230612-01	Total/NA	Water	300.0	
240-187259-5	BAC-08-F-A3-20230612-01	Total/NA	Water	300.0	
240-187259-6	EB-001-F-A3-20230612-01	Total/NA	Water	300.0	
MB 240-579935/3	Method Blank	Total/NA	Water	300.0	
LCS 240-579935/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 580125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-7	BAC-18-F-A3-20230613-01	Total/NA	Water	300.0	
240-187259-8	EB-001-F-A3-20230613-01	Total/NA	Water	300.0	
240-187259-9	BAC-10-F-A3-20230614-01	Total/NA	Water	300.0	
240-187259-10	BAC-14-F-A3-20230614-01	Total/NA	Water	300.0	
240-187259-11	DUP-002-BAC-14-F-A3-20230614-01	Total/NA	Water	300.0	
240-187259-12	EB-001-F-A4-20230613-01	Total/NA	Water	300.0-1993 R2.1	
240-187259-13	BAC-10-F-A4-20230614-01	Total/NA	Water	300.0-1993 R2.1	
240-187259-14	BAC-14-F-A4-20230614-01	Total/NA	Water	300.0-1993 R2.1	
240-187259-15	DUP-002-BAC-14-F-A4-20230614-01	Total/NA	Water	300.0-1993 R2.1	
240-187259-16	BAC-12-F-A4-20230614-01	Total/NA	Water	300.0-1993 R2.1	
240-187259-17	BAC-16-F-A4-20230614-01	Total/NA	Water	300.0-1993 R2.1	
240-187259-18	EB-001-F-A4-20230614-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-580125/3	Method Blank	Total/NA	Water	300.0	
LCS 240-580125/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 580390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-10	BAC-14-F-A3-20230614-01	Total/NA	Water	300.0	
240-187259-11	DUP-002-BAC-14-F-A3-20230614-01	Total/NA	Water	300.0	
MB 240-580390/3	Method Blank	Total/NA	Water	300.0	
LCS 240-580390/4	Lab Control Sample	Total/NA	Water	300.0	

Rad

Prep Batch: 616969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-12	EB-001-F-A4-20230613-01	Total/NA	Water	PrecSep-21	
240-187259-13	BAC-10-F-A4-20230614-01	Total/NA	Water	PrecSep-21	
240-187259-14	BAC-14-F-A4-20230614-01	Total/NA	Water	PrecSep-21	
240-187259-15	DUP-002-BAC-14-F-A4-20230614-01	Total/NA	Water	PrecSep-21	
240-187259-16	BAC-12-F-A4-20230614-01	Total/NA	Water	PrecSep-21	
240-187259-17	BAC-16-F-A4-20230614-01	Total/NA	Water	PrecSep-21	
240-187259-18	EB-001-F-A4-20230614-01	Total/NA	Water	PrecSep-21	
MB 160-616969/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-616969/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 616970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-12	EB-001-F-A4-20230613-01	Total/NA	Water	PrecSep_0	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Rad (Continued)

Prep Batch: 616970 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-13	BAC-10-F-A4-20230614-01	Total/NA	Water	PrecSep_0	
240-187259-14	BAC-14-F-A4-20230614-01	Total/NA	Water	PrecSep_0	
240-187259-15	DUP-002-BAC-14-F-A4-20230614-01	Total/NA	Water	PrecSep_0	
240-187259-16	BAC-12-F-A4-20230614-01	Total/NA	Water	PrecSep_0	
240-187259-17	BAC-16-F-A4-20230614-01	Total/NA	Water	PrecSep_0	
240-187259-18	EB-001-F-A4-20230614-01	Total/NA	Water	PrecSep_0	
MB 160-616970/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-616970/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-21-F-A3-20230612-01

Lab Sample ID: 240-187259-1

Date Collected: 06/12/23 10:53

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 21:45
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 13:48
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 17:51
Total/NA	Analysis	300.0		1	579935	ALT	EET CLE	07/08/23 00:18
Total/NA	Analysis	SM 2540C		1	577721	GH	EET CLE	06/19/23 14:54

Client Sample ID: DUP-001-BAC-21-F-A3-20230612-01

Lab Sample ID: 240-187259-2

Date Collected: 06/12/23 10:53

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 21:49
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 13:53
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 17:55
Total/NA	Analysis	300.0		1	579935	ALT	EET CLE	07/08/23 01:01
Total/NA	Analysis	SM 2540C		1	577721	GH	EET CLE	06/19/23 14:54

Client Sample ID: BAC-22-F-A3-20230612-01

Lab Sample ID: 240-187259-3

Date Collected: 06/12/23 12:34

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 21:54
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 13:57
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 18:18
Total/NA	Analysis	300.0		1	579935	ALT	EET CLE	07/08/23 01:44
Total/NA	Analysis	300.0		5	579935	ALT	EET CLE	07/08/23 02:06
Total/NA	Analysis	SM 2540C		1	577721	GH	EET CLE	06/19/23 14:54

Client Sample ID: BAC-23-F-A3-20230612-01

Lab Sample ID: 240-187259-4

Date Collected: 06/12/23 13:26

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 21:58
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 14:11

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-23-F-A3-20230612-01

Lab Sample ID: 240-187259-4

Date Collected: 06/12/23 13:26

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 18:10
Total/NA	Analysis	300.0		1	579935	ALT	EET CLE	07/08/23 02:28
Total/NA	Analysis	SM 2540C		1	577721	GH	EET CLE	06/19/23 14:54

Client Sample ID: BAC-08-F-A3-20230612-01

Lab Sample ID: 240-187259-5

Date Collected: 06/12/23 14:23

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 22:02
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 14:15
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 18:22
Total/NA	Analysis	300.0		1	579935	ALT	EET CLE	07/08/23 03:54
Total/NA	Analysis	SM 2540C		1	577721	GH	EET CLE	06/19/23 14:54

Client Sample ID: EB-001-F-A3-20230612-01

Lab Sample ID: 240-187259-6

Date Collected: 06/12/23 15:00

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 22:07
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 14:20
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 18:26
Total/NA	Analysis	300.0		1	579935	ALT	EET CLE	07/08/23 04:16
Total/NA	Analysis	SM 2540C		1	577721	GH	EET CLE	06/19/23 14:54

Client Sample ID: BAC-18-F-A3-20230613-01

Lab Sample ID: 240-187259-7

Date Collected: 06/13/23 13:18

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 22:11
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 14:25
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 18:29
Total/NA	Analysis	300.0		1	580125	ALT	EET CLE	07/11/23 03:45
Total/NA	Analysis	SM 2540C		1	577886	GH	EET CLE	06/20/23 14:55

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: EB-001-F-A3-20230613-01

Lab Sample ID: 240-187259-8

Date Collected: 06/13/23 16:00

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 22:15
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 14:29
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 18:33
Total/NA	Analysis	300.0		1	580125	ALT	EET CLE	07/11/23 04:06
Total/NA	Analysis	SM 2540C		1	577886	GH	EET CLE	06/20/23 14:55

Client Sample ID: BAC-10-F-A3-20230614-01

Lab Sample ID: 240-187259-9

Date Collected: 06/14/23 09:49

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 22:20
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 14:34
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 18:37
Total/NA	Analysis	300.0		1	580125	ALT	EET CLE	07/11/23 08:26
Total/NA	Analysis	SM 2540C		1	578050	GH	EET CLE	06/21/23 15:44

Client Sample ID: BAC-14-F-A3-20230614-01

Lab Sample ID: 240-187259-10

Date Collected: 06/14/23 10:55

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 22:24
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 14:38
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 18:41
Total/NA	Analysis	300.0		1	580125	ALT	EET CLE	07/11/23 09:09
Total/NA	Analysis	300.0		10	580390	ALT	EET CLE	07/12/23 15:04
Total/NA	Analysis	SM 2540C		1	578050	GH	EET CLE	06/21/23 15:44

Client Sample ID: DUP-002-BAC-14-F-A3-20230614-01

Lab Sample ID: 240-187259-11

Date Collected: 06/14/23 10:55

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 22:37
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 14:43

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: DUP-002-BAC-14-F-A3-20230614-01

Lab Sample ID: 240-187259-11

Date Collected: 06/14/23 10:55

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 18:44
Total/NA	Analysis	300.0		1	580125	ALT	EET CLE	07/11/23 10:15
Total/NA	Analysis	300.0		10	580390	ALT	EET CLE	07/12/23 15:24
Total/NA	Analysis	SM 2540C		1	578050	GH	EET CLE	06/21/23 15:44

Client Sample ID: EB-001-F-A4-20230613-01

Lab Sample ID: 240-187259-12

Date Collected: 06/13/23 16:00

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577687	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 19:11
Total/NA	Prep	7470A			577689	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 17:14
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 18:50
Total/NA	Analysis	300.0-1993 R2.1		1	580125	ALT	EET CLE	07/11/23 04:28
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620395	SCB	EET SL	07/17/23 09:31
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619620	FLC	EET SL	07/10/23 16:06
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 12:05

Client Sample ID: BAC-10-F-A4-20230614-01

Lab Sample ID: 240-187259-13

Date Collected: 06/14/23 09:49

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577687	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 19:32
Total/NA	Prep	7470A			577689	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 17:23
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 19:01
Total/NA	Analysis	300.0-1993 R2.1		1	580125	ALT	EET CLE	07/11/23 10:36
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620395	SCB	EET SL	07/17/23 09:32
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619620	FLC	EET SL	07/10/23 16:07
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 12:05

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-14-F-A4-20230614-01

Lab Sample ID: 240-187259-14

Date Collected: 06/14/23 10:55

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577687	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 19:35
Total/NA	Prep	7470A			577689	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 17:25
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 18:54
Total/NA	Analysis	300.0-1993 R2.1		1	580125	ALT	EET CLE	07/11/23 10:58
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620396	SCB	EET SL	07/17/23 09:34
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619620	FLC	EET SL	07/10/23 16:07
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 12:05

Client Sample ID: DUP-002-BAC-14-F-A4-20230614-01

Lab Sample ID: 240-187259-15

Date Collected: 06/14/23 10:55

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577687	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 19:38
Total/NA	Prep	7470A			577689	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 17:27
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 19:05
Total/NA	Analysis	300.0-1993 R2.1		1	580125	ALT	EET CLE	07/11/23 11:20
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620396	SCB	EET SL	07/17/23 09:34
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619620	FLC	EET SL	07/10/23 16:07
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 13:20

Client Sample ID: BAC-12-F-A4-20230614-01

Lab Sample ID: 240-187259-16

Date Collected: 06/14/23 12:10

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577687	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 19:40
Total/NA	Prep	7470A			577689	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 17:29
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 19:09
Total/NA	Analysis	300.0-1993 R2.1		1	580125	ALT	EET CLE	07/11/23 11:41
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620396	SCB	EET SL	07/17/23 09:34
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619620	FLC	EET SL	07/10/23 16:07

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-12-F-A4-20230614-01

Lab Sample ID: 240-187259-16

Date Collected: 06/14/23 12:10

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 13:20

Client Sample ID: BAC-16-F-A4-20230614-01

Lab Sample ID: 240-187259-17

Date Collected: 06/14/23 13:03

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577687	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 19:43
Total/NA	Prep	7470A			577689	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 17:36
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 19:12
Total/NA	Analysis	300.0-1993 R2.1		1	580125	ALT	EET CLE	07/11/23 12:03
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620396	SCB	EET SL	07/17/23 09:38
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619620	FLC	EET SL	07/10/23 16:07
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 13:20

Client Sample ID: EB-001-F-A4-20230614-01

Lab Sample ID: 240-187259-18

Date Collected: 06/14/23 15:20

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577687	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 19:46
Total/NA	Prep	7470A			577689	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 17:38
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 19:16
Total/NA	Analysis	300.0-1993 R2.1		1	580125	ALT	EET CLE	07/11/23 12:25
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620396	SCB	EET SL	07/17/23 09:35
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619620	FLC	EET SL	07/10/23 16:07
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 13:20

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
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

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
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-23 *
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-23 *
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-24
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-23
MI - RadChem Recognition	State	9005	06-30-23 *
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-23
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

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 Dakota	State	R-207	06-30-23 *
Oklahoma	NELAP	9997	08-31-23
Oregon	NELAP	4157	09-01-23
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23 *
Texas	NELAP	T104704193	07-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO000542021-14	07-31-23
Virginia	NELAP	10310	06-15-25
Washington	State	C592	08-30-23
West Virginia DEP	State	381	10-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Client Information		Sample: Bobby Costo		Lab PM: Cisneros, Roxanne		Carrier Tracking No(s): 240-93466-34578.1	
Client Contact: Taylor Huffman		Phone: [Redacted]		E-Mail: roxanne.cisneros@Eurofinset.com		Page: Pg 2 of 2	
Company: Lightstone Generation Gavin Power LLC		Address: 7397 OH-7		City: Cheshire		State of Origin: [Redacted]	
State, Zip: OH, 45620		Phone: 740-925-3171(Tel)		PO #: 2935505		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Email: taylor.huffman@lightstonegen.com		Project #: 24019633		SSOW#: [Redacted]		Due Date Requested: [Redacted]	
Federal CCR Wells - App IV		Site: [Redacted]		TAT Requested (days): [Redacted]		Field Filtered Sample (Yes or No): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
EB-001-F-A4-20230613-01		6-13-23		1600		6 Water	
BAC-10-F-A4-20230614-01		6-14-23		0949		6 Water	
BAC-14-F-A4-20230614-01		6-14-23		1055		6 Water	
DUP-002-BAC-14-F-A4-20230614-01		6-14-23		1055		6 Water	
BAC-12-F-A4-20230614-01		6-14-23		1210		6 Water	
BAC-16-F-A4-20230614-01		6-14-23		1303		6 W	
FB-001-F-A4-20230614-01		6-14-23		1520		6 W	
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant		<input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Deliverable Requested: I, II, III, IV, Other (specify)	
Empty Kit Relinquished by: [Redacted]		Date: [Redacted]		Time: [Redacted]		Method of Shipment: [Redacted]	
Relinquished by: [Redacted]		Date/Time: 6-16-23 / 0915		Company: KEMRON		Received by: [Redacted]	
Relinquished by: [Redacted]		Date/Time: 6-16-23 1700		Company: EA		Received by: Paul M. Smith	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.: [Redacted]		Cooler Temperature(s) °C and Other Remarks: [Redacted]		Date/Time: 6-16-23 Date/Time: 06-17-23 800 Date/Time: [Redacted]	
Company: [Redacted]		Company: [Redacted]		Company: [Redacted]		Company: [Redacted]	



Eurofins - Canton Sample Receipt Form/Narrative Login # : _____
Barberton Facility

Client Lightstone Generation Gavin Power Site Name _____ Cooler unpacked by: Leah M. Smith
Cooler Received on 06-17-23 Opened on 06-17-23
FedEx: 1st Grd Exp UPS FAS Clipper 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 # 22 (CF r0.0 °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 NA
-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# 10BDH4321
14. Were VOAs on the COC? Yes No NA
15. Were air bubbles >6 mm in any VOA vials? Yes No NA **● ← Larger than this.**
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 _____

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

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: _____



Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-21-F-A3-20230612-01	240-187259-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-001-BAC-21-F-A3-20230612-01	240-187259-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-22-F-A3-20230612-01	240-187259-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-23-F-A3-20230612-01	240-187259-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-08-F-A3-20230612-01	240-187259-C-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A3-20230612-01	240-187259-C-6	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-18-F-A3-20230613-01	240-187259-C-7	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A3-20230613-01	240-187259-C-8	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-10-F-A3-20230614-01	240-187259-C-9	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-14-F-A3-20230614-01	240-187259-C-10	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-002-BAC-14-F-A3-20230614-01	240-187259-C-11	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230613-01	240-187259-C-12	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230613-01	240-187259-D-12	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230613-01	240-187259-E-12	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-10-F-A4-20230614-01	240-187259-C-13	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-10-F-A4-20230614-01	240-187259-D-13	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-10-F-A4-20230614-01	240-187259-E-13	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-14-F-A4-20230614-01	240-187259-C-14	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-14-F-A4-20230614-01	240-187259-D-14	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-14-F-A4-20230614-01	240-187259-E-14	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-002-F-A4-20230614-01	240-187259-C-15	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-002-F-A4-20230614-01	240-187259-D-15	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-002-F-A4-20230614-01	240-187259-E-15	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-12-F-A4-20230614-01	240-187259-C-16	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-12-F-A4-20230614-01	240-187259-D-16	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-12-F-A4-20230614-01	240-187259-E-16	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-16-F-A4-20230614-01	240-187259-C-17	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-16-F-A4-20230614-01	240-187259-D-17	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-16-F-A4-20230614-01	240-187259-E-17	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230614-01	240-187259-C-18	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230614-01	240-187259-D-18	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230614-01	240-187259-E-18	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Carrier Tracking No(s):	COC No:	
Client Contact: Shipping/Receiving		Phone:	Cisneros, Roxanne		240-169563.1	
Company: Tesi/America Laboratories, Inc.		E-Mail: roxanne.cisneros@et.eurofins.com		State of Origin: Ohio		
Address: 13715 Rider Trail North,		Accreditations Required (See note):		Page: Page 1 of 1	Job #: 240-187259-1	
City: Earth City	Due Date Requested: 7/3/2023	Analysis Requested		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - EDTA Y - Trizma Z - other (specify)		
State, Zip: MO, 63045	TAT Requested (days):	9315_Ra226/PreSep_21 Radium-226 (GFC)		Total Number of Containers		
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:	9320_Ra226/PreSep_0 Radium-226 (GFC)				
Email:	WO #:	Radium-228				
Project Name: Federal GWM Wells	Project #: 24019633	Field Filtered Sample (Yes or No)				
Site:	SSOW#:	Uniform MSMSD (Yes or No)				
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C-comp, G-grab)	Matrix (Water, Solid, Oil, Tissue, Aque)	Preservation Code:	Special Instructions/Note:
EB-001-F-A4-20230613-01 (240-187259-12)	6/14/23	16:00 Eastern		Water		Recout of TAR after 21 day ingrowth if > action limit: save planchet
BAC-10-F-A4-20230614-01 (240-187259-13)	6/14/23	09:49 Eastern		Water		Recout of TAR after 21 day ingrowth if > action limit: save planchet
BAC-14-F-A4-20230614-01 (240-187259-14)	6/14/23	10:55 Eastern		Water		Recout of TAR after 21 day ingrowth if > action limit: save planchet
DUP-002-F-A4-20230614-01 (240-187259-15)	6/14/23	10:55 Eastern		Water		Recout of TAR after 21 day ingrowth if > action limit: save planchet
BAC-12-F-A4-20230614-01 (240-187259-16)	6/14/23	12:10 Eastern		Water		Recout of TAR after 21 day ingrowth if > action limit: save planchet
BAC-16-F-A4-20230614-01 (240-187259-17)	6/14/23	13:03 Eastern		Water		Recout of TAR after 21 day ingrowth if > action limit: save planchet
EB-001-F-A4-20230614-01 (240-187259-18)	6/14/23	15:20 Eastern		Water		Recout of TAR after 21 day ingrowth if > action limit: save planchet

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/leis/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
 Deliverable Requested: I, II, III, IV, Other (specify)
 Primary Deliverable Rank: 2

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
 Special Instructions/QC Requirements:

Eppey Kit Relinquished by: _____ Date: _____
Relinquished by: *Paulette Abriele* Date/Time: *6-19-23 8:30*
Relinquished by: *Fedex* Date/Time: *6/20/23 08:45*
Relinquished by: _____ Date/Time: _____
 Company: *EBTINC*
 Company: *Overseas Shipping - Niagara*
 Company: *ETAS*

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



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-187259-1

Login Number: 187259

List Number: 2

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

List Creation: 06/20/23 01:40 PM

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





ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 9/18/2023 12:37:05 PM

JOB DESCRIPTION

Federal GWM Wells - App IV

JOB NUMBER

240-190363-1

Eurofins Cleveland

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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9/18/2023 12:37:05 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Job ID: 240-190363-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-190363-1

Receipt

The samples were received on 8/18/2023 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 0.1°C, 0.2°C, 2.4°C, 2.5°C, 4.5°C and 22.1°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 9315_Ra226: Radium-226 Prep Batch 160-624958: The following samples were prepared at a reduced aliquot due to Matrix: BAC-10-F-A4-20230815-01 (240-190363-1), DUP-001-BAC-10-F-A4-20230815-01 (240-190363-2), BAC-21-F-A4-20230816-01 (240-190363-4) and BAC-22-F-A4-20230816-01 (240-190363-5). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method 9315_Ra226: Radium-226 prep Batch 160-624958: Insufficient sample volume was available to perform a sample duplicate for the following samples: EB-001-F-A4-20230815-01 (240-190363-3), BAC-23-F-A4-20230816-01 (240-190363-6) and EB-001-F-A4-20230816-01 (240-190363-7). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method 9315_Ra226: Radium-226 prep batch 160-624958: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-10-F-A4-20230815-01 (240-190363-1), DUP-001-BAC-10-F-A4-20230815-01 (240-190363-2), EB-001-F-A4-20230815-01 (240-190363-3), BAC-21-F-A4-20230816-01 (240-190363-4), BAC-22-F-A4-20230816-01 (240-190363-5), BAC-23-F-A4-20230816-01 (240-190363-6), EB-001-F-A4-20230816-01 (240-190363-7), (LCS 160-624958/2-A), (LCSD 160-624958/3-A) and (MB 160-624958/1-A)

Method 9320_Ra228: Radium-228 Prep Batch 160-624959: The following samples were prepared at a reduced aliquot due to Matrix: BAC-10-F-A4-20230815-01 (240-190363-1), DUP-001-BAC-10-F-A4-20230815-01 (240-190363-2), BAC-21-F-A4-20230816-01 (240-190363-4) and BAC-22-F-A4-20230816-01 (240-190363-5). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method 9320_Ra228: Radium-228 Prep Batch 160-62959: Insufficient sample volume was available to perform a sample duplicate for the following samples: EB-001-F-A4-20230815-01 (240-190363-3), BAC-23-F-A4-20230816-01 (240-190363-6) and EB-001-F-A4-20230816-01 (240-190363-7). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method 9320_Ra228: Radium-228 prep batch 160-624959: The following sample(s) did not meet the requested limit (RL) due to the reduced sample volume attributed to the presence of matrix interference. During preparation the analyst visually noted matrix effects. The data have been reported with this narrative. BAC-10-F-A4-20230815-01 (240-190363-1), DUP-001-BAC-10-F-A4-20230815-01 (240-190363-2) and BAC-21-F-A4-20230816-01 (240-190363-4)

Method 9320_Ra228: Radium-228 prep batch 160-624959: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-10-F-A4-20230815-01 (240-190363-1), DUP-001-BAC-10-F-A4-20230815-01 (240-190363-2), EB-001-F-A4-20230815-01 (240-190363-3), BAC-21-F-A4-20230816-01 (240-190363-4), BAC-22-F-A4-20230816-01 (240-190363-5), BAC-23-F-A4-20230816-01 (240-190363-6), EB-001-F-A4-20230816-01 (240-190363-7), (LCS 160-624959/2-A), (LCSD 160-624959/3-A) and (MB 160-624959/1-A)

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Job ID: 240-190363-1 (Continued)

Laboratory: Eurofins Cleveland (Continued)

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.

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Method Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0-1993 R2.1	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 GWM Wells - App IV

Job ID: 240-190363-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-190363-1	BAC-10-F-A4-20230815-01	Water	08/15/23 14:46	08/18/23 08:00
240-190363-2	DUP-001-BAC-10-F-A4-20230815-01	Water	08/15/23 14:46	08/18/23 08:00
240-190363-3	EB-001-F-A4-20230815-01	Water	08/15/23 15:15	08/18/23 08:00
240-190363-4	BAC-21-F-A4-20230816-01	Water	08/16/23 12:58	08/18/23 08:00
240-190363-5	BAC-22-F-A4-20230816-01	Water	08/16/23 13:48	08/18/23 08:00
240-190363-6	BAC-23-F-A4-20230816-01	Water	08/16/23 14:32	08/18/23 08:00
240-190363-7	EB-001-F-A4-20230816-01	Water	08/16/23 15:00	08/18/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: BAC-10-F-A4-20230815-01

Lab Sample ID: 240-190363-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.69	J	2.0	0.57	ug/L	1		6020B	Total Recoverable
Arsenic	4.3	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	55		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.28	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Chromium	5.3		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	3.7		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	3.5		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	7.3	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	27000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1900		1000	220	ug/L	1		6020B	Total Recoverable
Selenium	0.90	J	5.0	0.89	ug/L	1		6020B	Total Recoverable
Sodium	47000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	1.5		1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.15		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: DUP-001-BAC-10-F-A4-20230815-01

Lab Sample ID: 240-190363-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.5	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	52		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	4.5	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	3.2		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	3.3		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.5	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	27000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	48000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.15		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: EB-001-F-A4-20230815-01

Lab Sample ID: 240-190363-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: BAC-21-F-A4-20230816-01

Lab Sample ID: 240-190363-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.5		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	190		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	7.6		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.9		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	5.0		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	9.9		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	15000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.2	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	30000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.076		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-22-F-A4-20230816-01

Lab Sample ID: 240-190363-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.9	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	130		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	3.1	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.2		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	2.5		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.8	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	18000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	19000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.076		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-23-F-A4-20230816-01

Lab Sample ID: 240-190363-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.8	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	130		5.0	2.2	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 GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: BAC-23-F-A4-20230816-01 (Continued)

Lab Sample ID: 240-190363-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	1.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	4.1	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	16000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	20000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.13		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: EB-001-F-A4-20230816-01

Lab Sample ID: 240-190363-7

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: BAC-10-F-A4-20230815-01

Lab Sample ID: 240-190363-1

Date Collected: 08/15/23 14:46

Matrix: Water

Date Received: 08/18/23 08:00

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		08/22/23 14:00	08/24/23 15:41	1
Arsenic	4.3	J	5.0	0.75	ug/L		08/22/23 14:00	08/24/23 15:41	1
Barium	55		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 15:41	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 15:41	1
Cadmium	0.28	J	1.0	0.20	ug/L		08/22/23 14:00	08/24/23 15:41	1
Chromium	5.3		5.0	1.2	ug/L		08/22/23 14:00	08/24/23 15:41	1
Cobalt	3.7		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 15:41	1
Lead	3.5		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 15:41	1
Lithium	7.3	J	8.0	1.7	ug/L		08/22/23 14:00	08/24/23 15:41	1
Magnesium	27000		1000	61	ug/L		08/22/23 14:00	08/24/23 15:41	1
Molybdenum	ND		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 15:41	1
Potassium	1900		1000	220	ug/L		08/22/23 14:00	08/24/23 15:41	1
Selenium	0.90	J	5.0	0.89	ug/L		08/22/23 14:00	08/24/23 15:41	1
Sodium	47000		1000	330	ug/L		08/22/23 14:00	08/24/23 15:41	1
Thallium	1.5		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 15:41	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		08/22/23 14:00	08/24/23 16:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			08/22/23 20:01	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			08/22/23 20:01	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:01	1
Fluoride (EPA 300.0-1993 R2.1)	0.15		0.050	0.024	mg/L			09/07/23 05:39	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	0.325		0.179	0.182	1.00	0.216	pCi/L	08/22/23 09:59	09/13/23 09:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	62.4		30 - 110					08/22/23 09:59	09/13/23 09:23	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	-1.24	U G	0.732	0.741	1.00	1.64	pCi/L	08/22/23 10:02	09/08/23 12:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	62.4		30 - 110					08/22/23 10:02	09/08/23 12:15	1
Y Carrier	75.1		30 - 110					08/22/23 10:02	09/08/23 12:15	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: BAC-10-F-A4-20230815-01

Lab Sample ID: 240-190363-1

Date Collected: 08/15/23 14:46

Matrix: Water

Date Received: 08/18/23 08:00

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	-0.916	U	0.754	0.763	5.00	1.64	pCi/L		09/18/23 10:10	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: DUP-001-BAC-10-F-A4-20230815-01

Lab Sample ID: 240-190363-2

Date Collected: 08/15/23 14:46

Matrix: Water

Date Received: 08/18/23 08:00

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		08/22/23 14:00	08/24/23 16:06	1
Arsenic	3.5	J	5.0	0.75	ug/L		08/22/23 14:00	08/24/23 16:06	1
Barium	52		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 16:06	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 16:06	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 16:06	1
Chromium	4.5	J	5.0	1.2	ug/L		08/22/23 14:00	08/24/23 16:06	1
Cobalt	3.2		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 16:06	1
Lead	3.3		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 16:06	1
Lithium	6.5	J	8.0	1.7	ug/L		08/22/23 14:00	08/24/23 16:06	1
Magnesium	27000		1000	61	ug/L		08/22/23 14:00	08/24/23 16:06	1
Molybdenum	ND		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 16:06	1
Potassium	1900		1000	220	ug/L		08/22/23 14:00	08/24/23 16:06	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 16:06	1
Sodium	48000		1000	330	ug/L		08/22/23 14:00	08/24/23 16:06	1
Thallium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 16:06	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		08/22/23 14:00	08/24/23 16:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			08/22/23 20:05	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			08/22/23 20:05	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:05	1
Fluoride (EPA 300.0-1993 R2.1)	0.15		0.050	0.024	mg/L			09/07/23 06:44	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	0.292	U	0.220	0.222	1.00	0.319	pCi/L	08/22/23 09:59	09/13/23 09:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.7		30 - 110					08/22/23 09:59	09/13/23 09:27	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	0.708	U G	1.06	1.06	1.00	1.78	pCi/L	08/22/23 10:02	09/08/23 12:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.7		30 - 110					08/22/23 10:02	09/08/23 12:15	1
Y Carrier	83.0		30 - 110					08/22/23 10:02	09/08/23 12:15	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: DUP-001-BAC-10-F-A4-20230815-01

Lab Sample ID: 240-190363-2

Date Collected: 08/15/23 14:46

Matrix: Water

Date Received: 08/18/23 08:00

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	1.00	U	1.08	1.08	5.00	1.78	pCi/L		09/18/23 10:10	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: EB-001-F-A4-20230815-01

Lab Sample ID: 240-190363-3

Date Collected: 08/15/23 15:15

Matrix: Water

Date Received: 08/18/23 08:00

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		08/22/23 14:00	08/24/23 16:11	1
Arsenic	ND		5.0	0.75	ug/L		08/22/23 14:00	08/24/23 16:11	1
Barium	ND		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 16:11	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 16:11	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 16:11	1
Chromium	ND		5.0	1.2	ug/L		08/22/23 14:00	08/24/23 16:11	1
Cobalt	ND		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 16:11	1
Lead	ND		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 16:11	1
Lithium	ND		8.0	1.7	ug/L		08/22/23 14:00	08/24/23 16:11	1
Magnesium	ND		1000	61	ug/L		08/22/23 14:00	08/24/23 16:11	1
Molybdenum	ND		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 16:11	1
Potassium	ND		1000	220	ug/L		08/22/23 14:00	08/24/23 16:11	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 16:11	1
Sodium	ND		1000	330	ug/L		08/22/23 14:00	08/24/23 16:11	1
Thallium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 16:11	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		08/22/23 14:00	08/24/23 16:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:09	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:09	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:09	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			09/07/23 07:06	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0640	U	0.0798	0.0800	1.00	0.132	pCi/L	08/22/23 09:59	09/13/23 09:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.2		30 - 110					08/22/23 09:59	09/13/23 09:28	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.349	U	0.382	0.384	1.00	0.624	pCi/L	08/22/23 10:02	09/08/23 12:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.2		30 - 110					08/22/23 10:02	09/08/23 12:15	1
Y Carrier	86.7		30 - 110					08/22/23 10:02	09/08/23 12:15	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: EB-001-F-A4-20230815-01

Lab Sample ID: 240-190363-3

Date Collected: 08/15/23 15:15

Matrix: Water

Date Received: 08/18/23 08:00

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	0.413	U	0.390	0.392	5.00	0.624	pCi/L		09/18/23 10:10	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: BAC-21-F-A4-20230816-01

Lab Sample ID: 240-190363-4

Date Collected: 08/16/23 12:58

Matrix: Water

Date Received: 08/18/23 08:00

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		08/22/23 14:00	08/24/23 16:15	1
Arsenic	7.5		5.0	0.75	ug/L		08/22/23 14:00	08/24/23 16:15	1
Barium	190		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 16:15	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 16:15	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 16:15	1
Chromium	7.6		5.0	1.2	ug/L		08/22/23 14:00	08/24/23 16:15	1
Cobalt	2.9		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 16:15	1
Lead	5.0		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 16:15	1
Lithium	9.9		8.0	1.7	ug/L		08/22/23 14:00	08/24/23 16:15	1
Magnesium	15000		1000	61	ug/L		08/22/23 14:00	08/24/23 16:15	1
Molybdenum	1.2 J		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 16:15	1
Potassium	2800		1000	220	ug/L		08/22/23 14:00	08/24/23 16:15	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 16:15	1
Sodium	30000		1000	330	ug/L		08/22/23 14:00	08/24/23 16:15	1
Thallium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 16:15	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		08/22/23 14:00	08/24/23 16:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			08/22/23 20:13	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			08/22/23 20:13	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:13	1
Fluoride (EPA 300.0-1993 R2.1)	0.076		0.050	0.024	mg/L			09/07/23 07:28	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.567	U	0.405	0.408	1.00	0.579	pCi/L	08/22/23 09:59	09/13/23 09:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	42.1		30 - 110					08/22/23 09:59	09/13/23 09:28	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	1.48	U G	1.66	1.67	1.00	2.72	pCi/L	08/22/23 10:02	09/08/23 12:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	42.1		30 - 110					08/22/23 10:02	09/08/23 12:15	1
Y Carrier	83.7		30 - 110					08/22/23 10:02	09/08/23 12:15	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: BAC-21-F-A4-20230816-01

Lab Sample ID: 240-190363-4

Date Collected: 08/16/23 12:58

Matrix: Water

Date Received: 08/18/23 08:00

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	U	1.71	1.72	5.00	2.72	pCi/L		09/18/23 10:10	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: BAC-22-F-A4-20230816-01

Lab Sample ID: 240-190363-5

Date Collected: 08/16/23 13:48

Matrix: Water

Date Received: 08/18/23 08:00

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		08/22/23 14:00	08/24/23 16:20	1
Arsenic	2.9	J	5.0	0.75	ug/L		08/22/23 14:00	08/24/23 16:20	1
Barium	130		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 16:20	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 16:20	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 16:20	1
Chromium	3.1	J	5.0	1.2	ug/L		08/22/23 14:00	08/24/23 16:20	1
Cobalt	2.2		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 16:20	1
Lead	2.5		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 16:20	1
Lithium	6.8	J	8.0	1.7	ug/L		08/22/23 14:00	08/24/23 16:20	1
Magnesium	18000		1000	61	ug/L		08/22/23 14:00	08/24/23 16:20	1
Molybdenum	ND		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 16:20	1
Potassium	2800		1000	220	ug/L		08/22/23 14:00	08/24/23 16:20	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 16:20	1
Sodium	19000		1000	330	ug/L		08/22/23 14:00	08/24/23 16:20	1
Thallium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 16:20	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		08/22/23 14:00	08/24/23 16:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			08/22/23 20:19	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			08/22/23 20:19	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:19	1
Fluoride (EPA 300.0-1993 R2.1)	0.076		0.050	0.024	mg/L			09/07/23 07:49	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	0.243		0.169	0.170	1.00	0.242	pCi/L	08/22/23 09:59	09/13/23 09:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.5		30 - 110					08/22/23 09:59	09/13/23 09:28	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	0.161	U	0.444	0.444	1.00	0.792	pCi/L	08/22/23 10:02	09/08/23 12:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.5		30 - 110					08/22/23 10:02	09/08/23 12:15	1
Y Carrier	87.1		30 - 110					08/22/23 10:02	09/08/23 12:15	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: BAC-22-F-A4-20230816-01

Lab Sample ID: 240-190363-5

Date Collected: 08/16/23 13:48

Matrix: Water

Date Received: 08/18/23 08:00

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	0.404	U	0.475	0.475	5.00	0.792	pCi/L		09/18/23 10:10	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: BAC-23-F-A4-20230816-01

Lab Sample ID: 240-190363-6

Date Collected: 08/16/23 14:32

Matrix: Water

Date Received: 08/18/23 08:00

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		08/22/23 14:00	08/24/23 16:24	1
Arsenic	1.8	J	5.0	0.75	ug/L		08/22/23 14:00	08/24/23 16:24	1
Barium	130		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 16:24	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 16:24	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 16:24	1
Chromium	ND		5.0	1.2	ug/L		08/22/23 14:00	08/24/23 16:24	1
Cobalt	1.1		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 16:24	1
Lead	ND		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 16:24	1
Lithium	4.1	J	8.0	1.7	ug/L		08/22/23 14:00	08/24/23 16:24	1
Magnesium	16000		1000	61	ug/L		08/22/23 14:00	08/24/23 16:24	1
Molybdenum	ND		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 16:24	1
Potassium	2000		1000	220	ug/L		08/22/23 14:00	08/24/23 16:24	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 16:24	1
Sodium	20000		1000	330	ug/L		08/22/23 14:00	08/24/23 16:24	1
Thallium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 16:24	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		08/22/23 14:00	08/24/23 16:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230		5.0	2.6	mg/L			08/22/23 20:24	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230		5.0	2.6	mg/L			08/22/23 20:24	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:24	1
Fluoride (EPA 300.0-1993 R2.1)	0.13		0.050	0.024	mg/L			09/07/23 08:11	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	0.166		0.111	0.112	1.00	0.156	pCi/L	08/22/23 09:59	09/13/23 09:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.7		30 - 110					08/22/23 09:59	09/13/23 09:29	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	0.170	U	0.323	0.323	1.00	0.560	pCi/L	08/22/23 10:02	09/08/23 12:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.7		30 - 110					08/22/23 10:02	09/08/23 12:15	1
Y Carrier	86.0		30 - 110					08/22/23 10:02	09/08/23 12:15	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: BAC-23-F-A4-20230816-01

Lab Sample ID: 240-190363-6

Date Collected: 08/16/23 14:32

Matrix: Water

Date Received: 08/18/23 08:00

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	0.336	U	0.342	0.342	5.00	0.560	pCi/L		09/18/23 10:10	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: EB-001-F-A4-20230816-01

Lab Sample ID: 240-190363-7

Date Collected: 08/16/23 15:00

Matrix: Water

Date Received: 08/18/23 08:00

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		08/22/23 14:00	08/24/23 16:29	1
Arsenic	ND		5.0	0.75	ug/L		08/22/23 14:00	08/24/23 16:29	1
Barium	ND		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 16:29	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 16:29	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 16:29	1
Chromium	ND		5.0	1.2	ug/L		08/22/23 14:00	08/24/23 16:29	1
Cobalt	ND		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 16:29	1
Lead	ND		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 16:29	1
Lithium	ND		8.0	1.7	ug/L		08/22/23 14:00	08/24/23 16:29	1
Magnesium	ND		1000	61	ug/L		08/22/23 14:00	08/24/23 16:29	1
Molybdenum	ND		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 16:29	1
Potassium	ND		1000	220	ug/L		08/22/23 14:00	08/24/23 16:29	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 16:29	1
Sodium	ND		1000	330	ug/L		08/22/23 14:00	08/24/23 16:29	1
Thallium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 16:29	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		08/22/23 14:00	08/24/23 16:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:28	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:28	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:28	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			09/07/23 08:33	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0370	U	0.0881	0.0881	1.00	0.161	pCi/L	08/22/23 09:59	09/13/23 09:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.2		30 - 110					08/22/23 09:59	09/13/23 09:29	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	-0.0622	U	0.385	0.385	1.00	0.734	pCi/L	08/22/23 10:02	09/08/23 12:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.2		30 - 110					08/22/23 10:02	09/08/23 12:15	1
Y Carrier	80.7		30 - 110					08/22/23 10:02	09/08/23 12:15	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: EB-001-F-A4-20230816-01

Lab Sample ID: 240-190363-7

Date Collected: 08/16/23 15:00

Matrix: Water

Date Received: 08/18/23 08:00

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	-0.0252	U	0.395	0.395	5.00	0.734	pCi/L		09/18/23 10:10	1

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Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
240-190363-1	BAC-10-F-A4-20230815-01	62.4	
240-190363-2	DUP-001-BAC-10-F-A4-20230815-01	79.7	
240-190363-3	EB-001-F-A4-20230815-01	87.2	
240-190363-4	BAC-21-F-A4-20230816-01	42.1	
240-190363-5	BAC-22-F-A4-20230816-01	80.5	
240-190363-6	BAC-23-F-A4-20230816-01	89.7	
240-190363-7	EB-001-F-A4-20230816-01	81.2	
LCS 160-624958/2-A	Lab Control Sample	94.7	
LCSD 160-624958/3-A	Lab Control Sample Dup	95.0	
MB 160-624958/1-A	Method Blank	93.5	

Tracer/Carrier Legend
Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-190363-1	BAC-10-F-A4-20230815-01	62.4	75.1
240-190363-2	DUP-001-BAC-10-F-A4-20230815-01	79.7	83.0
240-190363-3	EB-001-F-A4-20230815-01	87.2	86.7
240-190363-4	BAC-21-F-A4-20230816-01	42.1	83.7
240-190363-5	BAC-22-F-A4-20230816-01	80.5	87.1
240-190363-6	BAC-23-F-A4-20230816-01	89.7	86.0
240-190363-7	EB-001-F-A4-20230816-01	81.2	80.7
LCS 160-624959/2-A	Lab Control Sample	94.7	84.1
LCSD 160-624959/3-A	Lab Control Sample Dup	95.0	87.9
MB 160-624959/1-A	Method Blank	93.5	83.7

Tracer/Carrier Legend
Ba = Ba Carrier
Y = Y Carrier

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-584712/1-A
Matrix: Water
Analysis Batch: 585084

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 584712

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		08/22/23 14:00	08/24/23 15:00	1
Arsenic	ND		5.0	0.75	ug/L		08/22/23 14:00	08/24/23 15:00	1
Barium	ND		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 15:00	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 15:00	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 15:00	1
Chromium	ND		5.0	1.2	ug/L		08/22/23 14:00	08/24/23 15:00	1
Cobalt	ND		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 15:00	1
Lead	ND		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 15:00	1
Lithium	ND		8.0	1.7	ug/L		08/22/23 14:00	08/24/23 15:00	1
Magnesium	ND		1000	61	ug/L		08/22/23 14:00	08/24/23 15:00	1
Molybdenum	ND		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 15:00	1
Potassium	ND		1000	220	ug/L		08/22/23 14:00	08/24/23 15:00	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 15:00	1
Sodium	ND		1000	330	ug/L		08/22/23 14:00	08/24/23 15:00	1
Thallium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 15:00	1

Lab Sample ID: LCS 240-584712/2-A
Matrix: Water
Analysis Batch: 585084

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 584712

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	105		ug/L		105	80 - 120
Arsenic	1000	1010		ug/L		101	80 - 120
Barium	1000	985		ug/L		98	80 - 120
Beryllium	500	457		ug/L		91	80 - 120
Cadmium	500	499		ug/L		100	80 - 120
Chromium	500	516		ug/L		103	80 - 120
Cobalt	500	519		ug/L		104	80 - 120
Lead	500	518		ug/L		104	80 - 120
Lithium	500	514		ug/L		103	80 - 120
Magnesium	25000	25200		ug/L		101	80 - 120
Molybdenum	500	509		ug/L		102	80 - 120
Potassium	25000	24700		ug/L		99	80 - 120
Selenium	1000	980		ug/L		98	80 - 120
Sodium	25000	25800		ug/L		103	80 - 120
Thallium	1000	991		ug/L		99	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-584713/1-A
Matrix: Water
Analysis Batch: 585098

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 584713

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		08/22/23 14:00	08/24/23 16:26	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-584713/2-A
 Matrix: Water
 Analysis Batch: 585098

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 584713

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.09		ug/L		102	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-584875/3
 Matrix: Water
 Analysis Batch: 584875

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			08/22/23 18:44	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/22/23 18:44	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/22/23 18:44	1

Lab Sample ID: LCS 240-584875/2
 Matrix: Water
 Analysis Batch: 584875

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	77.8		mg/L		96	86 - 123

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-586313/4
 Matrix: Water
 Analysis Batch: 586313

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			09/06/23 22:04	1

Lab Sample ID: LCS 240-586313/5
 Matrix: Water
 Analysis Batch: 586313

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.69		mg/L		107	90 - 110

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-624958/1-A
 Matrix: Water
 Analysis Batch: 627939

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 624958

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.03362	U	0.0822	0.0822	1.00	0.151	pCi/L	08/22/23 09:59	09/13/23 07:32	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		30 - 110					08/22/23 09:59	09/13/23 07:32	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: LCS 160-624958/2-A
Matrix: Water
Analysis Batch: 627939

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 624958

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	
Radium-226	11.3	11.03		1.18	1.00	0.137	pCi/L	97	75 - 125	
Carrier	%Yield	LCS Qualifier	Limits							
Ba Carrier	94.7		30 - 110							

Lab Sample ID: LCSD 160-624958/3-A
Matrix: Water
Analysis Batch: 627939

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 624958

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-226	11.3	9.447		1.05	1.00	0.168	pCi/L	83	75 - 125	0.71	1
Carrier	%Yield	LCSD Qualifier	Limits								
Ba Carrier	95.0		30 - 110								

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-624959/1-A
Matrix: Water
Analysis Batch: 627236

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 624959

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.4573	U	0.426	0.428	1.00	0.683	pCi/L	08/22/23 10:02	09/08/23 12:06	1
Carrier	%Yield	MB Qualifier	Limits							
Ba Carrier	93.5		30 - 110							
Y Carrier	83.7		30 - 110							
								Prepared	Analyzed	Dil Fac
								08/22/23 10:02	09/08/23 12:06	1
								08/22/23 10:02	09/08/23 12:06	1

Lab Sample ID: LCS 160-624959/2-A
Matrix: Water
Analysis Batch: 627236

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 624959

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	7.89	7.824		1.15	1.00	0.528	pCi/L	99	75 - 125
Carrier	%Yield	LCS Qualifier	Limits						
Ba Carrier	94.7		30 - 110						
Y Carrier	84.1		30 - 110						

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

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

Lab Sample ID: LCSD 160-624959/3-A
 Matrix: Water
 Analysis Batch: 627236

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 624959

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-228	7.89	8.795		1.23	1.00	0.565	pCi/L	111	75 - 125	0.41	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	95.0		30 - 110
Y Carrier	87.9		30 - 110

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Metals

Prep Batch: 584712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190363-1	BAC-10-F-A4-20230815-01	Total Recoverable	Water	3005A	
240-190363-2	DUP-001-BAC-10-F-A4-20230815-01	Total Recoverable	Water	3005A	
240-190363-3	EB-001-F-A4-20230815-01	Total Recoverable	Water	3005A	
240-190363-4	BAC-21-F-A4-20230816-01	Total Recoverable	Water	3005A	
240-190363-5	BAC-22-F-A4-20230816-01	Total Recoverable	Water	3005A	
240-190363-6	BAC-23-F-A4-20230816-01	Total Recoverable	Water	3005A	
240-190363-7	EB-001-F-A4-20230816-01	Total Recoverable	Water	3005A	
MB 240-584712/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-584712/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 584713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190363-1	BAC-10-F-A4-20230815-01	Total/NA	Water	7470A	
240-190363-2	DUP-001-BAC-10-F-A4-20230815-01	Total/NA	Water	7470A	
240-190363-3	EB-001-F-A4-20230815-01	Total/NA	Water	7470A	
240-190363-4	BAC-21-F-A4-20230816-01	Total/NA	Water	7470A	
240-190363-5	BAC-22-F-A4-20230816-01	Total/NA	Water	7470A	
240-190363-6	BAC-23-F-A4-20230816-01	Total/NA	Water	7470A	
240-190363-7	EB-001-F-A4-20230816-01	Total/NA	Water	7470A	
MB 240-584713/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-584713/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 585084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190363-1	BAC-10-F-A4-20230815-01	Total Recoverable	Water	6020B	584712
240-190363-2	DUP-001-BAC-10-F-A4-20230815-01	Total Recoverable	Water	6020B	584712
240-190363-3	EB-001-F-A4-20230815-01	Total Recoverable	Water	6020B	584712
240-190363-4	BAC-21-F-A4-20230816-01	Total Recoverable	Water	6020B	584712
240-190363-5	BAC-22-F-A4-20230816-01	Total Recoverable	Water	6020B	584712
240-190363-6	BAC-23-F-A4-20230816-01	Total Recoverable	Water	6020B	584712
240-190363-7	EB-001-F-A4-20230816-01	Total Recoverable	Water	6020B	584712
MB 240-584712/1-A	Method Blank	Total Recoverable	Water	6020B	584712
LCS 240-584712/2-A	Lab Control Sample	Total Recoverable	Water	6020B	584712

Analysis Batch: 585098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190363-1	BAC-10-F-A4-20230815-01	Total/NA	Water	7470A	584713
240-190363-2	DUP-001-BAC-10-F-A4-20230815-01	Total/NA	Water	7470A	584713
240-190363-3	EB-001-F-A4-20230815-01	Total/NA	Water	7470A	584713
240-190363-4	BAC-21-F-A4-20230816-01	Total/NA	Water	7470A	584713
240-190363-5	BAC-22-F-A4-20230816-01	Total/NA	Water	7470A	584713
240-190363-6	BAC-23-F-A4-20230816-01	Total/NA	Water	7470A	584713
240-190363-7	EB-001-F-A4-20230816-01	Total/NA	Water	7470A	584713
MB 240-584713/1-A	Method Blank	Total/NA	Water	7470A	584713
LCS 240-584713/2-A	Lab Control Sample	Total/NA	Water	7470A	584713

General Chemistry

Analysis Batch: 584875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190363-1	BAC-10-F-A4-20230815-01	Total/NA	Water	2320B-1997	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

General Chemistry (Continued)

Analysis Batch: 584875 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190363-2	DUP-001-BAC-10-F-A4-20230815-01	Total/NA	Water	2320B-1997	
240-190363-3	EB-001-F-A4-20230815-01	Total/NA	Water	2320B-1997	
240-190363-4	BAC-21-F-A4-20230816-01	Total/NA	Water	2320B-1997	
240-190363-5	BAC-22-F-A4-20230816-01	Total/NA	Water	2320B-1997	
240-190363-6	BAC-23-F-A4-20230816-01	Total/NA	Water	2320B-1997	
240-190363-7	EB-001-F-A4-20230816-01	Total/NA	Water	2320B-1997	
MB 240-584875/3	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-584875/2	Lab Control Sample	Total/NA	Water	2320B-1997	

Analysis Batch: 586313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190363-1	BAC-10-F-A4-20230815-01	Total/NA	Water	300.0-1993 R2.1	
240-190363-2	DUP-001-BAC-10-F-A4-20230815-01	Total/NA	Water	300.0-1993 R2.1	
240-190363-3	EB-001-F-A4-20230815-01	Total/NA	Water	300.0-1993 R2.1	
240-190363-4	BAC-21-F-A4-20230816-01	Total/NA	Water	300.0-1993 R2.1	
240-190363-5	BAC-22-F-A4-20230816-01	Total/NA	Water	300.0-1993 R2.1	
240-190363-6	BAC-23-F-A4-20230816-01	Total/NA	Water	300.0-1993 R2.1	
240-190363-7	EB-001-F-A4-20230816-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-586313/4	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-586313/5	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

Rad

Prep Batch: 624958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190363-1	BAC-10-F-A4-20230815-01	Total/NA	Water	PrecSep-21	
240-190363-2	DUP-001-BAC-10-F-A4-20230815-01	Total/NA	Water	PrecSep-21	
240-190363-3	EB-001-F-A4-20230815-01	Total/NA	Water	PrecSep-21	
240-190363-4	BAC-21-F-A4-20230816-01	Total/NA	Water	PrecSep-21	
240-190363-5	BAC-22-F-A4-20230816-01	Total/NA	Water	PrecSep-21	
240-190363-6	BAC-23-F-A4-20230816-01	Total/NA	Water	PrecSep-21	
240-190363-7	EB-001-F-A4-20230816-01	Total/NA	Water	PrecSep-21	
MB 160-624958/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-624958/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-624958/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 624959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190363-1	BAC-10-F-A4-20230815-01	Total/NA	Water	PrecSep_0	
240-190363-2	DUP-001-BAC-10-F-A4-20230815-01	Total/NA	Water	PrecSep_0	
240-190363-3	EB-001-F-A4-20230815-01	Total/NA	Water	PrecSep_0	
240-190363-4	BAC-21-F-A4-20230816-01	Total/NA	Water	PrecSep_0	
240-190363-5	BAC-22-F-A4-20230816-01	Total/NA	Water	PrecSep_0	
240-190363-6	BAC-23-F-A4-20230816-01	Total/NA	Water	PrecSep_0	
240-190363-7	EB-001-F-A4-20230816-01	Total/NA	Water	PrecSep_0	
MB 160-624959/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-624959/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-624959/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: BAC-10-F-A4-20230815-01

Lab Sample ID: 240-190363-1

Date Collected: 08/15/23 14:46

Matrix: Water

Date Received: 08/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584712	BN	EET CLE	08/22/23 14:00
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 15:41
Total/NA	Prep	7470A			584713	BN	EET CLE	08/22/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 16:37
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 20:01
Total/NA	Analysis	300.0-1993 R2.1		1	586313	JMR	EET CLE	09/07/23 05:39
Total/NA	Prep	PrecSep-21			624958	KAC	EET SL	08/22/23 09:59
Total/NA	Analysis	9315		1	627936	FLC	EET SL	09/13/23 09:23
Total/NA	Prep	PrecSep_0			624959	KAC	EET SL	08/22/23 10:02
Total/NA	Analysis	9320		1	627239	SCB	EET SL	09/08/23 12:15
Total/NA	Analysis	Ra226_Ra228		1	628538	FLC	EET SL	09/18/23 10:10

Client Sample ID: DUP-001-BAC-10-F-A4-20230815-01

Lab Sample ID: 240-190363-2

Date Collected: 08/15/23 14:46

Matrix: Water

Date Received: 08/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584712	BN	EET CLE	08/22/23 14:00
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 16:06
Total/NA	Prep	7470A			584713	BN	EET CLE	08/22/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 16:39
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 20:05
Total/NA	Analysis	300.0-1993 R2.1		1	586313	JMR	EET CLE	09/07/23 06:44
Total/NA	Prep	PrecSep-21			624958	KAC	EET SL	08/22/23 09:59
Total/NA	Analysis	9315		1	627939	FLC	EET SL	09/13/23 09:27
Total/NA	Prep	PrecSep_0			624959	KAC	EET SL	08/22/23 10:02
Total/NA	Analysis	9320		1	627239	SCB	EET SL	09/08/23 12:15
Total/NA	Analysis	Ra226_Ra228		1	628538	FLC	EET SL	09/18/23 10:10

Client Sample ID: EB-001-F-A4-20230815-01

Lab Sample ID: 240-190363-3

Date Collected: 08/15/23 15:15

Matrix: Water

Date Received: 08/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584712	BN	EET CLE	08/22/23 14:00
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 16:11
Total/NA	Prep	7470A			584713	BN	EET CLE	08/22/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 16:41
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 20:09
Total/NA	Analysis	300.0-1993 R2.1		1	586313	JMR	EET CLE	09/07/23 07:06
Total/NA	Prep	PrecSep-21			624958	KAC	EET SL	08/22/23 09:59
Total/NA	Analysis	9315		1	627939	FLC	EET SL	09/13/23 09:28
Total/NA	Prep	PrecSep_0			624959	KAC	EET SL	08/22/23 10:02
Total/NA	Analysis	9320		1	627241	SCB	EET SL	09/08/23 12:15

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: EB-001-F-A4-20230815-01

Lab Sample ID: 240-190363-3

Date Collected: 08/15/23 15:15

Matrix: Water

Date Received: 08/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228		1	628538	FLC	EET SL	09/18/23 10:10

Client Sample ID: BAC-21-F-A4-20230816-01

Lab Sample ID: 240-190363-4

Date Collected: 08/16/23 12:58

Matrix: Water

Date Received: 08/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584712	BN	EET CLE	08/22/23 14:00
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 16:15
Total/NA	Prep	7470A			584713	BN	EET CLE	08/22/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 16:43
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 20:13
Total/NA	Analysis	300.0-1993 R2.1		1	586313	JMR	EET CLE	09/07/23 07:28
Total/NA	Prep	PrecSep-21			624958	KAC	EET SL	08/22/23 09:59
Total/NA	Analysis	9315		1	627939	FLC	EET SL	09/13/23 09:28
Total/NA	Prep	PrecSep_0			624959	KAC	EET SL	08/22/23 10:02
Total/NA	Analysis	9320		1	627241	SCB	EET SL	09/08/23 12:15
Total/NA	Analysis	Ra226_Ra228		1	628538	FLC	EET SL	09/18/23 10:10

Client Sample ID: BAC-22-F-A4-20230816-01

Lab Sample ID: 240-190363-5

Date Collected: 08/16/23 13:48

Matrix: Water

Date Received: 08/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584712	BN	EET CLE	08/22/23 14:00
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 16:20
Total/NA	Prep	7470A			584713	BN	EET CLE	08/22/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 16:45
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 20:19
Total/NA	Analysis	300.0-1993 R2.1		1	586313	JMR	EET CLE	09/07/23 07:49
Total/NA	Prep	PrecSep-21			624958	KAC	EET SL	08/22/23 09:59
Total/NA	Analysis	9315		1	627939	FLC	EET SL	09/13/23 09:28
Total/NA	Prep	PrecSep_0			624959	KAC	EET SL	08/22/23 10:02
Total/NA	Analysis	9320		1	627241	SCB	EET SL	09/08/23 12:15
Total/NA	Analysis	Ra226_Ra228		1	628538	FLC	EET SL	09/18/23 10:10

Client Sample ID: BAC-23-F-A4-20230816-01

Lab Sample ID: 240-190363-6

Date Collected: 08/16/23 14:32

Matrix: Water

Date Received: 08/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584712	BN	EET CLE	08/22/23 14:00
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 16:24
Total/NA	Prep	7470A			584713	BN	EET CLE	08/22/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 16:51

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: BAC-23-F-A4-20230816-01

Lab Sample ID: 240-190363-6

Date Collected: 08/16/23 14:32

Matrix: Water

Date Received: 08/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 20:24
Total/NA	Analysis	300.0-1993 R2.1		1	586313	JMR	EET CLE	09/07/23 08:11
Total/NA	Prep	PrecSep-21			624958	KAC	EET SL	08/22/23 09:59
Total/NA	Analysis	9315		1	627939	FLC	EET SL	09/13/23 09:29
Total/NA	Prep	PrecSep_0			624959	KAC	EET SL	08/22/23 10:02
Total/NA	Analysis	9320		1	627241	SCB	EET SL	09/08/23 12:15
Total/NA	Analysis	Ra226_Ra228		1	628538	FLC	EET SL	09/18/23 10:10

Client Sample ID: EB-001-F-A4-20230816-01

Lab Sample ID: 240-190363-7

Date Collected: 08/16/23 15:00

Matrix: Water

Date Received: 08/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584712	BN	EET CLE	08/22/23 14:00
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 16:29
Total/NA	Prep	7470A			584713	BN	EET CLE	08/22/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 16:53
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 20:28
Total/NA	Analysis	300.0-1993 R2.1		1	586313	JMR	EET CLE	09/07/23 08:33
Total/NA	Prep	PrecSep-21			624958	KAC	EET SL	08/22/23 09:59
Total/NA	Analysis	9315		1	627939	FLC	EET SL	09/13/23 09:29
Total/NA	Prep	PrecSep_0			624959	KAC	EET SL	08/22/23 10:02
Total/NA	Analysis	9320		1	627241	SCB	EET SL	09/08/23 12:15
Total/NA	Analysis	Ra226_Ra228		1	628538	FLC	EET SL	09/18/23 10:10

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
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

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
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-24
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-24
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-24
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-24
Massachusetts	State	M-MO054	06-30-24
MI - RadChem Recognition	State	9005	06-30-24
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-24
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

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	07-31-24
North Dakota	State	R-207	06-30-24
Oregon	NELAP	4157	09-01-24
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23 *
Texas	NELAP	T104704193	07-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO000542021-14	07-31-24
Virginia	NELAP	10310	06-15-25
West Virginia DEP	State	381	10-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Chain of Custody Record

Eurofins Canton
180 S. Van Buren Avenue
Barberton, OH 44203
Phone (330) 497-9396 Phone (330) 497-0772

Client Information Client Contact: Bobby Castle 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: Federal CCR Wells - App IV Site: Gavin Plant		Lab PM: Cisneros, Roxanne E-Mail: roxanne.cisneros@Eurofinset.com Carrier Tracking No(s): 240-93466-34578.1 State of Origin:	
Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: 2935505 WO #: 24019633 Project #: 24019633 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 Other: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - EDTA Y - EDA Z - other (specify)	
Sample Identification BAC-10-F-A4-20230815-01 DUP-001-BAC-10-F-A4-20230815-01 FB-001-F-A4-20230815-01 BAC-21-F-A4-20230816-01 BAC-22-F-A4-20230816-01 BAC-23-F-A4-20230816-01 EB-001-F-A4-20230816-01		Total Number of Containers: <input checked="" type="checkbox"/>	
Sample Date 8-15-23 8-15-23 8-15-23 8-16-23 8-16-23 8-16-23 8-16-23		Special Instructions/Note: 240-190363 Chain of Custody	
Sample Type (C=Comp, G=grab) 6 6 6 6 6 6 6		Matrix (Water, Liquid, Oil, Slurry, Other) Water Water Water Water Water W W	
Sample Time 1446 1446 1515 1258 1348 1432 1500		Perform MS/MSD (Yes or No) 6020, 7470A 300.0_2BD - Fluoride 2320B - Alkalinity 9315_Ra226, 9320_Ra226, Ra226Ra228_GFC	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Empty Kit Relinquished by: Bobby Castle Date/Time: 8-17-23 / 0900 Relinquished by: Asmley Deal Date/Time: 8-17-23 / 1700		Method of Shipment: Received by: Ashley Deal Date/Time: 8-17-23 / 1144 Received by: Young Dege Date/Time: 8-18-23 / 800 Received by: Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks:	

Barberton Facility

Client Lightstone

Site Name _____

Cooler unpacked by: _____

Cooler Received on 8-18-23

Opened on 8-18-23

Nancy Page

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 # 22 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity each 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 NA

-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# HC312502

14. Were VOAs on the COC? Yes No NA

15. Were air bubbles >6 mm in any VOA vials? Yes No NA  ← Larger than this.

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: _____



Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-10F-A4-20230815-01	240-190363-C-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-10F-A4-20230815-01	240-190363-D-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-10F-A4-20230815-01	240-190363-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-001-BAC-10-F-A4-20230815-01	240-190363-C-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-001-BAC-10-F-A4-20230815-01	240-190363-D-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-001-BAC-10-F-A4-20230815-01	240-190363-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230815-01	240-190363-C-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230815-01	240-190363-D-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230815-01	240-190363-E-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-21-F-A4-20230815-01	240-190363-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-21-F-A4-20230815-01	240-190363-D-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-21-F-A4-20230815-01	240-190363-E-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-22-F-A4-20230816-01	240-190363-C-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-22-F-A4-20230816-01	240-190363-D-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-22-F-A4-20230816-01	240-190363-E-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-23-F-A4-20230816-01	240-190363-C-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-23-F-A4-20230816-01	240-190363-D-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-23-F-A4-20230816-01	240-190363-E-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230816-01	240-190363-C-7	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230816-01	240-190363-D-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230816-01	240-190363-E-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

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: Federal CCR Wells - App IV Site: <i>Spin Plant</i>		Lab PW: Cisneros, Roxanne E-Mail: roxanne.cisneros@Eurofinset.com Carrier Tracking No(s): State of Origin:		COC No: 240-93466-34578.1 Page: Page 1 of 1 Job #:	
Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: 2935505 WO #: Project #: 24019633 SOW#:		Analysis Requested 6020, 7470A 300.0, 28D - Fluoride 2308 - Alkalinity 8315, Ra226, 9320, Ra228, Ra226Ra228, GFPC			
Sample Identification BAC-10-F-A4-20230815-01 DUP-001-BAC-10-F-A4-20230815-01 EB-001-F-A4-20230815-01 BAC-21-F-A4-20230815-01 BAC-22-F-A4-20230816-01 BAC-23-F-A4-20230816-01 EB-001-F-A4-20230816-01		Sample Type (C=comp, G=grab) Sample Time Sample Date Matrix (W=water, S=solid, O=other, A=acid) Preservation Code:		Field Filtered Sample (Yes or No) Form MS/SD (Yes or No) 6020, 7470A 300.0, 28D - Fluoride 2308 - Alkalinity 8315, Ra226, 9320, Ra228, Ra226Ra228, GFPC	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Special Instructions/Note: Total Number of containers:	
Empty Kit Relinquished by: Relinquished by: <i>Bobby Castle</i> Relinquished by: <i>Ashley Deal</i> Relinquished by:		Date: 8-17-23 / 0900 Date: 8-17-23 1700 Date:		Method of Shipment: Received by: <i>Ashley Deal</i> Received by: <i>Joey Page</i> Received by:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Company: ETA Company: EETNC Company:	

Eurofins - Cleveland Sample Receipt Form/Narrative
Barberton Facility

Login # : 190363

Client Lightstone

Site Name _____

Cooler unpacked by: Nancy Payer

Cooler Received on 8-18-23

Opened on 8-18-23

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 # 22 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

- 2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity leach 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# HC312502
- 14. Were VOAs on the COC? Yes No
- 15. Were air bubbles >6 mm in any VOA vials? Yes 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: _____



Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-10F-A4-20230815-01	240-190363-C-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-10F-A4-20230815-01	240-190363-D-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-10F-A4-20230815-01	240-190363-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-001-BAC-10-F-A4-20230815-01	240-190363-C-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-001-BAC-10-F-A4-20230815-01	240-190363-D-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-001-BAC-10-F-A4-20230815-01	240-190363-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230815-01	240-190363-C-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230815-01	240-190363-D-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230815-01	240-190363-E-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-21-F-A4-20230815-01	240-190363-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-21-F-A4-20230815-01	240-190363-D-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-21-F-A4-20230815-01	240-190363-E-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-22-F-A4-20230816-01	240-190363-C-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-22-F-A4-20230816-01	240-190363-D-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-22-F-A4-20230816-01	240-190363-E-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-23-F-A4-20230816-01	240-190363-C-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-23-F-A4-20230816-01	240-190363-D-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-23-F-A4-20230816-01	240-190363-E-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230816-01	240-190363-C-7	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230816-01	240-190363-D-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230816-01	240-190363-E-7	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



Environment Testing

Client Information (Sub Contract Lab)
 Client Contact: Cishneros, Roxanne
 Shipping/Receiving: roxanne.cishneros@eurofins.com
 Company: TestAmerica Laboratories, Inc.
 Address: 13715 Rider Trail North, Earth City, MO, 63045
 Phone: 314-298-8566 (Tel) 314-298-8757 (Fax)
 Email: [Redacted]
 Project Name: Federal GWM Wells - App IV
 Site: [Redacted]

Sampler: Lab PM: Cishneros, Roxanne
 Phone: roxanne.cishneros@eurofins.com
 E-Mail: roxanne.cishneros@eurofins.com
 Camer Tracking No(s): 240-172620-1
 State of Origin: Ohio
 Page: Page 1 of 1
 Job #: 240-190363-1

Due Date Requested: 9/19/2023
TAT Requested (days): [Blank]
PO #: [Blank]
WO #: [Blank]
Project #: 24019633
SSOW#: [Blank]

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Soil, Other)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PreSep_21 Radium-226 (GFC)	9320_Ra228/PreSep_0 Radium-228 (GFC)	Ra226Ra228_GFC/ Combined Radium-226 and Radium-228	Total Number of Containers	Special Instructions/Note:
BAC-10-F-A4-20230815-01 (240-190363-1)	8/15/23	14:46 Eastern	Water	Water	X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
DUP-001-BAC-10-F-A4-20230815-01 (240-190363-2)	8/15/23	14:46 Eastern	Water	Water	X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
EB-001-F-A4-20230815-01 (240-190363-3)	8/15/23	15:15 Eastern	Water	Water	X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-21-F-A4-20230816-01 (240-190363-4)	8/16/23	12:58 Eastern	Water	Water	X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-22-F-A4-20230816-01 (240-190363-5)	8/16/23	13:48 Eastern	Water	Water	X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-23-F-A4-20230816-01 (240-190363-6)	8/16/23	14:32 Eastern	Water	Water	X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
EB-001-F-A4-20230816-01 (240-190363-7)	8/16/23	15:00 Eastern	Water	Water	X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet

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/test/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
 Deliverable Requested: I, II, III, IV, Other (specify) [Blank]
 Primary Deliverable Rank: 2
 Special Instructions/QC Requirements: [Blank]

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For [Blank] Months
 Received by: [Signature] Date: AUG 21 2023 0833
 Received by: [Signature] Date: [Blank]

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



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-190363-1

Login Number: 190363

List Number: 2

Creator: Pinette, Meadow L

List Source: Eurofins St. Louis

List Creation: 08/21/23 01:10 PM

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



 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 8/31/2023 6:03:18 PM

JOB DESCRIPTION

Federal GWM Wells - App III

JOB NUMBER

240-190365-1

Eurofins Cleveland

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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8/31/2023 6:03:18 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Job ID: 240-190365-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-190365-1

Comments

No additional comments.

Receipt

The samples were received on 8/18/2023 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 0.1° C, 0.2° C, 2.4° C, 2.5° C, 4.5° C and 21.2° C.

Metals

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

General Chemistry

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



Method Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
SM 2540C	Solids, Total Dissolved (TDS)	SM	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
Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-190365-1	BAC-10-F-A3-20230815-01	Water	08/15/23 14:46	08/18/23 08:00
240-190365-2	DUP-001-BAC-10-F-A3-20230815-01	Water	08/15/23 14:46	08/18/23 08:00
240-190365-3	EB-001-F-A3-20230815-01	Water	08/15/23 15:15	08/18/23 08:00
240-190365-4	BAC-21-F-A3-20230816-01	Water	08/16/23 12:58	08/18/23 08:00
240-190365-5	BAC-22-F-A3-20230816-01	Water	08/16/23 13:48	08/18/23 08:00
240-190365-6	BAC-23-F-A3-20230816-01	Water	08/16/23 14:32	08/18/23 08:00
240-190365-7	EB-001-F-A3-20230816-01	Water	08/16/23 15:00	08/18/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Client Sample ID: BAC-10-F-A3-20230815-01

Lab Sample ID: 240-190365-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	490		100	57	ug/L	1		6010D	Total Recoverable
Calcium	100000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	27000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	47000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	47		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.15		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	120		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	560		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-001-BAC-10-F-A3-20230815-01

Lab Sample ID: 240-190365-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	510		100	57	ug/L	1		6010D	Total Recoverable
Calcium	110000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	28000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	49000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	47		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.15		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	220		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	580		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-001-F-A3-20230815-01

Lab Sample ID: 240-190365-3

No Detections.

Client Sample ID: BAC-21-F-A3-20230816-01

Lab Sample ID: 240-190365-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	390		100	57	ug/L	1		6010D	Total Recoverable
Calcium	140000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	17000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	32000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Client Sample ID: BAC-21-F-A3-20230816-01 (Continued)

Lab Sample ID: 240-190365-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	77		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.069		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	130		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	540		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-22-F-A3-20230816-01

Lab Sample ID: 240-190365-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	230		100	57	ug/L	1		6010D	Total Recoverable
Calcium	160000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	3100		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	20000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	32		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.078		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	240		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	610		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-23-F-A3-20230816-01

Lab Sample ID: 240-190365-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	270		100	57	ug/L	1		6010D	Total Recoverable
Calcium	130000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	16000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	20000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	44		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	140		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	470		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-001-F-A3-20230816-01

Lab Sample ID: 240-190365-7

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Client Sample ID: BAC-10-F-A3-20230815-01

Lab Sample ID: 240-190365-1

Date Collected: 08/15/23 14:46

Matrix: Water

Date Received: 08/18/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	490		100	57	ug/L		08/21/23 14:00	08/22/23 19:46	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	100000		1000	250	ug/L		08/21/23 14:00	08/22/23 19:51	1
Magnesium	27000		1000	61	ug/L		08/21/23 14:00	08/22/23 11:50	1
Potassium	1900		1000	220	ug/L		08/21/23 14:00	08/22/23 11:50	1
Sodium	47000		1000	330	ug/L		08/21/23 14:00	08/22/23 11:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			08/22/23 20:45	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			08/22/23 20:45	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:45	1
Chloride (EPA 300.0)	47		1.0	0.13	mg/L			08/26/23 06:59	1
Fluoride (EPA 300.0)	0.15		0.050	0.024	mg/L			08/29/23 18:55	1
Sulfate (EPA 300.0)	120		5.0	1.7	mg/L			08/26/23 07:59	5
Total Dissolved Solids (SM 2540C)	560		10	7.8	mg/L			08/22/23 10:33	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Client Sample ID: DUP-001-BAC-10-F-A3-20230815-01

Lab Sample ID: 240-190365-2

Date Collected: 08/15/23 14:46

Matrix: Water

Date Received: 08/18/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	510		100	57	ug/L		08/21/23 14:00	08/22/23 19:50	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110000		1000	250	ug/L		08/21/23 14:00	08/22/23 19:53	1
Magnesium	28000		1000	61	ug/L		08/21/23 14:00	08/22/23 11:52	1
Potassium	2000		1000	220	ug/L		08/21/23 14:00	08/22/23 11:52	1
Sodium	49000		1000	330	ug/L		08/21/23 14:00	08/22/23 11:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			08/22/23 20:54	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			08/22/23 20:54	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:54	1
Chloride (EPA 300.0)	47		1.0	0.13	mg/L			08/26/23 08:19	1
Fluoride (EPA 300.0)	0.15		0.050	0.024	mg/L			08/29/23 19:17	1
Sulfate (EPA 300.0)	220		5.0	1.7	mg/L			08/26/23 08:40	5
Total Dissolved Solids (SM 2540C)	580		10	7.8	mg/L			08/21/23 15:16	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Client Sample ID: EB-001-F-A3-20230815-01

Lab Sample ID: 240-190365-3

Date Collected: 08/15/23 15:15

Matrix: Water

Date Received: 08/18/23 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		08/21/23 14:00	08/22/23 19:55	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		08/21/23 14:00	08/22/23 11:55	1
Magnesium	ND		1000	61	ug/L		08/21/23 14:00	08/22/23 11:55	1
Potassium	ND		1000	220	ug/L		08/21/23 14:00	08/22/23 11:55	1
Sodium	ND		1000	330	ug/L		08/21/23 14:00	08/22/23 11:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:58	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:58	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:58	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			08/26/23 09:00	1
Fluoride (EPA 300.0)	ND	F1	0.050	0.024	mg/L			08/29/23 19:39	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			08/26/23 09:00	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			08/21/23 15:16	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Client Sample ID: BAC-21-F-A3-20230816-01

Lab Sample ID: 240-190365-4

Date Collected: 08/16/23 12:58

Matrix: Water

Date Received: 08/18/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	390		100	57	ug/L		08/21/23 14:00	08/22/23 19:59	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	140000		1000	250	ug/L		08/21/23 14:00	08/22/23 19:56	1
Magnesium	17000		1000	61	ug/L		08/21/23 14:00	08/22/23 12:03	1
Potassium	2800		1000	220	ug/L		08/21/23 14:00	08/22/23 12:03	1
Sodium	32000		1000	330	ug/L		08/21/23 14:00	08/22/23 12:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			08/22/23 21:04	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			08/22/23 21:04	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 21:04	1
Chloride (EPA 300.0)	77		1.0	0.13	mg/L			08/28/23 14:10	1
Fluoride (EPA 300.0)	0.069		0.050	0.024	mg/L			08/28/23 14:10	1
Sulfate (EPA 300.0)	130		1.0	0.35	mg/L			08/28/23 14:10	1
Total Dissolved Solids (SM 2540C)	540		10	7.8	mg/L			08/22/23 10:33	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Client Sample ID: BAC-22-F-A3-20230816-01

Lab Sample ID: 240-190365-5

Date Collected: 08/16/23 13:48

Matrix: Water

Date Received: 08/18/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	230		100	57	ug/L		08/21/23 14:00	08/22/23 20:03	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	160000		1000	250	ug/L		08/21/23 14:00	08/22/23 19:59	1
Magnesium	20000		1000	61	ug/L		08/21/23 14:00	08/22/23 12:05	1
Potassium	3100		1000	220	ug/L		08/21/23 14:00	08/22/23 12:05	1
Sodium	20000		1000	330	ug/L		08/21/23 14:00	08/22/23 12:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			08/22/23 21:09	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			08/22/23 21:09	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 21:09	1
Chloride (EPA 300.0)	32		1.0	0.13	mg/L			08/28/23 16:20	1
Fluoride (EPA 300.0)	0.078		0.050	0.024	mg/L			08/28/23 16:20	1
Sulfate (EPA 300.0)	240		5.0	1.7	mg/L			08/28/23 16:42	5
Total Dissolved Solids (SM 2540C)	610		10	7.8	mg/L			08/22/23 10:33	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Client Sample ID: BAC-23-F-A3-20230816-01

Lab Sample ID: 240-190365-6

Date Collected: 08/16/23 14:32

Matrix: Water

Date Received: 08/18/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	270		100	57	ug/L		08/21/23 14:00	08/22/23 20:16	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130000		1000	250	ug/L		08/21/23 14:00	08/22/23 20:01	1
Magnesium	16000		1000	61	ug/L		08/21/23 14:00	08/22/23 12:08	1
Potassium	2000		1000	220	ug/L		08/21/23 14:00	08/22/23 12:08	1
Sodium	20000		1000	330	ug/L		08/21/23 14:00	08/22/23 12:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230		5.0	2.6	mg/L			08/22/23 21:14	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230		5.0	2.6	mg/L			08/22/23 21:14	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 21:14	1
Chloride (EPA 300.0)	44		1.0	0.13	mg/L			08/28/23 17:47	1
Fluoride (EPA 300.0)	0.13		0.050	0.024	mg/L			08/28/23 17:47	1
Sulfate (EPA 300.0)	140		1.0	0.35	mg/L			08/28/23 17:47	1
Total Dissolved Solids (SM 2540C)	470		10	7.8	mg/L			08/22/23 10:33	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Client Sample ID: EB-001-F-A3-20230816-01

Lab Sample ID: 240-190365-7

Date Collected: 08/16/23 15:00

Matrix: Water

Date Received: 08/18/23 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		08/21/23 14:00	08/22/23 20:21	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		08/21/23 14:00	08/22/23 12:11	1
Magnesium	ND		1000	61	ug/L		08/21/23 14:00	08/22/23 12:11	1
Potassium	ND		1000	220	ug/L		08/21/23 14:00	08/22/23 12:11	1
Sodium	ND		1000	330	ug/L		08/21/23 14:00	08/22/23 12:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 21:17	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 21:17	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 21:17	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			08/28/23 18:30	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			08/28/23 18:30	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			08/28/23 18:30	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			08/22/23 10:33	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-584567/1-A
 Matrix: Water
 Analysis Batch: 584753

Client Sample ID: Method Blank
 Prep Type: Total Recoverable
 Prep Batch: 584567

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		08/21/23 14:00	08/22/23 18:59	1

Lab Sample ID: LCS 240-584567/3-A
 Matrix: Water
 Analysis Batch: 584753

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 584567

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 240-584567/1-A
 Matrix: Water
 Analysis Batch: 584769

Client Sample ID: Method Blank
 Prep Type: Total Recoverable
 Prep Batch: 584567

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		08/21/23 14:00	08/22/23 11:20	1
Magnesium	ND		1000	61	ug/L		08/21/23 14:00	08/22/23 11:20	1
Potassium	ND		1000	220	ug/L		08/21/23 14:00	08/22/23 11:20	1
Sodium	ND		1000	330	ug/L		08/21/23 14:00	08/22/23 11:20	1

Lab Sample ID: LCS 240-584567/2-A
 Matrix: Water
 Analysis Batch: 584769

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 584567

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	24700		ug/L		99	80 - 120
Magnesium	25000	25100		ug/L		100	80 - 120
Potassium	25000	24900		ug/L		100	80 - 120
Sodium	25000	25400		ug/L		102	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-584875/29
 Matrix: Water
 Analysis Batch: 584875

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			08/22/23 20:41	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/22/23 20:41	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/22/23 20:41	1

Lab Sample ID: MB 240-584875/3
 Matrix: Water
 Analysis Batch: 584875

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			08/22/23 18:44	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/22/23 18:44	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/22/23 18:44	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Method: 2320B-1997 - Alkalinity, Total (Continued)

Lab Sample ID: LCS 240-584875/28
 Matrix: Water
 Analysis Batch: 584875

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	80.0		mg/L		99	86 - 123

Lab Sample ID: 240-190365-1 DU
 Matrix: Water
 Analysis Batch: 584875

Client Sample ID: BAC-10-F-A3-20230815-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	220		221		mg/L		0.6	20
Bicarbonate Alkalinity as CaCO3	220		221		mg/L		0.6	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-585213/3
 Matrix: Water
 Analysis Batch: 585213

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			08/25/23 19:54	1
Sulfate	ND		1.0	0.35	mg/L			08/25/23 19:54	1

Lab Sample ID: LCS 240-585213/4
 Matrix: Water
 Analysis Batch: 585213

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	50.7		mg/L		101	90 - 110
Sulfate	50.0	52.7		mg/L		105	90 - 110

Lab Sample ID: MB 240-585376/3
 Matrix: Water
 Analysis Batch: 585376

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			08/28/23 13:27	1
Fluoride	ND		0.050	0.024	mg/L			08/28/23 13:27	1
Sulfate	ND		1.0	0.35	mg/L			08/28/23 13:27	1

Lab Sample ID: LCS 240-585376/4
 Matrix: Water
 Analysis Batch: 585376

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	50.7		mg/L		101	90 - 110
Fluoride	2.50	2.70		mg/L		108	90 - 110
Sulfate	50.0	52.3		mg/L		105	90 - 110

Eurofins Cleveland

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-190365-4 MS
Matrix: Water
Analysis Batch: 585376

Client Sample ID: BAC-21-F-A3-20230816-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	77		50.0	128		mg/L		102	80 - 120
Fluoride	0.069		2.50	2.97		mg/L		116	80 - 120
Sulfate	130		50.0	181		mg/L		100	80 - 120

Lab Sample ID: 240-190365-4 MSD
Matrix: Water
Analysis Batch: 585376

Client Sample ID: BAC-21-F-A3-20230816-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	77		50.0	127		mg/L		101	80 - 120	0	15
Fluoride	0.069		2.50	2.94		mg/L		115	80 - 120	1	15
Sulfate	130		50.0	181		mg/L		99	80 - 120	0	15

Lab Sample ID: MB 240-585526/3
Matrix: Water
Analysis Batch: 585526

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			08/29/23 13:09	1
Fluoride	ND		0.050	0.024	mg/L			08/29/23 13:09	1
Sulfate	ND		1.0	0.35	mg/L			08/29/23 13:09	1

Lab Sample ID: LCS 240-585526/4
Matrix: Water
Analysis Batch: 585526

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.1		mg/L		102	90 - 110
Fluoride	2.50	2.71		mg/L		108	90 - 110
Sulfate	50.0	52.9		mg/L		106	90 - 110

Lab Sample ID: 240-190365-3 MS
Matrix: Water
Analysis Batch: 585526

Client Sample ID: EB-001-F-A3-20230815-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	ND		50.0	55.4		mg/L		111	80 - 120
Fluoride	ND	F1	2.50	3.10	F1	mg/L		124	80 - 120
Sulfate	ND	F1	50.0	62.1	F1	mg/L		124	80 - 120

Lab Sample ID: 240-190365-3 MSD
Matrix: Water
Analysis Batch: 585526

Client Sample ID: EB-001-F-A3-20230815-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND		50.0	54.1		mg/L		108	80 - 120	2	15
Fluoride	ND	F1	2.50	3.03	F1	mg/L		121	80 - 120	2	15
Sulfate	ND	F1	50.0	59.8		mg/L		120	80 - 120	4	15

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

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

Lab Sample ID: MB 240-584630/1
Matrix: Water
Analysis Batch: 584630

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			08/21/23 15:16	1

Lab Sample ID: LCS 240-584630/2
Matrix: Water
Analysis Batch: 584630

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	242	226		mg/L		93	80 - 120

Lab Sample ID: MB 240-584730/1
Matrix: Water
Analysis Batch: 584730

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			08/22/23 10:33	1

Lab Sample ID: LCS 240-584730/2
Matrix: Water
Analysis Batch: 584730

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	242	220		mg/L		91	80 - 120

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Metals

Prep Batch: 584567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190365-1	BAC-10-F-A3-20230815-01	Total Recoverable	Water	3005A	
240-190365-2	DUP-001-BAC-10-F-A3-20230815-01	Total Recoverable	Water	3005A	
240-190365-3	EB-001-F-A3-20230815-01	Total Recoverable	Water	3005A	
240-190365-4	BAC-21-F-A3-20230816-01	Total Recoverable	Water	3005A	
240-190365-5	BAC-22-F-A3-20230816-01	Total Recoverable	Water	3005A	
240-190365-6	BAC-23-F-A3-20230816-01	Total Recoverable	Water	3005A	
240-190365-7	EB-001-F-A3-20230816-01	Total Recoverable	Water	3005A	
MB 240-584567/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-584567/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-584567/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 584753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190365-1	BAC-10-F-A3-20230815-01	Total Recoverable	Water	6010D	584567
240-190365-2	DUP-001-BAC-10-F-A3-20230815-01	Total Recoverable	Water	6010D	584567
240-190365-3	EB-001-F-A3-20230815-01	Total Recoverable	Water	6010D	584567
240-190365-4	BAC-21-F-A3-20230816-01	Total Recoverable	Water	6010D	584567
240-190365-5	BAC-22-F-A3-20230816-01	Total Recoverable	Water	6010D	584567
240-190365-6	BAC-23-F-A3-20230816-01	Total Recoverable	Water	6010D	584567
240-190365-7	EB-001-F-A3-20230816-01	Total Recoverable	Water	6010D	584567
MB 240-584567/1-A	Method Blank	Total Recoverable	Water	6010D	584567
LCS 240-584567/3-A	Lab Control Sample	Total Recoverable	Water	6010D	584567

Analysis Batch: 584769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190365-1	BAC-10-F-A3-20230815-01	Total Recoverable	Water	6020B	584567
240-190365-2	DUP-001-BAC-10-F-A3-20230815-01	Total Recoverable	Water	6020B	584567
240-190365-3	EB-001-F-A3-20230815-01	Total Recoverable	Water	6020B	584567
240-190365-4	BAC-21-F-A3-20230816-01	Total Recoverable	Water	6020B	584567
240-190365-5	BAC-22-F-A3-20230816-01	Total Recoverable	Water	6020B	584567
240-190365-6	BAC-23-F-A3-20230816-01	Total Recoverable	Water	6020B	584567
240-190365-7	EB-001-F-A3-20230816-01	Total Recoverable	Water	6020B	584567
MB 240-584567/1-A	Method Blank	Total Recoverable	Water	6020B	584567
LCS 240-584567/2-A	Lab Control Sample	Total Recoverable	Water	6020B	584567

Analysis Batch: 584849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190365-1	BAC-10-F-A3-20230815-01	Total Recoverable	Water	6020B	584567
240-190365-2	DUP-001-BAC-10-F-A3-20230815-01	Total Recoverable	Water	6020B	584567
240-190365-4	BAC-21-F-A3-20230816-01	Total Recoverable	Water	6020B	584567
240-190365-5	BAC-22-F-A3-20230816-01	Total Recoverable	Water	6020B	584567
240-190365-6	BAC-23-F-A3-20230816-01	Total Recoverable	Water	6020B	584567

General Chemistry

Analysis Batch: 584630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190365-2	DUP-001-BAC-10-F-A3-20230815-01	Total/NA	Water	SM 2540C	
240-190365-3	EB-001-F-A3-20230815-01	Total/NA	Water	SM 2540C	
MB 240-584630/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-584630/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Eurofins Cleveland

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

General Chemistry

Analysis Batch: 584730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190365-1	BAC-10-F-A3-20230815-01	Total/NA	Water	SM 2540C	
240-190365-4	BAC-21-F-A3-20230816-01	Total/NA	Water	SM 2540C	
240-190365-5	BAC-22-F-A3-20230816-01	Total/NA	Water	SM 2540C	
240-190365-6	BAC-23-F-A3-20230816-01	Total/NA	Water	SM 2540C	
240-190365-7	EB-001-F-A3-20230816-01	Total/NA	Water	SM 2540C	
MB 240-584730/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-584730/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 584875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190365-1	BAC-10-F-A3-20230815-01	Total/NA	Water	2320B-1997	
240-190365-2	DUP-001-BAC-10-F-A3-20230815-01	Total/NA	Water	2320B-1997	
240-190365-3	EB-001-F-A3-20230815-01	Total/NA	Water	2320B-1997	
240-190365-4	BAC-21-F-A3-20230816-01	Total/NA	Water	2320B-1997	
240-190365-5	BAC-22-F-A3-20230816-01	Total/NA	Water	2320B-1997	
240-190365-6	BAC-23-F-A3-20230816-01	Total/NA	Water	2320B-1997	
240-190365-7	EB-001-F-A3-20230816-01	Total/NA	Water	2320B-1997	
MB 240-584875/29	Method Blank	Total/NA	Water	2320B-1997	
MB 240-584875/3	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-584875/28	Lab Control Sample	Total/NA	Water	2320B-1997	
240-190365-1 DU	BAC-10-F-A3-20230815-01	Total/NA	Water	2320B-1997	

Analysis Batch: 585213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190365-1	BAC-10-F-A3-20230815-01	Total/NA	Water	300.0	
240-190365-1	BAC-10-F-A3-20230815-01	Total/NA	Water	300.0	
240-190365-2	DUP-001-BAC-10-F-A3-20230815-01	Total/NA	Water	300.0	
240-190365-2	DUP-001-BAC-10-F-A3-20230815-01	Total/NA	Water	300.0	
240-190365-3	EB-001-F-A3-20230815-01	Total/NA	Water	300.0	
MB 240-585213/3	Method Blank	Total/NA	Water	300.0	
LCS 240-585213/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 585376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190365-4	BAC-21-F-A3-20230816-01	Total/NA	Water	300.0	
240-190365-5	BAC-22-F-A3-20230816-01	Total/NA	Water	300.0	
240-190365-5	BAC-22-F-A3-20230816-01	Total/NA	Water	300.0	
240-190365-6	BAC-23-F-A3-20230816-01	Total/NA	Water	300.0	
240-190365-7	EB-001-F-A3-20230816-01	Total/NA	Water	300.0	
MB 240-585376/3	Method Blank	Total/NA	Water	300.0	
LCS 240-585376/4	Lab Control Sample	Total/NA	Water	300.0	
240-190365-4 MS	BAC-21-F-A3-20230816-01	Total/NA	Water	300.0	
240-190365-4 MSD	BAC-21-F-A3-20230816-01	Total/NA	Water	300.0	

Analysis Batch: 585526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190365-1	BAC-10-F-A3-20230815-01	Total/NA	Water	300.0	
240-190365-2	DUP-001-BAC-10-F-A3-20230815-01	Total/NA	Water	300.0	
240-190365-3	EB-001-F-A3-20230815-01	Total/NA	Water	300.0	
MB 240-585526/3	Method Blank	Total/NA	Water	300.0	
LCS 240-585526/4	Lab Control Sample	Total/NA	Water	300.0	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

General Chemistry (Continued)

Analysis Batch: 585526 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190365-3 MS	EB-001-F-A3-20230815-01	Total/NA	Water	300.0	
240-190365-3 MSD	EB-001-F-A3-20230815-01	Total/NA	Water	300.0	

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Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Client Sample ID: BAC-10-F-A3-20230815-01
Date Collected: 08/15/23 14:46
Date Received: 08/18/23 08:00

Lab Sample ID: 240-190365-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6010D		1	584753	AJC	EET CLE	08/22/23 19:46
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	584769	RKT	EET CLE	08/22/23 11:50
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	584849	RKT	EET CLE	08/22/23 19:51
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 20:45
Total/NA	Analysis	300.0		1	585526	ALT	EET CLE	08/29/23 18:55
Total/NA	Analysis	300.0		1	585213	JMR	EET CLE	08/26/23 06:59
Total/NA	Analysis	300.0		5	585213	JMR	EET CLE	08/26/23 07:59
Total/NA	Analysis	SM 2540C		1	584730	MS	EET CLE	08/22/23 10:33

Client Sample ID: DUP-001-BAC-10-F-A3-20230815-01
Date Collected: 08/15/23 14:46
Date Received: 08/18/23 08:00

Lab Sample ID: 240-190365-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6010D		1	584753	AJC	EET CLE	08/22/23 19:50
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	584769	RKT	EET CLE	08/22/23 11:52
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	584849	RKT	EET CLE	08/22/23 19:53
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 20:54
Total/NA	Analysis	300.0		1	585526	ALT	EET CLE	08/29/23 19:17
Total/NA	Analysis	300.0		1	585213	JMR	EET CLE	08/26/23 08:19
Total/NA	Analysis	300.0		5	585213	JMR	EET CLE	08/26/23 08:40
Total/NA	Analysis	SM 2540C		1	584630	MS	EET CLE	08/21/23 15:16

Client Sample ID: EB-001-F-A3-20230815-01
Date Collected: 08/15/23 15:15
Date Received: 08/18/23 08:00

Lab Sample ID: 240-190365-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6010D		1	584753	AJC	EET CLE	08/22/23 19:55
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	584769	RKT	EET CLE	08/22/23 11:55
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 20:58
Total/NA	Analysis	300.0		1	585526	ALT	EET CLE	08/29/23 19:39
Total/NA	Analysis	300.0		1	585213	JMR	EET CLE	08/26/23 09:00
Total/NA	Analysis	SM 2540C		1	584630	MS	EET CLE	08/21/23 15:16

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Client Sample ID: BAC-21-F-A3-20230816-01

Lab Sample ID: 240-190365-4

Date Collected: 08/16/23 12:58

Matrix: Water

Date Received: 08/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6010D		1	584753	AJC	EET CLE	08/22/23 19:59
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	584769	RKT	EET CLE	08/22/23 12:03
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	584849	RKT	EET CLE	08/22/23 19:56
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 21:04
Total/NA	Analysis	300.0		1	585376	JMR	EET CLE	08/28/23 14:10
Total/NA	Analysis	SM 2540C		1	584730	MS	EET CLE	08/22/23 10:33

Client Sample ID: BAC-22-F-A3-20230816-01

Lab Sample ID: 240-190365-5

Date Collected: 08/16/23 13:48

Matrix: Water

Date Received: 08/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6010D		1	584753	AJC	EET CLE	08/22/23 20:03
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	584769	RKT	EET CLE	08/22/23 12:05
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	584849	RKT	EET CLE	08/22/23 19:59
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 21:09
Total/NA	Analysis	300.0		1	585376	JMR	EET CLE	08/28/23 16:20
Total/NA	Analysis	300.0		5	585376	JMR	EET CLE	08/28/23 16:42
Total/NA	Analysis	SM 2540C		1	584730	MS	EET CLE	08/22/23 10:33

Client Sample ID: BAC-23-F-A3-20230816-01

Lab Sample ID: 240-190365-6

Date Collected: 08/16/23 14:32

Matrix: Water

Date Received: 08/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6010D		1	584753	AJC	EET CLE	08/22/23 20:16
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	584769	RKT	EET CLE	08/22/23 12:08
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	584849	RKT	EET CLE	08/22/23 20:01
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 21:14
Total/NA	Analysis	300.0		1	585376	JMR	EET CLE	08/28/23 17:47
Total/NA	Analysis	SM 2540C		1	584730	MS	EET CLE	08/22/23 10:33

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Client Sample ID: EB-001-F-A3-20230816-01

Lab Sample ID: 240-190365-7

Date Collected: 08/16/23 15:00

Matrix: Water

Date Received: 08/18/23 08:00

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6010D		1	584753	AJC	EET CLE	08/22/23 20:21
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	584769	RKT	EET CLE	08/22/23 12:11
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 21:17
Total/NA	Analysis	300.0		1	585376	JMR	EET CLE	08/28/23 18:30
Total/NA	Analysis	SM 2540C		1	584730	MS	EET CLE	08/22/23 10:33

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
Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

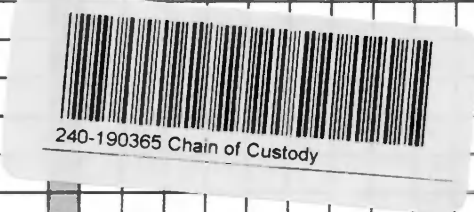
Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

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Chain of Custody Record

Client Information		Sampler: <i>Bobby Castle</i>		Lab PM: Cisneros, Roxanne		Carrier Tracking No(s):		COC No: 240-93465-34577.1	
Client Contact: Taylor Huffman		Phone: <i>740-373-4308</i>		E-Mail: roxanne.cisneros@Eurofins.com		State of Origin:		Page: Page 1 of 1	
Company: Lightstone Generation Gavin Power LLC		Address: 7397 OH-7		City: Cheshire		State: OH, 45620		Job #:	
Phone: 740-925-3171(Tel)		PO #: 2935505		WO #:		Project #:		Analysis Requested	
Email: taylor.huffman@lightstonegen.com		Project Name: Federal CCR Wells - App III		Site: <i>Gavin Plant</i>		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 - Na2OAS Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4.5 Z - other (specify)	
Due Date Requested:		TAT Requested (days):		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		PO #:		Other:	
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (Water, Solid, Other)	
BAC-10-F-A3-20230815-01		8-15-23		1446		G		W	
BUP-001-F-A3-20230815-01		8-15-23		1446		G		W	
EB-001-F-A3-20230815-01		8-15-23		1515		G		W	
BAC-21-F-A3-20230816-01		8-16-23		1258		G		W	
BAC-22-F-A3-20230816-01		8-16-23		1348		G		W	
BAC-23-F-A3-20230816-01		8-16-23		1432		G		W	
EB-001-F-A3-20230816-01		8-16-23		1500		G		W	
Possible Hazard Identification		Deliverable Requested: <input type="checkbox"/> I, II, III, IV, Other (specify)		Empty Kit Relinquished by: <i>Bobby Castle</i>		Relinquished by: <i>Ashey Deal</i>		Relinquished by: <i>Ashey Deal</i>	
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant		<input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Date: 8-17-23 / 0900		Date/Time: 8-17-23 1700		Date/Time: 8-17-23 11:44	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Company: <i>ETA</i>		Company: <i>ETA</i>		Company: <i>ETA</i>	



Ver: 01/16/2019
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Eurofins - Cleveland Sample Receipt Form/Narrative
Barberton Facility

Login #: 190365

Client Lightstone Site Name _____ Cooler unpacked by: Nancy Page
Cooler Received on 8-18-23 Opened on 8-18-23
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 # 22 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity leach 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 NA
 -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 NA
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# HC312502
14. Were VOAs on the COC? Yes No NA
15. Were air bubbles >6 mm in any VOA vials? Yes No NA  Larger than this.
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No NA
17. Was a LL Hg or Me Hg trip blank present? _____ Yes No NA

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: _____

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-10-F-A3-20230815-01	240-190365-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-001-BAC-10-F-A3-20230815-01	240-190365-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A3-20230815-01	240-190365-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-21-F-A3-20230816-01	240-190365-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-22-F-A3-20230816-01	240-190365-C-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-23-F-A3-20230816-01	240-190365-C-6	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A3-20230816-01	240-190365-C-7	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____

Chain of Custody Record

Eurofins Canton
180 S. Van Buren Avenue
Barberton, OH 44203
Phone (330) 497-9396 Phone (330) 497-0772

Client Information		Sampler: <i>Bobby Castle</i>		Lab P/M: Cisneros, Roxanne		Camera Tracking Ne(s):		COC No: 240-93465-34577.1	
Client Contact: Taylor Huffman		Phone: 740-323-4308		E-Mail: roxanne.cisneros@Eurofinsnet.com		State of Origin:		Page: Page 1 of 1	
Company: Lightstone Generation Gavin Power LLC		Address: 7397 OH-7		City: Cheshire		State, Zip: OH, 45620		Job #:	
Phone: 740-925-3171 (Tel)		PO #: 2935505		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		TAT Requested (days):		Preservation Codes:	
Email: taylor.huffman@lightstonegen.com		WO #: 24019633		Project #:		Due Date Requested:		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 Other:	
Site: <i>Gavin Plant</i>		SSOW#:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of Containers	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=oil, T=tissue, A=air)	
<i>BAC-10-F-A3-20230815-01</i>		<i>8-15-23</i>		<i>1446</i>		<i>G</i>		<i>W</i>	
<i>BUP-001-BAG-10-F-A3-20230815-01</i>		<i>8-15-23</i>		<i>1446</i>		<i>G</i>		<i>W</i>	
<i>EB-001-F-A3-20230815-01</i>		<i>8-15-23</i>		<i>1515</i>		<i>G</i>		<i>W</i>	
<i>BAC-21-F-A3-20230816-01</i>		<i>8-16-23</i>		<i>1258</i>		<i>G</i>		<i>W</i>	
<i>BAC-22-F-A3-20230816-01</i>		<i>8-16-23</i>		<i>1348</i>		<i>G</i>		<i>W</i>	
<i>BAC-23-F-A3-20230816-01</i>		<i>8-16-23</i>		<i>1432</i>		<i>G</i>		<i>W</i>	
<i>EB-001-F-A3-20230816-01</i>		<i>8-16-23</i>		<i>1500</i>		<i>G</i>		<i>W</i>	
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard		<input type="checkbox"/> Flammable		<input type="checkbox"/> Skin Irritant		<input type="checkbox"/> Poison B	
<input type="checkbox"/> Deliverable Requested: I, II, III, IV, Other (specify)		<input type="checkbox"/> Unknown		<input type="checkbox"/> Radiological		<input type="checkbox"/> Return To Client		<input type="checkbox"/> Disposal By Lab	
Empty Kit Relinquished by: <i>Bobby Castle</i>		Date/Time: <i>8-17-23/0900</i>		Date/Time: <i>8-17-23/1200</i>		Date/Time: <i>8-17-23/1144</i>		Date/Time: <i>8-18-23/800</i>	
Relinquished by: <i>Ashley Deal</i>		Company: <i>ES&A</i>		Company: <i>ES&A</i>		Company: <i>ES&A</i>		Company: <i>ES&A</i>	
Relinquished by:		Company:		Company:		Company:		Company:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Special Instructions/QC Requirements:		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
								<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	



Eurofins - Cleveland Sample Receipt Form/Narrative
Barberton Facility

Login #: 190365

Client Lightstone

Site Name _____

Cooler unpacked by:

Cooler Received on 8-18-23

Opened on 8-18-23

Nancy Peyer

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

- Cooler temperature upon receipt
IR GUN # 22 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 See Multiple Cooler Form
- Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity leach
 - 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
- Shippers' packing slip attached to the cooler(s)? Yes No
- Did custody papers accompany the sample(s)? Yes No
- Were the custody papers relinquished & signed in the appropriate place? Yes No
- Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
- Did all bottles arrive in good condition (Unbroken)? Yes No
- Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes No
- For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)? Yes No
- Were correct bottle(s) used for the test(s) indicated? Yes No
- Sufficient quantity received to perform indicated analyses? Yes No
- 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.
- Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC312502
- Were VOAs on the COC? Yes No
- Were air bubbles >6 mm in any VOA vials? Yes Larger than this. Yes No NA
- Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
- 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: _____



Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-10-F-A3-20230815-01	240-190365-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-001-BAC-10-F-A3-20230815-01	240-190365-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A3-20230815-01	240-190365-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-21-F-A3-20230816-01	240-190365-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-22-F-A3-20230816-01	240-190365-C-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-23-F-A3-20230816-01	240-190365-C-6	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A3-20230816-01	240-190365-C-7	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____

 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 9/5/2023 10:05:09 AM

JOB DESCRIPTION

Federal CCR Wells - App III

JOB NUMBER

240-190431-1

Eurofins Cleveland

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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9/5/2023 10:05:09 AM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

Job ID: 240-190431-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative
240-190431-1

Receipt

The samples were received on 8/19/2023 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 5 coolers at receipt time were 0.5°C, 0.8°C, 1.0°C, 3.0°C and 24.1°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 - App III

Job ID: 240-190431-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
SM 2540C	Solids, Total Dissolved (TDS)	SM	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
Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-190431-1	BAC-18-F-A3-20230817-01	Water	08/17/23 11:35	08/19/23 08:00
240-190431-2	BAC-16-F-A3-20230817-01	Water	08/17/23 14:04	08/19/23 08:00
240-190431-3	BAC-08-F-A3-20230817-01	Water	08/17/23 15:02	08/19/23 08:00
240-190431-4	EB-001-F-A3-20230817-01	Water	08/17/23 15:15	08/19/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

Client Sample ID: BAC-18-F-A3-20230817-01

Lab Sample ID: 240-190431-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1400		100	57	ug/L	1		6010D	Total Recoverable
Calcium	79000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	88		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	88		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	25		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.054		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	400		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-16-F-A3-20230817-01

Lab Sample ID: 240-190431-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1400		100	57	ug/L	1		6010D	Total Recoverable
Calcium	100000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	23000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	28		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.053		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	460		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-08-F-A3-20230817-01

Lab Sample ID: 240-190431-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	110		100	57	ug/L	1		6010D	Total Recoverable
Calcium	99000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	13000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	12000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	24		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	82		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	350		10	7.8	mg/L	1		SM 2540C	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 - App III

Job ID: 240-190431-1

Client Sample ID: EB-001-F-A3-20230817-01

Lab Sample ID: 240-190431-4

No Detections.

- 1
- 2
- 3
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- 12
- 13

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

Client Sample ID: BAC-18-F-A3-20230817-01

Lab Sample ID: 240-190431-1

Date Collected: 08/17/23 11:35

Matrix: Water

Date Received: 08/19/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1400		100	57	ug/L		08/21/23 14:00	08/24/23 02:44	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	79000		1000	250	ug/L		08/21/23 14:00	08/25/23 21:14	1
Magnesium	21000		1000	61	ug/L		08/21/23 14:00	08/25/23 21:14	1
Potassium	1400		1000	220	ug/L		08/21/23 14:00	08/25/23 21:14	1
Sodium	16000		1000	330	ug/L		08/21/23 14:00	08/25/23 21:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	88		5.0	2.6	mg/L			08/23/23 18:00	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	88		5.0	2.6	mg/L			08/23/23 18:00	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 18:00	1
Chloride (EPA 300.0)	25		1.0	0.13	mg/L			09/01/23 05:38	1
Fluoride (EPA 300.0)	0.054		0.050	0.024	mg/L			09/01/23 05:38	1
Sulfate (EPA 300.0)	190		1.0	0.35	mg/L			09/01/23 05:38	1
Total Dissolved Solids (SM 2540C)	400		10	7.8	mg/L			08/22/23 10:46	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

Client Sample ID: BAC-16-F-A3-20230817-01

Lab Sample ID: 240-190431-2

Date Collected: 08/17/23 14:04

Matrix: Water

Date Received: 08/19/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1400		100	57	ug/L		08/21/23 14:00	08/24/23 02:49	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	100000		1000	250	ug/L		08/21/23 14:00	08/25/23 21:17	1
Magnesium	23000		1000	61	ug/L		08/21/23 14:00	08/25/23 21:17	1
Potassium	1800		1000	220	ug/L		08/21/23 14:00	08/25/23 21:17	1
Sodium	15000		1000	330	ug/L		08/21/23 14:00	08/25/23 21:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	160		5.0	2.6	mg/L			08/23/23 18:04	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	160		5.0	2.6	mg/L			08/23/23 18:04	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 18:04	1
Chloride (EPA 300.0)	28		1.0	0.13	mg/L			09/01/23 06:00	1
Fluoride (EPA 300.0)	0.053		0.050	0.024	mg/L			09/01/23 06:00	1
Sulfate (EPA 300.0)	190		1.0	0.35	mg/L			09/01/23 06:00	1
Total Dissolved Solids (SM 2540C)	460		10	7.8	mg/L			08/22/23 10:46	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

Client Sample ID: BAC-08-F-A3-20230817-01

Lab Sample ID: 240-190431-3

Date Collected: 08/17/23 15:02

Matrix: Water

Date Received: 08/19/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	110		100	57	ug/L		08/21/23 14:00	08/24/23 02:53	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	99000		1000	250	ug/L		08/21/23 14:00	08/25/23 21:25	1
Magnesium	13000		1000	61	ug/L		08/21/23 14:00	08/25/23 21:25	1
Potassium	1500		1000	220	ug/L		08/21/23 14:00	08/25/23 21:25	1
Sodium	12000		1000	330	ug/L		08/21/23 14:00	08/25/23 21:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	190		5.0	2.6	mg/L			08/23/23 18:09	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	190		5.0	2.6	mg/L			08/23/23 18:09	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 18:09	1
Chloride (EPA 300.0)	24		1.0	0.13	mg/L			09/01/23 06:22	1
Fluoride (EPA 300.0)	0.12		0.050	0.024	mg/L			09/01/23 06:22	1
Sulfate (EPA 300.0)	82		1.0	0.35	mg/L			09/01/23 06:22	1
Total Dissolved Solids (SM 2540C)	350		10	7.8	mg/L			08/22/23 10:46	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

Client Sample ID: EB-001-F-A3-20230817-01

Lab Sample ID: 240-190431-4

Date Collected: 08/17/23 15:15

Matrix: Water

Date Received: 08/19/23 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		08/21/23 14:00	08/24/23 02:57	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		08/21/23 14:00	08/25/23 21:27	1
Magnesium	ND		1000	61	ug/L		08/21/23 14:00	08/25/23 21:27	1
Potassium	ND		1000	220	ug/L		08/21/23 14:00	08/25/23 21:27	1
Sodium	ND		1000	330	ug/L		08/21/23 14:00	08/25/23 21:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 18:12	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 18:12	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 18:12	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			09/01/23 06:43	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			09/01/23 06:43	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			09/01/23 06:43	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			08/22/23 10:46	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-584561/1-A
Matrix: Water
Analysis Batch: 584923

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 584561

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		08/21/23 14:00	08/24/23 00:43	1

Lab Sample ID: LCS 240-584561/2-A
Matrix: Water
Analysis Batch: 584923

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 584561

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	992		ug/L		99	80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-584561/1-A
Matrix: Water
Analysis Batch: 585084

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 584561

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		08/21/23 14:00	08/24/23 17:37	1
Magnesium	ND		1000	61	ug/L		08/21/23 14:00	08/24/23 17:37	1
Potassium	ND		1000	220	ug/L		08/21/23 14:00	08/24/23 17:37	1
Sodium	ND		1000	330	ug/L		08/21/23 14:00	08/24/23 17:37	1

Lab Sample ID: LCS 240-584561/3-A
Matrix: Water
Analysis Batch: 585084

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 584561

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	23800		ug/L		95	80 - 120
Magnesium	25000	24800		ug/L		99	80 - 120
Potassium	25000	24400		ug/L		98	80 - 120
Sodium	25000	25200		ug/L		101	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-585070/30
Matrix: Water
Analysis Batch: 585070

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			08/23/23 17:31	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 17:31	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 17:31	1

Lab Sample ID: MB 240-585070/4
Matrix: Water
Analysis Batch: 585070

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			08/23/23 15:31	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 15:31	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 15:31	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

Method: 2320B-1997 - Alkalinity, Total (Continued)

Lab Sample ID: LCS 240-585070/29
 Matrix: Water
 Analysis Batch: 585070

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	79.1		mg/L		98	86 - 123

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-585846/35
 Matrix: Water
 Analysis Batch: 585846

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			09/01/23 04:55	1
Fluoride	ND		0.050	0.024	mg/L			09/01/23 04:55	1
Sulfate	ND		1.0	0.35	mg/L			09/01/23 04:55	1

Lab Sample ID: LCS 240-585846/36
 Matrix: Water
 Analysis Batch: 585846

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.2		mg/L		102	90 - 110
Fluoride	2.50	2.71		mg/L		109	90 - 110
Sulfate	50.0	53.0		mg/L		106	90 - 110

Lab Sample ID: 240-190431-4 MS
 Matrix: Water
 Analysis Batch: 585846

Client Sample ID: EB-001-F-A3-20230817-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	ND		50.0	54.6		mg/L		109	80 - 120
Fluoride	ND		2.50	2.94		mg/L		117	80 - 120
Sulfate	ND		50.0	58.5		mg/L		117	80 - 120

Lab Sample ID: 240-190431-4 MSD
 Matrix: Water
 Analysis Batch: 585846

Client Sample ID: EB-001-F-A3-20230817-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Chloride	ND		50.0	54.9		mg/L		110	80 - 120	0	15
Fluoride	ND		2.50	2.92		mg/L		117	80 - 120	1	15
Sulfate	ND		50.0	57.6		mg/L		115	80 - 120	2	15

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

Lab Sample ID: MB 240-584736/1
 Matrix: Water
 Analysis Batch: 584736

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			08/22/23 10:46	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

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

Lab Sample ID: LCS 240-584736/2
Matrix: Water
Analysis Batch: 584736

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	242	217		mg/L		90	80 - 120

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

Metals

Prep Batch: 584561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190431-1	BAC-18-F-A3-20230817-01	Total Recoverable	Water	3005A	
240-190431-2	BAC-16-F-A3-20230817-01	Total Recoverable	Water	3005A	
240-190431-3	BAC-08-F-A3-20230817-01	Total Recoverable	Water	3005A	
240-190431-4	EB-001-F-A3-20230817-01	Total Recoverable	Water	3005A	
MB 240-584561/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-584561/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-584561/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 584923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190431-1	BAC-18-F-A3-20230817-01	Total Recoverable	Water	6010D	584561
240-190431-2	BAC-16-F-A3-20230817-01	Total Recoverable	Water	6010D	584561
240-190431-3	BAC-08-F-A3-20230817-01	Total Recoverable	Water	6010D	584561
240-190431-4	EB-001-F-A3-20230817-01	Total Recoverable	Water	6010D	584561
MB 240-584561/1-A	Method Blank	Total Recoverable	Water	6010D	584561
LCS 240-584561/2-A	Lab Control Sample	Total Recoverable	Water	6010D	584561

Analysis Batch: 585084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-584561/1-A	Method Blank	Total Recoverable	Water	6020B	584561
LCS 240-584561/3-A	Lab Control Sample	Total Recoverable	Water	6020B	584561

Analysis Batch: 585284

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190431-1	BAC-18-F-A3-20230817-01	Total Recoverable	Water	6020B	584561
240-190431-2	BAC-16-F-A3-20230817-01	Total Recoverable	Water	6020B	584561
240-190431-3	BAC-08-F-A3-20230817-01	Total Recoverable	Water	6020B	584561
240-190431-4	EB-001-F-A3-20230817-01	Total Recoverable	Water	6020B	584561

General Chemistry

Analysis Batch: 584736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190431-1	BAC-18-F-A3-20230817-01	Total/NA	Water	SM 2540C	
240-190431-2	BAC-16-F-A3-20230817-01	Total/NA	Water	SM 2540C	
240-190431-3	BAC-08-F-A3-20230817-01	Total/NA	Water	SM 2540C	
240-190431-4	EB-001-F-A3-20230817-01	Total/NA	Water	SM 2540C	
MB 240-584736/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-584736/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 585070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190431-1	BAC-18-F-A3-20230817-01	Total/NA	Water	2320B-1997	
240-190431-2	BAC-16-F-A3-20230817-01	Total/NA	Water	2320B-1997	
240-190431-3	BAC-08-F-A3-20230817-01	Total/NA	Water	2320B-1997	
240-190431-4	EB-001-F-A3-20230817-01	Total/NA	Water	2320B-1997	
MB 240-585070/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-585070/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-585070/29	Lab Control Sample	Total/NA	Water	2320B-1997	

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

General Chemistry

Analysis Batch: 585846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190431-1	BAC-18-F-A3-20230817-01	Total/NA	Water	300.0	
240-190431-2	BAC-16-F-A3-20230817-01	Total/NA	Water	300.0	
240-190431-3	BAC-08-F-A3-20230817-01	Total/NA	Water	300.0	
240-190431-4	EB-001-F-A3-20230817-01	Total/NA	Water	300.0	
MB 240-585846/35	Method Blank	Total/NA	Water	300.0	
LCS 240-585846/36	Lab Control Sample	Total/NA	Water	300.0	
240-190431-4 MS	EB-001-F-A3-20230817-01	Total/NA	Water	300.0	
240-190431-4 MSD	EB-001-F-A3-20230817-01	Total/NA	Water	300.0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

Client Sample ID: BAC-18-F-A3-20230817-01

Lab Sample ID: 240-190431-1

Date Collected: 08/17/23 11:35

Matrix: Water

Date Received: 08/19/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584561	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6010D		1	584923	AJC	EET CLE	08/24/23 02:44
Total Recoverable	Prep	3005A			584561	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	585284	AJC	EET CLE	08/25/23 21:14
Total/NA	Analysis	2320B-1997		1	585070	JMR	EET CLE	08/23/23 18:00
Total/NA	Analysis	300.0		1	585846	ALT	EET CLE	09/01/23 05:38
Total/NA	Analysis	SM 2540C		1	584736	MS	EET CLE	08/22/23 10:46

Client Sample ID: BAC-16-F-A3-20230817-01

Lab Sample ID: 240-190431-2

Date Collected: 08/17/23 14:04

Matrix: Water

Date Received: 08/19/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584561	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6010D		1	584923	AJC	EET CLE	08/24/23 02:49
Total Recoverable	Prep	3005A			584561	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	585284	AJC	EET CLE	08/25/23 21:17
Total/NA	Analysis	2320B-1997		1	585070	JMR	EET CLE	08/23/23 18:04
Total/NA	Analysis	300.0		1	585846	ALT	EET CLE	09/01/23 06:00
Total/NA	Analysis	SM 2540C		1	584736	MS	EET CLE	08/22/23 10:46

Client Sample ID: BAC-08-F-A3-20230817-01

Lab Sample ID: 240-190431-3

Date Collected: 08/17/23 15:02

Matrix: Water

Date Received: 08/19/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584561	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6010D		1	584923	AJC	EET CLE	08/24/23 02:53
Total Recoverable	Prep	3005A			584561	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	585284	AJC	EET CLE	08/25/23 21:25
Total/NA	Analysis	2320B-1997		1	585070	JMR	EET CLE	08/23/23 18:09
Total/NA	Analysis	300.0		1	585846	ALT	EET CLE	09/01/23 06:22
Total/NA	Analysis	SM 2540C		1	584736	MS	EET CLE	08/22/23 10:46

Client Sample ID: EB-001-F-A3-20230817-01

Lab Sample ID: 240-190431-4

Date Collected: 08/17/23 15:15

Matrix: Water

Date Received: 08/19/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584561	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6010D		1	584923	AJC	EET CLE	08/24/23 02:57
Total Recoverable	Prep	3005A			584561	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	585284	AJC	EET CLE	08/25/23 21:27
Total/NA	Analysis	2320B-1997		1	585070	JMR	EET CLE	08/23/23 18:12

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

Client Sample ID: EB-001-F-A3-20230817-01

Lab Sample ID: 240-190431-4

Date Collected: 08/17/23 15:15

Matrix: Water

Date Received: 08/19/23 08:00

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total/NA	Analysis	300.0		1	585846	ALT	EET CLE	09/01/23 06:43
Total/NA	Analysis	SM 2540C		1	584736	MS	EET CLE	08/22/23 10:46

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
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

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
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.



Client Lightstone

Site Name _____

Cooler unpacked by: Vany Beyer

Cooler Received on 8-19-23

Opened on 8-19-23

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 # 22 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity perch 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 NA

-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# HC312502

14. Were VOAs on the COC? Yes No

15. Were air bubbles >6 mm in any VOA vials? Yes No NA Larger than this.

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: _____

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-18-F-A3-20230817-01	240-190431-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-16-F-A3-20230817-01	240-190431-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-08-F-A3-20230817-01	240-190431-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A3-20230817-01	240-190431-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____

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ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 9/21/2023 5:18:11 PM

JOB DESCRIPTION

Federal CCR Wells - App IV

JOB NUMBER

240-190433-1

Eurofins Cleveland

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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9/21/2023 5:18:11 PM

Authorized for release by
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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

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
F1	MS and/or MSD recovery exceeds control limits.
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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Job ID: 240-190433-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-190433-1

Receipt

The samples were received on 8/19/2023 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 5 coolers at receipt time were 0.5° C, 0.8° C, 1.0° C, 3.0° C and 24.1° C.

RAD

Method 9315: Radium-226 prep batch 160-625154: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-07-F-A4-20230817-01 (240-190433-1), BAC-18-F-A4-20230817-01 (240-190433-2), BAC-06-F-A4-20230817-01 (240-190433-3), BAC-06-F-A4-20230817-01 (240-190433-3[MS]), BAC-06-F-A4-20230817-01 (240-190433-3[MSD]), BAC-16-F-A4-20230817-01 (240-190433-4), BAC-08-F-A4-20230817-01 (240-190433-5), EB-001-F-4A-20230817-01 (240-190433-6), (LCS 160-625154/2-A) and (MB 160-625154/1-A)

Method 9320: Radium-228 batch 625155: The detection goal was not met for the following sample(s). Sample was prepped at a reduced volume due to the presence of matrix interferences: BAC-08-F-A4-20230817-01 (240-190433-5). Analytical results are reported with the detection limit achieved.

Method 9320: Radium-228 batch 625155: The matrix spike (MS) recoveries were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. BAC-06-F-A4-20230817-01 (240-190433-3[MS])

Method 9320: Radium-228 batch 625155: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-07-F-A4-20230817-01 (240-190433-1), BAC-18-F-A4-20230817-01 (240-190433-2), BAC-06-F-A4-20230817-01 (240-190433-3), BAC-06-F-A4-20230817-01 (240-190433-3[MS]), BAC-06-F-A4-20230817-01 (240-190433-3[MSD]), BAC-16-F-A4-20230817-01 (240-190433-4), BAC-08-F-A4-20230817-01 (240-190433-5), EB-001-F-4A-20230817-01 (240-190433-6), (LCS 160-625155/2-A) and (MB 160-625155/1-A)

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

Metals

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

General Chemistry

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0-1993 R2.1	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 - App IV

Job ID: 240-190433-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-190433-1	BAC-07-F-A4-20230817-01	Water	08/17/23 10:42	08/19/23 08:00
240-190433-2	BAC-18-F-A4-20230817-01	Water	08/17/23 11:35	08/19/23 08:00
240-190433-3	BAC-06-F-A4-20230817-01	Water	08/17/23 12:51	08/19/23 08:00
240-190433-4	BAC-16-F-A4-20230817-01	Water	08/17/23 14:04	08/19/23 08:00
240-190433-5	BAC-08-F-A4-20230817-01	Water	08/17/23 15:02	08/19/23 08:00
240-190433-6	EB-001-F-4A-20230817-01	Water	08/17/23 15:15	08/19/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-07-F-A4-20230817-01

Lab Sample ID: 240-190433-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	40		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.6		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	6.3	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	130		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	130		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.069		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-18-F-A4-20230817-01

Lab Sample ID: 240-190433-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.86	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	29		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.9		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.2		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	7.6	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	90		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	90		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.054		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-06-F-A4-20230817-01

Lab Sample ID: 240-190433-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.0	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	91		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	4.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	7.9	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	27000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	17000		1000	330	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 - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-06-F-A4-20230817-01 (Continued)

Lab Sample ID: 240-190433-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Thallium	1.3		1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.092		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-16-F-A4-20230817-01

Lab Sample ID: 240-190433-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.2	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	51		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	1.5	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.2		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	8.3		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	23000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.054		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-08-F-A4-20230817-01

Lab Sample ID: 240-190433-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.3	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	130		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	1.3	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.0		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.47	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	5.0	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	13000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.3	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	1500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	13000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.12		0.050	0.024	mg/L	1		300.0-1993 R2.1	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 - App IV

Job ID: 240-190433-1

Client Sample ID: EB-001-F-4A-20230817-01

Lab Sample ID: 240-190433-6

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-07-F-A4-20230817-01

Lab Sample ID: 240-190433-1

Date Collected: 08/17/23 10:42

Matrix: Water

Date Received: 08/19/23 08:00

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		08/22/23 14:00	08/24/23 17:01	1
Arsenic	ND		5.0	0.75	ug/L		08/22/23 14:00	08/24/23 17:01	1
Barium	40		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 17:01	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 17:01	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 17:01	1
Chromium	ND		5.0	1.2	ug/L		08/22/23 14:00	08/24/23 17:01	1
Cobalt	1.6		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 17:01	1
Lead	ND		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 17:01	1
Lithium	6.3 J		8.0	1.7	ug/L		08/22/23 14:00	08/24/23 17:01	1
Magnesium	20000		1000	61	ug/L		08/22/23 14:00	08/24/23 17:01	1
Molybdenum	ND		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 17:01	1
Potassium	1300		1000	220	ug/L		08/22/23 14:00	08/24/23 17:01	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 17:01	1
Sodium	16000		1000	330	ug/L		08/22/23 14:00	08/24/23 17:01	1
Thallium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 17:01	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		08/22/23 14:00	08/24/23 17:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	130		5.0	2.6	mg/L			08/23/23 01:38	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	130		5.0	2.6	mg/L			08/23/23 01:38	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 01:38	1
Fluoride (EPA 300.0-1993 R2.1)	0.069		0.050	0.024	mg/L			09/12/23 01:38	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0279	U	0.0887	0.0887	1.00	0.166	pCi/L	08/23/23 10:08	09/18/23 09:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.2		30 - 110					08/23/23 10:08	09/18/23 09:58	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	1.59		0.554	0.573	1.00	0.698	pCi/L	08/23/23 10:12	09/14/23 11:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.2		30 - 110					08/23/23 10:12	09/14/23 11:47	1
Y Carrier	77.0		30 - 110					08/23/23 10:12	09/14/23 11:47	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-07-F-A4-20230817-01

Lab Sample ID: 240-190433-1

Date Collected: 08/17/23 10:42

Matrix: Water

Date Received: 08/19/23 08:00

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	1.61		0.561	0.580	5.00	0.698	pCi/L		09/21/23 17:54	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-18-F-A4-20230817-01

Lab Sample ID: 240-190433-2

Date Collected: 08/17/23 11:35

Matrix: Water

Date Received: 08/19/23 08:00

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		08/22/23 14:00	08/24/23 17:05	1
Arsenic	0.86	J	5.0	0.75	ug/L		08/22/23 14:00	08/24/23 17:05	1
Barium	29		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 17:05	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 17:05	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 17:05	1
Chromium	ND		5.0	1.2	ug/L		08/22/23 14:00	08/24/23 17:05	1
Cobalt	1.9		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 17:05	1
Lead	1.2		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 17:05	1
Lithium	7.6	J	8.0	1.7	ug/L		08/22/23 14:00	08/24/23 17:05	1
Magnesium	21000		1000	61	ug/L		08/22/23 14:00	08/24/23 17:05	1
Molybdenum	ND		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 17:05	1
Potassium	1300		1000	220	ug/L		08/22/23 14:00	08/24/23 17:05	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 17:05	1
Sodium	16000		1000	330	ug/L		08/22/23 14:00	08/24/23 17:05	1
Thallium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 17:05	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		08/22/23 14:00	08/24/23 17:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	90		5.0	2.6	mg/L			08/23/23 01:44	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	90		5.0	2.6	mg/L			08/23/23 01:44	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 01:44	1
Fluoride (EPA 300.0-1993 R2.1)	0.054		0.050	0.024	mg/L			09/12/23 02:00	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.148	U	0.152	0.152	1.00	0.240	pCi/L	08/23/23 14:00	09/18/23 09:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.9		30 - 110					08/23/23 14:00	09/18/23 09:59	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.699	U	0.563	0.567	1.00	0.872	pCi/L	08/23/23 14:05	09/14/23 11:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.9		30 - 110					08/23/23 14:05	09/14/23 11:47	1
Y Carrier	81.5		30 - 110					08/23/23 14:05	09/14/23 11:47	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-18-F-A4-20230817-01

Lab Sample ID: 240-190433-2

Date Collected: 08/17/23 11:35

Matrix: Water

Date Received: 08/19/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.847	U	0.583	0.587	5.00	0.872	pCi/L		09/21/23 17:54	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-06-F-A4-20230817-01

Lab Sample ID: 240-190433-3

Date Collected: 08/17/23 12:51

Matrix: Water

Date Received: 08/19/23 08:00

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		08/22/23 14:00	08/24/23 15:10	1
Arsenic	1.0	J	5.0	0.75	ug/L		08/22/23 14:00	08/24/23 15:10	1
Barium	91		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 15:10	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 15:10	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 15:10	1
Chromium	ND		5.0	1.2	ug/L		08/22/23 14:00	08/24/23 15:10	1
Cobalt	4.1		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 15:10	1
Lead	ND		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 15:10	1
Lithium	7.9	J	8.0	1.7	ug/L		08/22/23 14:00	08/24/23 15:10	1
Magnesium	27000		1000	61	ug/L		08/22/23 14:00	08/24/23 15:10	1
Molybdenum	ND		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 15:10	1
Potassium	1500		1000	220	ug/L		08/22/23 14:00	08/24/23 15:10	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 15:10	1
Sodium	17000		1000	330	ug/L		08/22/23 14:00	08/24/23 15:10	1
Thallium	1.3		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 15:10	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		08/22/23 14:00	08/24/23 16:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	200		5.0	2.6	mg/L			08/23/23 01:48	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	200		5.0	2.6	mg/L			08/23/23 01:48	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 01:48	1
Fluoride (EPA 300.0-1993 R2.1)	0.092		0.050	0.024	mg/L			09/12/23 02:22	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	0.111	U	0.129	0.130	1.00	0.211	pCi/L	08/23/23 14:00	09/18/23 09:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.9		30 - 110					08/23/23 14:00	09/18/23 09:59	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	0.657		0.429	0.433	1.00	0.622	pCi/L	08/23/23 14:05	09/14/23 11:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.9		30 - 110					08/23/23 14:05	09/14/23 11:47	1
Y Carrier	77.8		30 - 110					08/23/23 14:05	09/14/23 11:47	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-06-F-A4-20230817-01

Lab Sample ID: 240-190433-3

Date Collected: 08/17/23 12:51

Matrix: Water

Date Received: 08/19/23 08:00

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	0.768		0.448	0.452	5.00	0.622	pCi/L		09/21/23 17:54	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-16-F-A4-20230817-01

Lab Sample ID: 240-190433-4

Date Collected: 08/17/23 14:04

Matrix: Water

Date Received: 08/19/23 08:00

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		08/22/23 14:00	08/24/23 17:10	1
Arsenic	1.2	J	5.0	0.75	ug/L		08/22/23 14:00	08/24/23 17:10	1
Barium	51		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 17:10	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 17:10	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 17:10	1
Chromium	1.5	J	5.0	1.2	ug/L		08/22/23 14:00	08/24/23 17:10	1
Cobalt	2.1		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 17:10	1
Lead	1.2		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 17:10	1
Lithium	8.3		8.0	1.7	ug/L		08/22/23 14:00	08/24/23 17:10	1
Magnesium	23000		1000	61	ug/L		08/22/23 14:00	08/24/23 17:10	1
Molybdenum	ND		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 17:10	1
Potassium	1700		1000	220	ug/L		08/22/23 14:00	08/24/23 17:10	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 17:10	1
Sodium	16000		1000	330	ug/L		08/22/23 14:00	08/24/23 17:10	1
Thallium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 17:10	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		08/22/23 14:00	08/24/23 17:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	160		5.0	2.6	mg/L			08/23/23 01:58	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	160		5.0	2.6	mg/L			08/23/23 01:58	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 01:58	1
Fluoride (EPA 300.0-1993 R2.1)	0.054		0.050	0.024	mg/L			09/12/23 04:10	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
Radium-226	-0.0187	U	0.0806	0.0806	1.00	0.186	pCi/L	08/23/23 14:00	09/18/23 09:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.0		30 - 110					08/23/23 14:00	09/18/23 09:59	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
Radium-228	1.19		0.639	0.648	1.00	0.912	pCi/L	08/23/23 14:05	09/14/23 11:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.0		30 - 110					08/23/23 14:05	09/14/23 11:50	1
Y Carrier	79.6		30 - 110					08/23/23 14:05	09/14/23 11:50	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-16-F-A4-20230817-01

Lab Sample ID: 240-190433-4

Date Collected: 08/17/23 14:04

Matrix: Water

Date Received: 08/19/23 08:00

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	1.17		0.644	0.653	5.00	0.912	pCi/L		09/21/23 17:54	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-08-F-A4-20230817-01

Lab Sample ID: 240-190433-5

Date Collected: 08/17/23 15:02

Matrix: Water

Date Received: 08/19/23 08:00

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		08/22/23 14:00	08/24/23 17:14	1
Arsenic	2.3	J	5.0	0.75	ug/L		08/22/23 14:00	08/24/23 17:14	1
Barium	130		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 17:14	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 17:14	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 17:14	1
Chromium	1.3	J	5.0	1.2	ug/L		08/22/23 14:00	08/24/23 17:14	1
Cobalt	2.0		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 17:14	1
Lead	0.47	J	1.0	0.45	ug/L		08/22/23 14:00	08/24/23 17:14	1
Lithium	5.0	J	8.0	1.7	ug/L		08/22/23 14:00	08/24/23 17:14	1
Magnesium	13000		1000	61	ug/L		08/22/23 14:00	08/24/23 17:14	1
Molybdenum	1.3	J	5.0	1.1	ug/L		08/22/23 14:00	08/24/23 17:14	1
Potassium	1500		1000	220	ug/L		08/22/23 14:00	08/24/23 17:14	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 17:14	1
Sodium	13000		1000	330	ug/L		08/22/23 14:00	08/24/23 17:14	1
Thallium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 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		08/22/23 14:00	08/24/23 17:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	200		5.0	2.6	mg/L			08/23/23 02:02	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	200		5.0	2.6	mg/L			08/23/23 02:02	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 02:02	1
Fluoride (EPA 300.0-1993 R2.1)	0.12		0.050	0.024	mg/L			09/12/23 04:32	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	0.205		0.148	0.149	1.00	0.205	pCi/L	08/23/23 14:00	09/18/23 09:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.7		30 - 110					08/23/23 14:00	09/18/23 09:59	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	0.282	U G	0.637	0.638	1.00	1.11	pCi/L	08/23/23 14:05	09/14/23 11:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.7		30 - 110					08/23/23 14:05	09/14/23 11:50	1
Y Carrier	80.0		30 - 110					08/23/23 14:05	09/14/23 11:50	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-08-F-A4-20230817-01

Lab Sample ID: 240-190433-5

Date Collected: 08/17/23 15:02

Matrix: Water

Date Received: 08/19/23 08:00

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	0.487	U	0.654	0.655	5.00	1.11	pCi/L		09/21/23 17:54	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: EB-001-F-4A-20230817-01

Lab Sample ID: 240-190433-6

Date Collected: 08/17/23 15:15

Matrix: Water

Date Received: 08/19/23 08:00

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		08/22/23 14:00	08/24/23 17:19	1
Arsenic	ND		5.0	0.75	ug/L		08/22/23 14:00	08/24/23 17:19	1
Barium	ND		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 17:19	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 17:19	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 17:19	1
Chromium	ND		5.0	1.2	ug/L		08/22/23 14:00	08/24/23 17:19	1
Cobalt	ND		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 17:19	1
Lead	ND		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 17:19	1
Lithium	ND		8.0	1.7	ug/L		08/22/23 14:00	08/24/23 17:19	1
Magnesium	ND		1000	61	ug/L		08/22/23 14:00	08/24/23 17:19	1
Molybdenum	ND		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 17:19	1
Potassium	ND		1000	220	ug/L		08/22/23 14:00	08/24/23 17:19	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 17:19	1
Sodium	ND		1000	330	ug/L		08/22/23 14:00	08/24/23 17:19	1
Thallium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 17:19	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		08/22/23 14:00	08/24/23 17:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 02:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 02:06	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 02:06	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			09/12/23 04:54	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.198	U	0.146	0.147	1.00	0.213	pCi/L	08/23/23 14:00	09/18/23 09:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.7		30 - 110					08/23/23 14:00	09/18/23 09:59	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.254	U	0.372	0.373	1.00	0.629	pCi/L	08/23/23 14:05	09/14/23 11:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.7		30 - 110					08/23/23 14:05	09/14/23 11:50	1
Y Carrier	81.9		30 - 110					08/23/23 14:05	09/14/23 11:50	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: EB-001-F-4A-20230817-01

Lab Sample ID: 240-190433-6

Date Collected: 08/17/23 15:15

Matrix: Water

Date Received: 08/19/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.452	U	0.400	0.401	5.00	0.629	pCi/L		09/21/23 17:54	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
240-190433-1	BAC-07-F-A4-20230817-01	89.2	
240-190433-2	BAC-18-F-A4-20230817-01	78.9	
240-190433-3	BAC-06-F-A4-20230817-01	75.9	
240-190433-3 MS	BAC-06-F-A4-20230817-01	83.0	
240-190433-3 MSD	BAC-06-F-A4-20230817-01	86.0	
240-190433-4	BAC-16-F-A4-20230817-01	84.0	
240-190433-5	BAC-08-F-A4-20230817-01	76.7	
240-190433-6	EB-001-F-4A-20230817-01	78.7	
LCS 160-625154/2-A	Lab Control Sample	77.9	
MB 160-625154/1-A	Method Blank	84.2	

Tracer/Carrier Legend
 Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-190433-1	BAC-07-F-A4-20230817-01	89.2	77.0
240-190433-2	BAC-18-F-A4-20230817-01	78.9	81.5
240-190433-3	BAC-06-F-A4-20230817-01	75.9	77.8
240-190433-3 MS	BAC-06-F-A4-20230817-01	83.0	74.4
240-190433-3 MSD	BAC-06-F-A4-20230817-01	86.0	77.0
240-190433-4	BAC-16-F-A4-20230817-01	84.0	79.6
240-190433-5	BAC-08-F-A4-20230817-01	76.7	80.0
240-190433-6	EB-001-F-4A-20230817-01	78.7	81.9
LCS 160-625155/2-A	Lab Control Sample	77.9	76.3
MB 160-625155/1-A	Method Blank	84.2	77.4

Tracer/Carrier Legend
 Ba = Ba Carrier
 Y = Y Carrier

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-584712/1-A
Matrix: Water
Analysis Batch: 585084

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 584712

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	ND		2.0	0.57	ug/L		08/22/23 14:00	08/24/23 15:00	1
Arsenic	ND		5.0	0.75	ug/L		08/22/23 14:00	08/24/23 15:00	1
Barium	ND		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 15:00	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 15:00	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 15:00	1
Chromium	ND		5.0	1.2	ug/L		08/22/23 14:00	08/24/23 15:00	1
Cobalt	ND		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 15:00	1
Lead	ND		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 15:00	1
Lithium	ND		8.0	1.7	ug/L		08/22/23 14:00	08/24/23 15:00	1
Magnesium	ND		1000	61	ug/L		08/22/23 14:00	08/24/23 15:00	1
Molybdenum	ND		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 15:00	1
Potassium	ND		1000	220	ug/L		08/22/23 14:00	08/24/23 15:00	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 15:00	1
Sodium	ND		1000	330	ug/L		08/22/23 14:00	08/24/23 15:00	1
Thallium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 15:00	1

Lab Sample ID: LCS 240-584712/2-A
Matrix: Water
Analysis Batch: 585084

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 584712

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1000	1010		ug/L		101	80 - 120
Barium	1000	985		ug/L		98	80 - 120
Beryllium	500	457		ug/L		91	80 - 120
Cadmium	500	499		ug/L		100	80 - 120
Chromium	500	516		ug/L		103	80 - 120
Cobalt	500	519		ug/L		104	80 - 120
Lead	500	518		ug/L		104	80 - 120
Lithium	500	514		ug/L		103	80 - 120
Magnesium	25000	25200		ug/L		101	80 - 120
Molybdenum	500	509		ug/L		102	80 - 120
Potassium	25000	24700		ug/L		99	80 - 120
Selenium	1000	980		ug/L		98	80 - 120
Sodium	25000	25800		ug/L		103	80 - 120
Thallium	1000	991		ug/L		99	80 - 120

Lab Sample ID: 240-190433-3 MS
Matrix: Water
Analysis Batch: 585084

Client Sample ID: BAC-06-F-A4-20230817-01
Prep Type: Total Recoverable
Prep Batch: 584712

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
Antimony	ND		100	107		ug/L		107	80 - 120
Arsenic	1.0	J	1000	1020		ug/L		102	80 - 120
Barium	91		1000	1110		ug/L		102	80 - 120
Beryllium	ND		500	437		ug/L		87	80 - 120
Cadmium	ND		500	496		ug/L		99	80 - 120
Chromium	ND		500	516		ug/L		103	80 - 120
Cobalt	4.1		500	527		ug/L		105	80 - 120

Eurofins Cleveland

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

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

Lab Sample ID: 240-190433-3 MS
Matrix: Water
Analysis Batch: 585084

Client Sample ID: BAC-06-F-A4-20230817-01
Prep Type: Total Recoverable
Prep Batch: 584712

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				Limits	
Lead	ND		500	520		ug/L		104	80 - 120	
Lithium	7.9	J	500	516		ug/L		102	80 - 120	
Magnesium	27000		25000	52400		ug/L		100	80 - 120	
Molybdenum	ND		500	520		ug/L		104	80 - 120	
Potassium	1500		25000	26100		ug/L		98	80 - 120	
Selenium	ND		1000	983		ug/L		98	80 - 120	
Sodium	17000		25000	42400		ug/L		102	80 - 120	
Thallium	1.3		1000	1010		ug/L		100	80 - 120	

Lab Sample ID: 240-190433-3 MSD
Matrix: Water
Analysis Batch: 585084

Client Sample ID: BAC-06-F-A4-20230817-01
Prep Type: Total Recoverable
Prep Batch: 584712

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Antimony	ND		100	107		ug/L		107	80 - 120	1	20
Arsenic	1.0	J	1000	1030		ug/L		103	80 - 120	1	20
Barium	91		1000	1090		ug/L		100	80 - 120	1	20
Beryllium	ND		500	454		ug/L		91	80 - 120	4	20
Cadmium	ND		500	497		ug/L		99	80 - 120	0	20
Chromium	ND		500	523		ug/L		105	80 - 120	1	20
Cobalt	4.1		500	525		ug/L		104	80 - 120	0	20
Lead	ND		500	528		ug/L		106	80 - 120	2	20
Lithium	7.9	J	500	542		ug/L		107	80 - 120	5	20
Magnesium	27000		25000	52400		ug/L		100	80 - 120	0	20
Molybdenum	ND		500	525		ug/L		105	80 - 120	1	20
Potassium	1500		25000	26000		ug/L		98	80 - 120	0	20
Selenium	ND		1000	988		ug/L		99	80 - 120	1	20
Sodium	17000		25000	42200		ug/L		102	80 - 120	0	20
Thallium	1.3		1000	1010		ug/L		101	80 - 120	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-584713/1-A
Matrix: Water
Analysis Batch: 585098

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 584713

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil
	Result	Qualifier							
Mercury	ND		0.20	0.13	ug/L		08/22/23 14:00	08/24/23 16:26	1

Lab Sample ID: LCS 240-584713/2-A
Matrix: Water
Analysis Batch: 585098

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 584713

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec
		Result	Qualifier				Limits
Mercury	5.00	5.09		ug/L		102	80 - 120

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 240-190433-3 MS
Matrix: Water
Analysis Batch: 585098

Client Sample ID: BAC-06-F-A4-20230817-01
Prep Type: Total/NA
Prep Batch: 584713

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

Lab Sample ID: 240-190433-3 MSD
Matrix: Water
Analysis Batch: 585098

Client Sample ID: BAC-06-F-A4-20230817-01
Prep Type: Total/NA
Prep Batch: 584713

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Mercury	ND		1.00	0.953		ug/L		95	80 - 120	7	20

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-584875/55
Matrix: Water
Analysis Batch: 584875

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			08/22/23 22:33	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/22/23 22:33	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/22/23 22:33	1

Lab Sample ID: MB 240-584875/82
Matrix: Water
Analysis Batch: 584875

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			08/23/23 00:19	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 00:19	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 00:19	1

Lab Sample ID: LCS 240-584875/81
Matrix: Water
Analysis Batch: 584875

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	79.2		mg/L		98	86 - 123

Lab Sample ID: 240-190433-3 DU
Matrix: Water
Analysis Batch: 584875

Client Sample ID: BAC-06-F-A4-20230817-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Alkalinity	200		203		mg/L		0.9	20
Bicarbonate Alkalinity as CaCO3	200		203		mg/L		0.9	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-586790/3
 Matrix: Water
 Analysis Batch: 586790

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			09/11/23 19:30	1

Lab Sample ID: LCS 240-586790/4
 Matrix: Water
 Analysis Batch: 586790

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.69		mg/L		108	90 - 110

Lab Sample ID: 240-190433-3 MS
 Matrix: Water
 Analysis Batch: 586790

Client Sample ID: BAC-06-F-A4-20230817-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.092		2.50	2.93		mg/L		114	80 - 120

Lab Sample ID: 240-190433-3 MSD
 Matrix: Water
 Analysis Batch: 586790

Client Sample ID: BAC-06-F-A4-20230817-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.092		2.50	2.96		mg/L		115	80 - 120	1	15

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-625154/1-A
 Matrix: Water
 Analysis Batch: 628632

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 625154

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.02857	U	0.0761	0.0761	1.00	0.143	pCi/L	08/23/23 10:08	09/18/23 09:50	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.2		30 - 110					08/23/23 10:08	09/18/23 09:50	1

Lab Sample ID: LCS 160-625154/2-A
 Matrix: Water
 Analysis Batch: 628632

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 625154

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	11.3	12.80		1.38	1.00	0.152	pCi/L	113	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	77.9		30 - 110						

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: 240-190433-3 MS
Matrix: Water
Analysis Batch: 628634

Client Sample ID: BAC-06-F-A4-20230817-01
Prep Type: Total/NA
Prep Batch: 625154

Analyte	Sample	Sample	Spike Added	MS	MS	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
	Result	Qual		Result	Qual						
Radium-226	0.111	U	11.4	11.78		1.28	1.00	0.134	pCi/L	103	60 - 140
Carrier	%Yield	MS Qualifier	Limits								
Ba Carrier	83.0		30 - 110								

Lab Sample ID: 240-190433-3 MSD
Matrix: Water
Analysis Batch: 628634

Client Sample ID: BAC-06-F-A4-20230817-01
Prep Type: Total/NA
Prep Batch: 625154

Analyte	Sample	Sample	Spike Added	MSD	MSD	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
	Result	Qual		Result	Qual								
Radium-226	0.111	U	11.4	11.68		1.27	1.00	0.144	pCi/L	102	60 - 140	0.04	1
Carrier	%Yield	MSD Qualifier	Limits										
Ba Carrier	86.0		30 - 110										

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-625155/1-A
Matrix: Water
Analysis Batch: 628152

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 625155

Analyte	MB	MB	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-228	0.3014	U	0.365	0.366	1.00	0.604	pCi/L	08/23/23 10:12	09/14/23 11:43	1
Carrier	%Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.2		30 - 110					08/23/23 10:12	09/14/23 11:43	1
Y Carrier	77.4		30 - 110					08/23/23 10:12	09/14/23 11:43	1

Lab Sample ID: LCS 160-625155/2-A
Matrix: Water
Analysis Batch: 628152

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 625155

Analyte	Spike Added	LCS	LCS	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
		Result	Qual						
Radium-228	7.88	9.215		1.65	1.00	1.06	pCi/L	117	75 - 125
Carrier	%Yield	LCS Qualifier	Limits						
Ba Carrier	77.9		30 - 110						
Y Carrier	76.3		30 - 110						

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

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

Lab Sample ID: 240-190433-3 MS

Matrix: Water

Analysis Batch: 628146

Client Sample ID: BAC-06-F-A4-20230817-01

Prep Type: Total/NA

Prep Batch: 625155

Analyte	Sample	Sample	Spike	MS	MS	Total	RL	MDC	Unit	%Rec	%Rec	Limits
	Result	Qual		Result	Qual							
Radium-228	0.657		7.90	11.93	F1	1.64	1.00	0.659	pCi/L	143		60 - 140
MS MS												
Carrier	%Yield	Qualifier	Limits									
Ba Carrier	83.0		30 - 110									
Y Carrier	74.4		30 - 110									

Lab Sample ID: 240-190433-3 MSD

Matrix: Water

Analysis Batch: 628146

Client Sample ID: BAC-06-F-A4-20230817-01

Prep Type: Total/NA

Prep Batch: 625155

Analyte	Sample	Sample	Spike	MSD	MSD	Total	RL	MDC	Unit	%Rec	%Rec	Limits	RER	Limit
	Result	Qual		Result	Qual									
Radium-228	0.657		7.91	10.85		1.51	1.00	0.620	pCi/L	129		60 - 140	0.34	1
MSD MSD														
Carrier	%Yield	Qualifier	Limits											
Ba Carrier	86.0		30 - 110											
Y Carrier	77.0		30 - 110											

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Metals

Prep Batch: 584712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190433-1	BAC-07-F-A4-20230817-01	Total Recoverable	Water	3005A	
240-190433-2	BAC-18-F-A4-20230817-01	Total Recoverable	Water	3005A	
240-190433-3	BAC-06-F-A4-20230817-01	Total Recoverable	Water	3005A	
240-190433-4	BAC-16-F-A4-20230817-01	Total Recoverable	Water	3005A	
240-190433-5	BAC-08-F-A4-20230817-01	Total Recoverable	Water	3005A	
240-190433-6	EB-001-F-4A-20230817-01	Total Recoverable	Water	3005A	
MB 240-584712/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-584712/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-190433-3 MS	BAC-06-F-A4-20230817-01	Total Recoverable	Water	3005A	
240-190433-3 MSD	BAC-06-F-A4-20230817-01	Total Recoverable	Water	3005A	

Prep Batch: 584713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190433-1	BAC-07-F-A4-20230817-01	Total/NA	Water	7470A	
240-190433-2	BAC-18-F-A4-20230817-01	Total/NA	Water	7470A	
240-190433-3	BAC-06-F-A4-20230817-01	Total/NA	Water	7470A	
240-190433-4	BAC-16-F-A4-20230817-01	Total/NA	Water	7470A	
240-190433-5	BAC-08-F-A4-20230817-01	Total/NA	Water	7470A	
240-190433-6	EB-001-F-4A-20230817-01	Total/NA	Water	7470A	
MB 240-584713/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-584713/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-190433-3 MS	BAC-06-F-A4-20230817-01	Total/NA	Water	7470A	
240-190433-3 MSD	BAC-06-F-A4-20230817-01	Total/NA	Water	7470A	

Analysis Batch: 585084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190433-1	BAC-07-F-A4-20230817-01	Total Recoverable	Water	6020B	584712
240-190433-2	BAC-18-F-A4-20230817-01	Total Recoverable	Water	6020B	584712
240-190433-3	BAC-06-F-A4-20230817-01	Total Recoverable	Water	6020B	584712
240-190433-4	BAC-16-F-A4-20230817-01	Total Recoverable	Water	6020B	584712
240-190433-5	BAC-08-F-A4-20230817-01	Total Recoverable	Water	6020B	584712
240-190433-6	EB-001-F-4A-20230817-01	Total Recoverable	Water	6020B	584712
MB 240-584712/1-A	Method Blank	Total Recoverable	Water	6020B	584712
LCS 240-584712/2-A	Lab Control Sample	Total Recoverable	Water	6020B	584712
240-190433-3 MS	BAC-06-F-A4-20230817-01	Total Recoverable	Water	6020B	584712
240-190433-3 MSD	BAC-06-F-A4-20230817-01	Total Recoverable	Water	6020B	584712

Analysis Batch: 585098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190433-1	BAC-07-F-A4-20230817-01	Total/NA	Water	7470A	584713
240-190433-2	BAC-18-F-A4-20230817-01	Total/NA	Water	7470A	584713
240-190433-3	BAC-06-F-A4-20230817-01	Total/NA	Water	7470A	584713
240-190433-4	BAC-16-F-A4-20230817-01	Total/NA	Water	7470A	584713
240-190433-5	BAC-08-F-A4-20230817-01	Total/NA	Water	7470A	584713
240-190433-6	EB-001-F-4A-20230817-01	Total/NA	Water	7470A	584713
MB 240-584713/1-A	Method Blank	Total/NA	Water	7470A	584713
LCS 240-584713/2-A	Lab Control Sample	Total/NA	Water	7470A	584713
240-190433-3 MS	BAC-06-F-A4-20230817-01	Total/NA	Water	7470A	584713
240-190433-3 MSD	BAC-06-F-A4-20230817-01	Total/NA	Water	7470A	584713

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

General Chemistry

Analysis Batch: 584875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190433-1	BAC-07-F-A4-20230817-01	Total/NA	Water	2320B-1997	
240-190433-2	BAC-18-F-A4-20230817-01	Total/NA	Water	2320B-1997	
240-190433-3	BAC-06-F-A4-20230817-01	Total/NA	Water	2320B-1997	
240-190433-4	BAC-16-F-A4-20230817-01	Total/NA	Water	2320B-1997	
240-190433-5	BAC-08-F-A4-20230817-01	Total/NA	Water	2320B-1997	
240-190433-6	EB-001-F-4A-20230817-01	Total/NA	Water	2320B-1997	
MB 240-584875/55	Method Blank	Total/NA	Water	2320B-1997	
MB 240-584875/82	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-584875/81	Lab Control Sample	Total/NA	Water	2320B-1997	
240-190433-3 DU	BAC-06-F-A4-20230817-01	Total/NA	Water	2320B-1997	

Analysis Batch: 586790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190433-1	BAC-07-F-A4-20230817-01	Total/NA	Water	300.0-1993 R2.1	
240-190433-2	BAC-18-F-A4-20230817-01	Total/NA	Water	300.0-1993 R2.1	
240-190433-3	BAC-06-F-A4-20230817-01	Total/NA	Water	300.0-1993 R2.1	
240-190433-4	BAC-16-F-A4-20230817-01	Total/NA	Water	300.0-1993 R2.1	
240-190433-5	BAC-08-F-A4-20230817-01	Total/NA	Water	300.0-1993 R2.1	
240-190433-6	EB-001-F-4A-20230817-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-586790/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-586790/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-190433-3 MS	BAC-06-F-A4-20230817-01	Total/NA	Water	300.0-1993 R2.1	
240-190433-3 MSD	BAC-06-F-A4-20230817-01	Total/NA	Water	300.0-1993 R2.1	

Rad

Prep Batch: 625154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190433-1	BAC-07-F-A4-20230817-01	Total/NA	Water	PrecSep-21	
240-190433-2	BAC-18-F-A4-20230817-01	Total/NA	Water	PrecSep-21	
240-190433-3	BAC-06-F-A4-20230817-01	Total/NA	Water	PrecSep-21	
240-190433-4	BAC-16-F-A4-20230817-01	Total/NA	Water	PrecSep-21	
240-190433-5	BAC-08-F-A4-20230817-01	Total/NA	Water	PrecSep-21	
240-190433-6	EB-001-F-4A-20230817-01	Total/NA	Water	PrecSep-21	
MB 160-625154/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-625154/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
240-190433-3 MS	BAC-06-F-A4-20230817-01	Total/NA	Water	PrecSep-21	
240-190433-3 MSD	BAC-06-F-A4-20230817-01	Total/NA	Water	PrecSep-21	

Prep Batch: 625155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190433-1	BAC-07-F-A4-20230817-01	Total/NA	Water	PrecSep_0	
240-190433-2	BAC-18-F-A4-20230817-01	Total/NA	Water	PrecSep_0	
240-190433-3	BAC-06-F-A4-20230817-01	Total/NA	Water	PrecSep_0	
240-190433-4	BAC-16-F-A4-20230817-01	Total/NA	Water	PrecSep_0	
240-190433-5	BAC-08-F-A4-20230817-01	Total/NA	Water	PrecSep_0	
240-190433-6	EB-001-F-4A-20230817-01	Total/NA	Water	PrecSep_0	
MB 160-625155/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-625155/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
240-190433-3 MS	BAC-06-F-A4-20230817-01	Total/NA	Water	PrecSep_0	
240-190433-3 MSD	BAC-06-F-A4-20230817-01	Total/NA	Water	PrecSep_0	

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-07-F-A4-20230817-01

Lab Sample ID: 240-190433-1

Date Collected: 08/17/23 10:42

Matrix: Water

Date Received: 08/19/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584712	BN	EET CLE	08/22/23 14:00
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 17:01
Total/NA	Prep	7470A			584713	BN	EET CLE	08/22/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 17:03
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/23/23 01:38
Total/NA	Analysis	300.0-1993 R2.1		1	586790	JWW	EET CLE	09/12/23 01:38
Total/NA	Prep	PrecSep-21			625154	KAC	EET SL	08/23/23 10:08
Total/NA	Analysis	9315		1	628634	SCB	EET SL	09/18/23 09:58
Total/NA	Prep	PrecSep_0			625155	KAC	EET SL	08/23/23 10:12
Total/NA	Analysis	9320		1	628146	SCB	EET SL	09/14/23 11:47
Total/NA	Analysis	Ra226_Ra228		1	629191	EMH	EET SL	09/21/23 17:54

Client Sample ID: BAC-18-F-A4-20230817-01

Lab Sample ID: 240-190433-2

Date Collected: 08/17/23 11:35

Matrix: Water

Date Received: 08/19/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584712	BN	EET CLE	08/22/23 14:00
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 17:05
Total/NA	Prep	7470A			584713	BN	EET CLE	08/22/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 17:05
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/23/23 01:44
Total/NA	Analysis	300.0-1993 R2.1		1	586790	JWW	EET CLE	09/12/23 02:00
Total/NA	Prep	PrecSep-21			625154	KAC	EET SL	08/23/23 14:00
Total/NA	Analysis	9315		1	628634	SCB	EET SL	09/18/23 09:59
Total/NA	Prep	PrecSep_0			625155	KAC	EET SL	08/23/23 14:05
Total/NA	Analysis	9320		1	628146	SCB	EET SL	09/14/23 11:47
Total/NA	Analysis	Ra226_Ra228		1	629191	EMH	EET SL	09/21/23 17:54

Client Sample ID: BAC-06-F-A4-20230817-01

Lab Sample ID: 240-190433-3

Date Collected: 08/17/23 12:51

Matrix: Water

Date Received: 08/19/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584712	BN	EET CLE	08/22/23 14:00
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 15:10
Total/NA	Prep	7470A			584713	BN	EET CLE	08/22/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 16:30
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/23/23 01:48
Total/NA	Analysis	300.0-1993 R2.1		1	586790	JWW	EET CLE	09/12/23 02:22
Total/NA	Prep	PrecSep-21			625154	KAC	EET SL	08/23/23 14:00
Total/NA	Analysis	9315		1	628634	SCB	EET SL	09/18/23 09:59
Total/NA	Prep	PrecSep_0			625155	KAC	EET SL	08/23/23 14:05
Total/NA	Analysis	9320		1	628146	SCB	EET SL	09/14/23 11:47

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-06-F-A4-20230817-01

Lab Sample ID: 240-190433-3

Date Collected: 08/17/23 12:51

Matrix: Water

Date Received: 08/19/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228		1	629191	EMH	EET SL	09/21/23 17:54

Client Sample ID: BAC-16-F-A4-20230817-01

Lab Sample ID: 240-190433-4

Date Collected: 08/17/23 14:04

Matrix: Water

Date Received: 08/19/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584712	BN	EET CLE	08/22/23 14:00
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 17:10
Total/NA	Prep	7470A			584713	BN	EET CLE	08/22/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 17:07
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/23/23 01:58
Total/NA	Analysis	300.0-1993 R2.1		1	586790	JWW	EET CLE	09/12/23 04:10
Total/NA	Prep	PrecSep-21			625154	KAC	EET SL	08/23/23 14:00
Total/NA	Analysis	9315		1	628634	SCB	EET SL	09/18/23 09:59
Total/NA	Prep	PrecSep_0			625155	KAC	EET SL	08/23/23 14:05
Total/NA	Analysis	9320		1	628146	SCB	EET SL	09/14/23 11:50
Total/NA	Analysis	Ra226_Ra228		1	629191	EMH	EET SL	09/21/23 17:54

Client Sample ID: BAC-08-F-A4-20230817-01

Lab Sample ID: 240-190433-5

Date Collected: 08/17/23 15:02

Matrix: Water

Date Received: 08/19/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584712	BN	EET CLE	08/22/23 14:00
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 17:14
Total/NA	Prep	7470A			584713	BN	EET CLE	08/22/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 17:09
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/23/23 02:02
Total/NA	Analysis	300.0-1993 R2.1		1	586790	JWW	EET CLE	09/12/23 04:32
Total/NA	Prep	PrecSep-21			625154	KAC	EET SL	08/23/23 14:00
Total/NA	Analysis	9315		1	628634	SCB	EET SL	09/18/23 09:59
Total/NA	Prep	PrecSep_0			625155	KAC	EET SL	08/23/23 14:05
Total/NA	Analysis	9320		1	628146	SCB	EET SL	09/14/23 11:50
Total/NA	Analysis	Ra226_Ra228		1	629191	EMH	EET SL	09/21/23 17:54

Client Sample ID: EB-001-F-4A-20230817-01

Lab Sample ID: 240-190433-6

Date Collected: 08/17/23 15:15

Matrix: Water

Date Received: 08/19/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584712	BN	EET CLE	08/22/23 14:00
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 17:19
Total/NA	Prep	7470A			584713	BN	EET CLE	08/22/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 17:16

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: EB-001-F-4A-20230817-01

Lab Sample ID: 240-190433-6

Date Collected: 08/17/23 15:15

Matrix: Water

Date Received: 08/19/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/23/23 02:06
Total/NA	Analysis	300.0-1993 R2.1		1	586790	JWW	EET CLE	09/12/23 04:54
Total/NA	Prep	PrecSep-21			625154	KAC	EET SL	08/23/23 14:00
Total/NA	Analysis	9315		1	628634	SCB	EET SL	09/18/23 09:59
Total/NA	Prep	PrecSep_0			625155	KAC	EET SL	08/23/23 14:05
Total/NA	Analysis	9320		1	628146	SCB	EET SL	09/14/23 11:50
Total/NA	Analysis	Ra226_Ra228		1	629191	EMH	EET SL	09/21/23 17:54

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
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

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
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-24
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-24
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-24
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-24
Massachusetts	State	M-MO054	06-30-24
MI - RadChem Recognition	State	9005	06-30-24
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-24
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

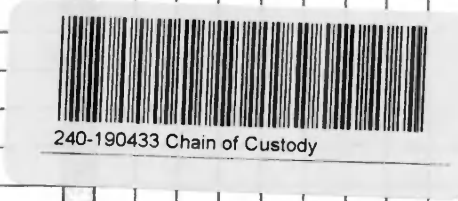
Laboratory: Eurofins St. Louis (Continued)

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	07-31-24
North Dakota	State	R-207	06-30-24
Oregon	NELAP	4157	09-01-24
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23 *
Texas	NELAP	T104704193	07-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO000542021-14	07-31-24
Virginia	NELAP	10310	06-15-25
West Virginia DEP	State	381	10-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Soil, Sludge, Other)	Field Filtered Sample (Yes or No)	Form MSMSD (Yes or No)		300.0_28D - Fluoride		9315_Ra226, 9320_Ra228, Ra226Ra228_GFPc		Total Number of Containers	Special Instructions/Note:
						D	N	D	N	D	N		
BAC-07-F-A4-20230817-01	8-17-23	1042	G	Water									
BAC-18-F-A4-20230817-01	8-17-23	1135	G	Water									
BAC-06-F-A4-20230817-01	8-17-23	1251	G	Water									
BAC-06-F-A4-20230817-MS	8-17-23	1251	G	Water									
BAC-06-F-A4-20230817-MSD	8-17-23	1404	G	Water									
BAC-16-F-A4-20230817-01	8-17-23	1502	G	Water									
BAC-08-F-A4-20230817-01	8-17-23	1515	G	Water									
EB-001-F-A4-20230817-01													



Possible Hazard Identification
 Non-Hazard
 Flammable
 Skin Irritant
 Poison B
 Unknown
 Radiological
 Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client
 Disposal By Lab
 Archive For _____ Months

Special Instructions/QC Requirements:

Empty Kit Relinquished by: _____ Date: _____
 Relinquished by: *Bobby Caste* Date/Time: 8-18-23 / 0850
 Relinquished by: *Asney Deal* Date/Time: 8-18-23 1700
 Relinquished by: _____ Date/Time: _____

Method of Shipment: _____
 Received by: *Asney Deal* Date/Time: 8-18-23 11:10 Company: *ETA*
 Received by: *Jamy Page* Date/Time: 8-19-23 800 Company: *ETA*
 Received by: _____ Date/Time: _____ Company: _____

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

Barberton Facility

Client Lightstone

Site Name _____

Cooler unpacked by:

Cooler Received on 8-19-23

Opened on 8-19-23

Vany Rye

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 # 22 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity each 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# HC312502

14. Were VOAs on the COC? Yes No

15. Were air bubbles >6 mm in any VOA vials? Yes No NA Larger than this.

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: _____

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-07-F-A4-20230817-01	240-190433-C-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-A4-20230817-01	240-190433-D-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-A4-20230817-01	240-190433-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-18-F-A4-20230817-01	240-190433-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-18-F-A4-20230817-01	240-190433-D-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-18-F-A4-20230817-01	240-190433-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-A4-20230817-01	240-190433-G-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-A4-20230817-01	240-190433-H-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-A4-20230817-01	240-190433-I-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-A4-20230817-01	240-190433-J-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-A4-20230817-01	240-190433-K-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-A4-20230817-01	240-190433-L-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-A4-20230817-01	240-190433-M-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-A4-20230817-01	240-190433-N-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-A4-20230817-01	240-190433-O-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-16-F-A4-20230817-01	240-190433-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-16-F-A4-20230817-01	240-190433-D-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-16-F-A4-20230817-01	240-190433-E-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-08-F-A4-20230817-01	240-190433-C-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-08-F-A4-20230817-01	240-190433-D-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-08-F-A4-20230817-01	240-190433-E-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-4A-20230817-01	240-190433-C-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-4A-20230817-01	240-190433-D-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-4A-20230817-01	240-190433-E-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-190433-1

Login Number: 190433

List Number: 2

Creator: Worthington, Sierra M

List Source: Eurofins St. Louis

List Creation: 08/23/23 07:34 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?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 9/9/2023 10:38:32 AM

JOB DESCRIPTION

Federal CCR Wells - App III

JOB NUMBER

240-190488-1

Eurofins Cleveland

Job Notes

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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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(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

Job ID: 240-190488-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative
240-190488-1

Receipt

The samples were received on 8/22/2023 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 1.1°C and 1.5°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 - App III

Job ID: 240-190488-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
SM 2540C	Solids, Total Dissolved (TDS)	SM	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
Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-190488-1	BAC-14-F-A3-20230818-01	Water	08/18/23 09:59	08/22/23 08:00
240-190488-2	BAC-12-F-A3-20230818-01	Water	08/18/23 10:56	08/22/23 08:00
240-190488-3	DUP-002-BAC-12-F-A3-20230818-01	Water	08/18/23 10:56	08/22/23 08:00
240-190488-4	EB-001-F-A3-20230818-01	Water	08/18/23 11:15	08/22/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

Client Sample ID: BAC-14-F-A3-20230818-01

Lab Sample ID: 240-190488-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2800		100	57	ug/L	1		6010D	Total Recoverable
Calcium	75000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	22000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	81		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	81		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	32		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.060		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	250		10	3.5	mg/L	10		300.0	Total/NA
Total Dissolved Solids	460		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-12-F-A3-20230818-01

Lab Sample ID: 240-190488-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1900		100	57	ug/L	1		6010D	Total Recoverable
Calcium	80000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	3100		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	32000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	85		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	85		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	68		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.065		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	240		10	3.5	mg/L	10		300.0	Total/NA
Total Dissolved Solids	510		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-002-BAC-12-F-A3-20230818-01

Lab Sample ID: 240-190488-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1900		100	57	ug/L	1		6010D	Total Recoverable
Calcium	79000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	3100		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	31000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	84		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	84		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	68		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.065		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	230		10	3.5	mg/L	10		300.0	Total/NA
Total Dissolved Solids	510		10	7.8	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

Client Sample ID: EB-001-F-A3-20230818-01

Lab Sample ID: 240-190488-4

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

Client Sample ID: BAC-14-F-A3-20230818-01

Lab Sample ID: 240-190488-1

Date Collected: 08/18/23 09:59

Matrix: Water

Date Received: 08/22/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2800		100	57	ug/L		08/23/23 17:30	08/25/23 05:15	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	75000		1000	250	ug/L		08/23/23 17:30	08/24/23 12:49	1
Magnesium	20000		1000	61	ug/L		08/23/23 17:30	08/24/23 12:49	1
Potassium	1600		1000	220	ug/L		08/23/23 17:30	08/24/23 12:49	1
Sodium	22000		1000	330	ug/L		08/23/23 17:30	08/24/23 12:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	81		5.0	2.6	mg/L			08/23/23 18:29	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	81		5.0	2.6	mg/L			08/23/23 18:29	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 18:29	1
Chloride (EPA 300.0)	32		1.0	0.13	mg/L			09/05/23 18:59	1
Fluoride (EPA 300.0)	0.060		0.050	0.024	mg/L			09/05/23 18:59	1
Sulfate (EPA 300.0)	250		10	3.5	mg/L			09/07/23 12:31	10
Total Dissolved Solids (SM 2540C)	460		10	7.8	mg/L			08/23/23 08:49	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

Client Sample ID: BAC-12-F-A3-20230818-01

Lab Sample ID: 240-190488-2

Date Collected: 08/18/23 10:56

Matrix: Water

Date Received: 08/22/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1900		100	57	ug/L		08/23/23 17:30	08/25/23 05:36	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	80000		1000	250	ug/L		08/23/23 17:30	08/25/23 21:30	1
Magnesium	20000		1000	61	ug/L		08/23/23 17:30	08/25/23 21:30	1
Potassium	3100		1000	220	ug/L		08/23/23 17:30	08/25/23 21:30	1
Sodium	32000		1000	330	ug/L		08/23/23 17:30	08/25/23 21:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	85		5.0	2.6	mg/L			08/23/23 18:33	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	85		5.0	2.6	mg/L			08/23/23 18:33	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 18:33	1
Chloride (EPA 300.0)	68		1.0	0.13	mg/L			09/05/23 19:20	1
Fluoride (EPA 300.0)	0.065		0.050	0.024	mg/L			09/05/23 19:20	1
Sulfate (EPA 300.0)	240		10	3.5	mg/L			09/07/23 12:53	10
Total Dissolved Solids (SM 2540C)	510		10	7.8	mg/L			08/23/23 08:49	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

Client Sample ID: DUP-002-BAC-12-F-A3-20230818-01

Lab Sample ID: 240-190488-3

Date Collected: 08/18/23 10:56

Matrix: Water

Date Received: 08/22/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1900		100	57	ug/L		08/23/23 17:30	08/25/23 05:41	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	79000		1000	250	ug/L		08/23/23 17:30	08/25/23 21:33	1
Magnesium	20000		1000	61	ug/L		08/23/23 17:30	08/25/23 21:33	1
Potassium	3100		1000	220	ug/L		08/23/23 17:30	08/25/23 21:33	1
Sodium	31000		1000	330	ug/L		08/23/23 17:30	08/25/23 21:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	84		5.0	2.6	mg/L			08/25/23 18:27	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	84		5.0	2.6	mg/L			08/25/23 18:27	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/25/23 18:27	1
Chloride (EPA 300.0)	68		1.0	0.13	mg/L			09/05/23 19:42	1
Fluoride (EPA 300.0)	0.065		0.050	0.024	mg/L			09/05/23 19:42	1
Sulfate (EPA 300.0)	230		10	3.5	mg/L			09/07/23 13:14	10
Total Dissolved Solids (SM 2540C)	510		10	7.8	mg/L			08/23/23 08:49	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

Client Sample ID: EB-001-F-A3-20230818-01

Lab Sample ID: 240-190488-4

Date Collected: 08/18/23 11:15

Matrix: Water

Date Received: 08/22/23 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		08/23/23 17:30	08/25/23 05:45	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		08/23/23 17:30	08/25/23 21:35	1
Magnesium	ND		1000	61	ug/L		08/23/23 17:30	08/25/23 21:35	1
Potassium	ND		1000	220	ug/L		08/23/23 17:30	08/25/23 21:35	1
Sodium	ND		1000	330	ug/L		08/23/23 17:30	08/25/23 21:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/25/23 18:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/25/23 18:31	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/25/23 18:31	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			09/05/23 20:04	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			09/05/23 20:04	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			09/05/23 20:04	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			08/23/23 08:49	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-584878/1-A
Matrix: Water
Analysis Batch: 585041

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 584878

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		08/23/23 17:30	08/25/23 04:58	1

Lab Sample ID: LCS 240-584878/2-A
Matrix: Water
Analysis Batch: 585041

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 584878

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1110		ug/L		111	80 - 120

Lab Sample ID: 240-190488-1 MS
Matrix: Water
Analysis Batch: 585041

Client Sample ID: BAC-14-F-A3-20230818-01
Prep Type: Total Recoverable
Prep Batch: 584878

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	2800		1000	3860		ug/L		108	75 - 125

Lab Sample ID: 240-190488-1 MSD
Matrix: Water
Analysis Batch: 585041

Client Sample ID: BAC-14-F-A3-20230818-01
Prep Type: Total Recoverable
Prep Batch: 584878

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	2800		1000	3830		ug/L		105	75 - 125	1	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-584878/1-A
Matrix: Water
Analysis Batch: 585084

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 584878

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		08/23/23 17:30	08/24/23 12:22	1
Magnesium	ND		1000	61	ug/L		08/23/23 17:30	08/24/23 12:22	1
Potassium	ND		1000	220	ug/L		08/23/23 17:30	08/24/23 12:22	1
Sodium	ND		1000	330	ug/L		08/23/23 17:30	08/24/23 12:22	1

Lab Sample ID: LCS 240-584878/3-A
Matrix: Water
Analysis Batch: 585084

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 584878

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	23800		ug/L		95	80 - 120
Magnesium	25000	24300		ug/L		97	80 - 120
Potassium	25000	24400		ug/L		98	80 - 120
Sodium	25000	24600		ug/L		98	80 - 120

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

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

Lab Sample ID: 240-190488-1 MS
Matrix: Water
Analysis Batch: 585084

Client Sample ID: BAC-14-F-A3-20230818-01
Prep Type: Total Recoverable
Prep Batch: 584878

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier				Limits	
Calcium	75000		25000	101000		ug/L		105	80 - 120	
Magnesium	20000		25000	45400		ug/L		100	80 - 120	
Potassium	1600		25000	26300		ug/L		99	80 - 120	
Sodium	22000		25000	47600		ug/L		102	80 - 120	

Lab Sample ID: 240-190488-1 MSD
Matrix: Water
Analysis Batch: 585084

Client Sample ID: BAC-14-F-A3-20230818-01
Prep Type: Total Recoverable
Prep Batch: 584878

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec		RPD
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit
Calcium	75000		25000	97200		ug/L		89	80 - 120		4
Magnesium	20000		25000	43200		ug/L		91	80 - 120		5
Potassium	1600		25000	25000		ug/L		93	80 - 120		5
Sodium	22000		25000	45600		ug/L		94	80 - 120		4

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-585070/30
Matrix: Water
Analysis Batch: 585070

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			08/23/23 17:31	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 17:31	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 17:31	1

Lab Sample ID: MB 240-585070/4
Matrix: Water
Analysis Batch: 585070

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			08/23/23 15:31	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 15:31	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 15:31	1

Lab Sample ID: LCS 240-585070/29
Matrix: Water
Analysis Batch: 585070

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec	
		Result	Qualifier				Limits	
Total Alkalinity	80.6	79.1		mg/L		98	86 - 123	

Lab Sample ID: 240-190488-1 DU
Matrix: Water
Analysis Batch: 585070

Client Sample ID: BAC-14-F-A3-20230818-01
Prep Type: Total/NA

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	RPD
	Result	Qualifier	Result	Qualifier				Limit
Total Alkalinity	81		81.0		mg/L		0.6	20
Bicarbonate Alkalinity as CaCO3	81		81.0		mg/L		0.6	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-585670/30
Matrix: Water
Analysis Batch: 585670

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			08/25/23 16:42	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/25/23 16:42	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/25/23 16:42	1

Lab Sample ID: MB 240-585670/4
Matrix: Water
Analysis Batch: 585670

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			08/25/23 14:47	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/25/23 14:47	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/25/23 14:47	1

Lab Sample ID: LCS 240-585670/29
Matrix: Water
Analysis Batch: 585670

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	79.1		mg/L		98	86 - 123

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-586171/3
Matrix: Water
Analysis Batch: 586171

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			09/05/23 17:10	1
Fluoride	ND		0.050	0.024	mg/L			09/05/23 17:10	1
Sulfate	ND		1.0	0.35	mg/L			09/05/23 17:10	1

Lab Sample ID: LCS 240-586171/4
Matrix: Water
Analysis Batch: 586171

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	50.1		mg/L		100	90 - 110
Fluoride	2.50	2.65		mg/L		106	90 - 110
Sulfate	50.0	51.8		mg/L		104	90 - 110

Lab Sample ID: MB 240-586383/3
Matrix: Water
Analysis Batch: 586383

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			09/07/23 10:43	1
Fluoride	ND		0.050	0.024	mg/L			09/07/23 10:43	1
Sulfate	ND		1.0	0.35	mg/L			09/07/23 10:43	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 240-586383/4
 Matrix: Water
 Analysis Batch: 586383

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	49.8		mg/L		100	90 - 110	
Fluoride	2.50	2.65		mg/L		106	90 - 110	
Sulfate	50.0	51.5		mg/L		103	90 - 110	

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

Lab Sample ID: MB 240-584857/1
 Matrix: Water
 Analysis Batch: 584857

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Dissolved Solids	ND		10	7.8	mg/L			08/23/23 08:49	1

Lab Sample ID: LCS 240-584857/2
 Matrix: Water
 Analysis Batch: 584857

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	242	232		mg/L		96	80 - 120	

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

Metals

Prep Batch: 584878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190488-1	BAC-14-F-A3-20230818-01	Total Recoverable	Water	3005A	
240-190488-2	BAC-12-F-A3-20230818-01	Total Recoverable	Water	3005A	
240-190488-3	DUP-002-BAC-12-F-A3-20230818-01	Total Recoverable	Water	3005A	
240-190488-4	EB-001-F-A3-20230818-01	Total Recoverable	Water	3005A	
MB 240-584878/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-584878/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-584878/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-190488-1 MS	BAC-14-F-A3-20230818-01	Total Recoverable	Water	3005A	
240-190488-1 MS	BAC-14-F-A3-20230818-01	Total Recoverable	Water	3005A	
240-190488-1 MSD	BAC-14-F-A3-20230818-01	Total Recoverable	Water	3005A	
240-190488-1 MSD	BAC-14-F-A3-20230818-01	Total Recoverable	Water	3005A	

Analysis Batch: 585041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190488-1	BAC-14-F-A3-20230818-01	Total Recoverable	Water	6010D	584878
240-190488-2	BAC-12-F-A3-20230818-01	Total Recoverable	Water	6010D	584878
240-190488-3	DUP-002-BAC-12-F-A3-20230818-01	Total Recoverable	Water	6010D	584878
240-190488-4	EB-001-F-A3-20230818-01	Total Recoverable	Water	6010D	584878
MB 240-584878/1-A	Method Blank	Total Recoverable	Water	6010D	584878
LCS 240-584878/2-A	Lab Control Sample	Total Recoverable	Water	6010D	584878
240-190488-1 MS	BAC-14-F-A3-20230818-01	Total Recoverable	Water	6010D	584878
240-190488-1 MSD	BAC-14-F-A3-20230818-01	Total Recoverable	Water	6010D	584878

Analysis Batch: 585084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190488-1	BAC-14-F-A3-20230818-01	Total Recoverable	Water	6020B	584878
MB 240-584878/1-A	Method Blank	Total Recoverable	Water	6020B	584878
LCS 240-584878/3-A	Lab Control Sample	Total Recoverable	Water	6020B	584878
240-190488-1 MS	BAC-14-F-A3-20230818-01	Total Recoverable	Water	6020B	584878
240-190488-1 MSD	BAC-14-F-A3-20230818-01	Total Recoverable	Water	6020B	584878

Analysis Batch: 585284

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190488-2	BAC-12-F-A3-20230818-01	Total Recoverable	Water	6020B	584878
240-190488-3	DUP-002-BAC-12-F-A3-20230818-01	Total Recoverable	Water	6020B	584878
240-190488-4	EB-001-F-A3-20230818-01	Total Recoverable	Water	6020B	584878

General Chemistry

Analysis Batch: 584857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190488-1	BAC-14-F-A3-20230818-01	Total/NA	Water	SM 2540C	
240-190488-2	BAC-12-F-A3-20230818-01	Total/NA	Water	SM 2540C	
240-190488-3	DUP-002-BAC-12-F-A3-20230818-01	Total/NA	Water	SM 2540C	
240-190488-4	EB-001-F-A3-20230818-01	Total/NA	Water	SM 2540C	
MB 240-584857/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-584857/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 585070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190488-1	BAC-14-F-A3-20230818-01	Total/NA	Water	2320B-1997	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

General Chemistry (Continued)

Analysis Batch: 585070 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190488-2	BAC-12-F-A3-20230818-01	Total/NA	Water	2320B-1997	
MB 240-585070/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-585070/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-585070/29	Lab Control Sample	Total/NA	Water	2320B-1997	
240-190488-1 DU	BAC-14-F-A3-20230818-01	Total/NA	Water	2320B-1997	

Analysis Batch: 585670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190488-3	DUP-002-BAC-12-F-A3-20230818-01	Total/NA	Water	2320B-1997	
240-190488-4	EB-001-F-A3-20230818-01	Total/NA	Water	2320B-1997	
MB 240-585670/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-585670/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-585670/29	Lab Control Sample	Total/NA	Water	2320B-1997	

Analysis Batch: 586171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190488-1	BAC-14-F-A3-20230818-01	Total/NA	Water	300.0	
240-190488-2	BAC-12-F-A3-20230818-01	Total/NA	Water	300.0	
240-190488-3	DUP-002-BAC-12-F-A3-20230818-01	Total/NA	Water	300.0	
240-190488-4	EB-001-F-A3-20230818-01	Total/NA	Water	300.0	
MB 240-586171/3	Method Blank	Total/NA	Water	300.0	
LCS 240-586171/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 586383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190488-1	BAC-14-F-A3-20230818-01	Total/NA	Water	300.0	
240-190488-2	BAC-12-F-A3-20230818-01	Total/NA	Water	300.0	
240-190488-3	DUP-002-BAC-12-F-A3-20230818-01	Total/NA	Water	300.0	
MB 240-586383/3	Method Blank	Total/NA	Water	300.0	
LCS 240-586383/4	Lab Control Sample	Total/NA	Water	300.0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

Client Sample ID: BAC-14-F-A3-20230818-01

Lab Sample ID: 240-190488-1

Date Collected: 08/18/23 09:59

Matrix: Water

Date Received: 08/22/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584878	GK	EET CLE	08/23/23 17:30
Total Recoverable	Analysis	6010D		1	585041	AJC	EET CLE	08/25/23 05:15
Total Recoverable	Prep	3005A			584878	GK	EET CLE	08/23/23 17:30
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 12:49
Total/NA	Analysis	2320B-1997		1	585070	JMR	EET CLE	08/23/23 18:29
Total/NA	Analysis	300.0		1	586171	JMR	EET CLE	09/05/23 18:59
Total/NA	Analysis	300.0		10	586383	JMR	EET CLE	09/07/23 12:31
Total/NA	Analysis	SM 2540C		1	584857	MS	EET CLE	08/23/23 08:49

Client Sample ID: BAC-12-F-A3-20230818-01

Lab Sample ID: 240-190488-2

Date Collected: 08/18/23 10:56

Matrix: Water

Date Received: 08/22/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584878	GK	EET CLE	08/23/23 17:30
Total Recoverable	Analysis	6010D		1	585041	AJC	EET CLE	08/25/23 05:36
Total Recoverable	Prep	3005A			584878	GK	EET CLE	08/23/23 17:30
Total Recoverable	Analysis	6020B		1	585284	AJC	EET CLE	08/25/23 21:30
Total/NA	Analysis	2320B-1997		1	585070	JMR	EET CLE	08/23/23 18:33
Total/NA	Analysis	300.0		1	586171	JMR	EET CLE	09/05/23 19:20
Total/NA	Analysis	300.0		10	586383	JMR	EET CLE	09/07/23 12:53
Total/NA	Analysis	SM 2540C		1	584857	MS	EET CLE	08/23/23 08:49

Client Sample ID: DUP-002-BAC-12-F-A3-20230818-01

Lab Sample ID: 240-190488-3

Date Collected: 08/18/23 10:56

Matrix: Water

Date Received: 08/22/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584878	GK	EET CLE	08/23/23 17:30
Total Recoverable	Analysis	6010D		1	585041	AJC	EET CLE	08/25/23 05:41
Total Recoverable	Prep	3005A			584878	GK	EET CLE	08/23/23 17:30
Total Recoverable	Analysis	6020B		1	585284	AJC	EET CLE	08/25/23 21:33
Total/NA	Analysis	2320B-1997		1	585670	JVVV	EET CLE	08/25/23 18:27
Total/NA	Analysis	300.0		1	586171	JMR	EET CLE	09/05/23 19:42
Total/NA	Analysis	300.0		10	586383	JMR	EET CLE	09/07/23 13:14
Total/NA	Analysis	SM 2540C		1	584857	MS	EET CLE	08/23/23 08:49

Client Sample ID: EB-001-F-A3-20230818-01

Lab Sample ID: 240-190488-4

Date Collected: 08/18/23 11:15

Matrix: Water

Date Received: 08/22/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584878	GK	EET CLE	08/23/23 17:30
Total Recoverable	Analysis	6010D		1	585041	AJC	EET CLE	08/25/23 05:45

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

Client Sample ID: EB-001-F-A3-20230818-01

Lab Sample ID: 240-190488-4

Date Collected: 08/18/23 11:15

Matrix: Water

Date Received: 08/22/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584878	GK	EET CLE	08/23/23 17:30
Total Recoverable	Analysis	6020B		1	585284	AJC	EET CLE	08/25/23 21:35
Total/NA	Analysis	2320B-1997		1	585670	JWW	EET CLE	08/25/23 18:31
Total/NA	Analysis	300.0		1	586171	JMR	EET CLE	09/05/23 20:04
Total/NA	Analysis	SM 2540C		1	584857	MS	EET CLE	08/23/23 08:49

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
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

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
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.



Client Information		Lab PM: Cisneros, Roxanne		COC No: 240-93465-34577.1	
Client Contact: Taylor Huffman		E-Mail: roxanne.cisneros@Eurofins.com		Page: 1 of 1	
Company: Lightstone Generation Gavin Power LLC		Address: 7397 OH-7		Job #:	
City: Cheshire		State, Zip: OH, 45620		Preservation Codes:	
Phone: 740-925-3171(Tel)		Project #: 24019633		A - HCL	
Email: taylor.huffman@lightstonegen.com		SSOW#:		B - NaOH	
Project Name: Federal CCR Wells - App III		Site: Gavin Plant		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 - Na2SO4	
				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)	Preservation Code	Matrix (Hexane, Benzene, Chloroform, BT-Toluene, Acety)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 6020	2540C, Calcd, 300.0, 28D	2320B - Alkalinity	D	N	Total Number of Containers	Special Instructions/Note:
BAC-14-F-A3-20230818-c1	8-18-23	0959	G	W	W									
BAC-12-F-A3-20230818-c1	8-18-23	1056	G	W	W									
DUP-002-BAC-12-F-A3-20230818-c1	8-18-23	1056	G	W	W									
EB-001-F-A3-20230818-c1	8-18-23	1115	G	W	W									



240-190488 Chain of Custody

Possible Hazard Identification		<input type="checkbox"/> Non-Hazard		<input type="checkbox"/> Flammable		<input type="checkbox"/> Skin Irritant		<input type="checkbox"/> Poison B		<input type="checkbox"/> Unknown		<input type="checkbox"/> Radiological	
Deliverable Requested: I, II, III, IV, Other (specify)													
Empty Kit Relinquished by:													
Relinquished by:		Date: 8/21/23		Time: 1700		Company: E7A		Received by:		Date/Time: 8/21-23 1130		Company: E7A	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:		Received by:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:											

Eurofins - Cleveland Sample Receipt Form/Narrative Login #: 190488
Barberton Facility
 Client Lightstone Site Name _____ Cooler unpacked by: Nancy Rye
 Cooler Received on 8-22-23 Opened on 8-22-23
 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 # 22 (CF 0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity leach 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
13. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC312502
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: _____


Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-14-F-A3-20230818-01	240-190488-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-12-F-A3-20230818-01	240-190488-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-002-BAC-12-F-A3-20230818-01	240-190488-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A3-20230818-01	240-190488-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____

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Client Information		Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No: 240-93465-34577.1
Client Contact: Taylor Huffman		E-Mail: roxanne.cisneros@Eurofinsel.com	State of Origin:	Page: Page 1 of 1
Company: Lightstone Generation Gavin Power LLC		PWSID:	Job #:	
Address: 7397 OH-7		Analysis Requested		
City: Cheshire	TAT Requested (days):	Total Number of Containers		
State, Zip: OH, 45620	Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No	Preservation Codes:		
Phone: 740-925-3171(Tel)	PO #: 2935505	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 Other:		
Email: taylor.huffman@lightstonegen.com	WO #:	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)		
Project Name: Federal CCR Wells - App III	Project #: 24019633	Special Instructions/Note:		
Site: <i>Garh Plant</i>	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Preservation Code:	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540B - Calcd. 300.0, 28D	2320B - Alkalinity	D	N
BAC-14-F-A3-20230818-c1	8-18-23	0959	G	W	M					
BAC-12-F-A3-20230818-c1	8-18-23	1056	G	W	M					
DUP-02-BAC-12-F-A3-20230818-c1	8-18-23	1056	G	W	M					
EB-001-F-A3-20230818-c1	8-18-23	1115	G	W	M					



240-190488 Chain of Custody

<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological <input type="checkbox"/> Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months
Empty Kit Relinquished by: _____ Date: _____ Relinquished by: _____ Date/Time: 8/21/23 1700 Relinquished by: _____ Date/Time: 8/21/23 1700		Special Instructions/QC Requirements: Received by: _____ Date/Time: 8/21/23 1130 Received by: _____ Date/Time: 8/21/23 800 Received by: _____ Date/Time: _____
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks:

190488

Barberton Facility

Client Lightstone

Site Name _____

Cooler unpacked by: _____

Cooler Received on 8-22-23

Opened on 8-22-23

Nancy Reyer

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 # 22 (CF 0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity leach 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# HC312502

14. Were VOAs on the COC? Yes No

15. Were air bubbles >6 mm in any VOA vials? Yes No NA  Larger than this.

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: _____

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Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-14-F-A3-20230818-01	240-190488-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-12-F-A3-20230818-01	240-190488-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-002-BAC-12-F-A3-20230818-01	240-190488-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A3-20230818-01	240-190488-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____



ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 9/20/2023 3:07:30 PM

JOB DESCRIPTION

Federal CCR Wells - App IV

JOB NUMBER

240-190489-1

Eurofins Cleveland

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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9/20/2023 3:07:30 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

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.

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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Job ID: 240-190489-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-190489-1

Receipt

The samples were received on 8/22/2023 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 1.1° C and 1.5° C.

RAD

Methods 9315: Radium-226 batch 625310: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-14-F-A4-20230818-01 (240-190489-1), BAC-12-F-A4-20230818-01 (240-190489-2), DUP-002-BAC-12-F-A4-20230818-01 (240-190489-3), EB-001-F-A4-20230818-01 (240-190489-4), (LCS 160-625310/2-A), (MB 160-625310/1-A)

Method 9320: Radium-228 prep batch 160-625311: The following sample(s) did not meet the requested limit (RL) due to the reduced sample volume attributed to the presence of matrix interference. During preparation the analyst visually noted matrix effects. The data have been reported with this narrative. BAC-12-F-A4-20230818-01 (240-190489-2) and DUP-002-BAC-12-F-A4-20230818-01 (240-190489-3)

Methods 9320: Radium-228 prep batch 160-625311: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-14-F-A4-20230818-01 (240-190489-1), BAC-12-F-A4-20230818-01 (240-190489-2), DUP-002-BAC-12-F-A4-20230818-01 (240-190489-3), EB-001-F-A4-20230818-01 (240-190489-4), (LCS 160-625311/2-A), (MB 160-625311/1-A)

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

Metals

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

General Chemistry

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0-1993 R2.1	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 - App IV

Job ID: 240-190489-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-190489-1	BAC-14-F-A4-20230818-01	Water	08/18/23 09:59	08/22/23 08:00
240-190489-2	BAC-12-F-A4-20230818-01	Water	08/18/23 10:56	08/22/23 08:00
240-190489-3	DUP-002-BAC-12-F-A4-20230818-01	Water	08/18/23 10:56	08/22/23 08:00
240-190489-4	EB-001-F-A4-20230818-01	Water	08/18/23 11:15	08/22/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Client Sample ID: BAC-14-F-A4-20230818-01

Lab Sample ID: 240-190489-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.9	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	96		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	1.5	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.78	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.3	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	23000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	81		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	81		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.057		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-12-F-A4-20230818-01

Lab Sample ID: 240-190489-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	9.5		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	130		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	3.7	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	10		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	6.2		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	11		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.2	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	3100		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	32000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	83		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	83		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.062		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: DUP-002-BAC-12-F-A4-20230818-01

Lab Sample ID: 240-190489-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	9.4		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	130		5.0	2.2	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 - App IV

Job ID: 240-190489-1

Client Sample ID: DUP-002-BAC-12-F-A4-20230818-01
 (Continued)

Lab Sample ID: 240-190489-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	3.6	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	11		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	6.5		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	11		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.2	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	3200		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	33000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	84		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	84		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.066		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: EB-001-F-A4-20230818-01

Lab Sample ID: 240-190489-4

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Client Sample ID: BAC-14-F-A4-20230818-01

Lab Sample ID: 240-190489-1

Date Collected: 08/18/23 09:59

Matrix: Water

Date Received: 08/22/23 08:00

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		08/23/23 17:30	08/25/23 21:49	1
Arsenic	3.9	J	5.0	0.75	ug/L		08/23/23 17:30	08/25/23 21:49	1
Barium	96		5.0	2.2	ug/L		08/23/23 17:30	08/25/23 21:49	1
Beryllium	ND		1.0	0.62	ug/L		08/23/23 17:30	08/25/23 21:49	1
Cadmium	ND		1.0	0.20	ug/L		08/23/23 17:30	08/25/23 21:49	1
Chromium	1.5	J	5.0	1.2	ug/L		08/23/23 17:30	08/25/23 21:49	1
Cobalt	2.1		1.0	0.19	ug/L		08/23/23 17:30	08/25/23 21:49	1
Lead	0.78	J	1.0	0.45	ug/L		08/23/23 17:30	08/25/23 21:49	1
Lithium	6.3	J	8.0	1.7	ug/L		08/23/23 17:30	08/25/23 21:49	1
Magnesium	21000		1000	61	ug/L		08/23/23 17:30	08/25/23 21:49	1
Molybdenum	ND		5.0	1.1	ug/L		08/23/23 17:30	08/25/23 21:49	1
Potassium	1800		1000	220	ug/L		08/23/23 17:30	08/25/23 21:49	1
Selenium	ND		5.0	0.89	ug/L		08/23/23 17:30	08/25/23 21:49	1
Sodium	23000		1000	330	ug/L		08/23/23 17:30	08/25/23 21:49	1
Thallium	ND		1.0	0.20	ug/L		08/23/23 17:30	08/25/23 21:49	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		08/23/23 14:00	08/24/23 13:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	81		5.0	2.6	mg/L			08/25/23 17:37	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	81		5.0	2.6	mg/L			08/25/23 17:37	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/25/23 17:37	1
Fluoride (EPA 300.0-1993 R2.1)	0.057		0.050	0.024	mg/L			09/12/23 05:15	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	0.332		0.176	0.179	1.00	0.218	pCi/L	08/24/23 09:39	09/15/23 07:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.5		30 - 110					08/24/23 09:39	09/15/23 07:35	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	0.685	U	0.512	0.516	1.00	0.775	pCi/L	08/24/23 09:42	09/11/23 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.5		30 - 110					08/24/23 09:42	09/11/23 12:08	1
Y Carrier	83.7		30 - 110					08/24/23 09:42	09/11/23 12:08	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Client Sample ID: BAC-14-F-A4-20230818-01

Lab Sample ID: 240-190489-1

Date Collected: 08/18/23 09:59

Matrix: Water

Date Received: 08/22/23 08:00

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		0.541	0.546	5.00	0.775	pCi/L		09/20/23 14:56	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Client Sample ID: BAC-12-F-A4-20230818-01

Lab Sample ID: 240-190489-2

Date Collected: 08/18/23 10:56

Matrix: Water

Date Received: 08/22/23 08:00

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		08/23/23 17:30	08/25/23 21:57	1
Arsenic	9.5		5.0	0.75	ug/L		08/23/23 17:30	08/25/23 21:57	1
Barium	130		5.0	2.2	ug/L		08/23/23 17:30	08/25/23 21:57	1
Beryllium	ND		1.0	0.62	ug/L		08/23/23 17:30	08/25/23 21:57	1
Cadmium	ND		1.0	0.20	ug/L		08/23/23 17:30	08/25/23 21:57	1
Chromium	3.7 J		5.0	1.2	ug/L		08/23/23 17:30	08/25/23 21:57	1
Cobalt	10		1.0	0.19	ug/L		08/23/23 17:30	08/25/23 21:57	1
Lead	6.2		1.0	0.45	ug/L		08/23/23 17:30	08/25/23 21:57	1
Lithium	11		8.0	1.7	ug/L		08/23/23 17:30	08/25/23 21:57	1
Magnesium	20000		1000	61	ug/L		08/23/23 17:30	08/25/23 21:57	1
Molybdenum	1.2 J		5.0	1.1	ug/L		08/23/23 17:30	08/25/23 21:57	1
Potassium	3100		1000	220	ug/L		08/23/23 17:30	08/25/23 21:57	1
Selenium	ND		5.0	0.89	ug/L		08/23/23 17:30	08/25/23 21:57	1
Sodium	32000		1000	330	ug/L		08/23/23 17:30	08/25/23 21:57	1
Thallium	ND		1.0	0.20	ug/L		08/23/23 17:30	08/25/23 21:57	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		08/23/23 14:00	08/24/23 13:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	83		5.0	2.6	mg/L			08/25/23 18:23	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	83		5.0	2.6	mg/L			08/25/23 18:23	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/25/23 18:23	1
Fluoride (EPA 300.0-1993 R2.1)	0.062		0.050	0.024	mg/L			09/12/23 05:37	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	0.358		0.221	0.224	1.00	0.282	pCi/L	08/24/23 09:39	09/15/23 07:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.7		30 - 110					08/24/23 09:39	09/15/23 07:35	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	0.858	U G	0.790	0.794	1.00	1.25	pCi/L	08/24/23 09:42	09/11/23 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.7		30 - 110					08/24/23 09:42	09/11/23 12:08	1
Y Carrier	83.0		30 - 110					08/24/23 09:42	09/11/23 12:08	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Client Sample ID: BAC-12-F-A4-20230818-01

Lab Sample ID: 240-190489-2

Date Collected: 08/18/23 10:56

Matrix: Water

Date Received: 08/22/23 08:00

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	1.22	U	0.820	0.825	5.00	1.25	pCi/L		09/20/23 14:56	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Client Sample ID: DUP-002-BAC-12-F-A4-20230818-01

Lab Sample ID: 240-190489-3

Date Collected: 08/18/23 10:56

Matrix: Water

Date Received: 08/22/23 08:00

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		08/23/23 17:30	08/25/23 21:59	1
Arsenic	9.4		5.0	0.75	ug/L		08/23/23 17:30	08/25/23 21:59	1
Barium	130		5.0	2.2	ug/L		08/23/23 17:30	08/25/23 21:59	1
Beryllium	ND		1.0	0.62	ug/L		08/23/23 17:30	08/25/23 21:59	1
Cadmium	ND		1.0	0.20	ug/L		08/23/23 17:30	08/25/23 21:59	1
Chromium	3.6 J		5.0	1.2	ug/L		08/23/23 17:30	08/25/23 21:59	1
Cobalt	11		1.0	0.19	ug/L		08/23/23 17:30	08/25/23 21:59	1
Lead	6.5		1.0	0.45	ug/L		08/23/23 17:30	08/25/23 21:59	1
Lithium	11		8.0	1.7	ug/L		08/23/23 17:30	08/25/23 21:59	1
Magnesium	21000		1000	61	ug/L		08/23/23 17:30	08/25/23 21:59	1
Molybdenum	1.2 J		5.0	1.1	ug/L		08/23/23 17:30	08/25/23 21:59	1
Potassium	3200		1000	220	ug/L		08/23/23 17:30	08/25/23 21:59	1
Selenium	ND		5.0	0.89	ug/L		08/23/23 17:30	08/25/23 21:59	1
Sodium	33000		1000	330	ug/L		08/23/23 17:30	08/25/23 21:59	1
Thallium	ND		1.0	0.20	ug/L		08/23/23 17:30	08/25/23 21:59	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		08/23/23 14:00	08/24/23 13:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	84		5.0	2.6	mg/L			08/23/23 18:16	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	84		5.0	2.6	mg/L			08/23/23 18:16	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 18:16	1
Fluoride (EPA 300.0-1993 R2.1)	0.066		0.050	0.024	mg/L			09/12/23 05:59	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	0.330		0.220	0.222	1.00	0.279	pCi/L	08/24/23 09:39	09/15/23 07:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	71.4		30 - 110					08/24/23 09:39	09/15/23 07:35	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	0.0470	U G	0.922	0.922	1.00	1.68	pCi/L	08/24/23 09:42	09/11/23 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	71.4		30 - 110					08/24/23 09:42	09/11/23 12:08	1
Y Carrier	84.5		30 - 110					08/24/23 09:42	09/11/23 12:08	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Client Sample ID: DUP-002-BAC-12-F-A4-20230818-01

Lab Sample ID: 240-190489-3

Date Collected: 08/18/23 10:56

Matrix: Water

Date Received: 08/22/23 08:00

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	0.377	U	0.948	0.948	5.00	1.68	pCi/L		09/20/23 14:56	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Client Sample ID: EB-001-F-A4-20230818-01

Lab Sample ID: 240-190489-4

Date Collected: 08/18/23 11:15

Matrix: Water

Date Received: 08/22/23 08:00

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		08/23/23 17:30	08/25/23 22:02	1
Arsenic	ND		5.0	0.75	ug/L		08/23/23 17:30	08/25/23 22:02	1
Barium	ND		5.0	2.2	ug/L		08/23/23 17:30	08/25/23 22:02	1
Beryllium	ND		1.0	0.62	ug/L		08/23/23 17:30	08/25/23 22:02	1
Cadmium	ND		1.0	0.20	ug/L		08/23/23 17:30	08/25/23 22:02	1
Chromium	ND		5.0	1.2	ug/L		08/23/23 17:30	08/25/23 22:02	1
Cobalt	ND		1.0	0.19	ug/L		08/23/23 17:30	08/25/23 22:02	1
Lead	ND		1.0	0.45	ug/L		08/23/23 17:30	08/25/23 22:02	1
Lithium	ND		8.0	1.7	ug/L		08/23/23 17:30	08/25/23 22:02	1
Magnesium	ND		1000	61	ug/L		08/23/23 17:30	08/25/23 22:02	1
Molybdenum	ND		5.0	1.1	ug/L		08/23/23 17:30	08/25/23 22:02	1
Potassium	ND		1000	220	ug/L		08/23/23 17:30	08/25/23 22:02	1
Selenium	ND		5.0	0.89	ug/L		08/23/23 17:30	08/25/23 22:02	1
Sodium	ND		1000	330	ug/L		08/23/23 17:30	08/25/23 22:02	1
Thallium	ND		1.0	0.20	ug/L		08/23/23 17:30	08/25/23 22:02	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		08/23/23 14:00	08/24/23 13:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 18:20	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 18:20	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 18:20	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			09/12/23 06:20	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0331	U	0.0888	0.0889	1.00	0.164	pCi/L	08/24/23 09:39	09/15/23 07:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.2		30 - 110					08/24/23 09:39	09/15/23 07:39	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	-0.118	U	0.254	0.254	1.00	0.527	pCi/L	08/24/23 09:42	09/11/23 12:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.2		30 - 110					08/24/23 09:42	09/11/23 12:09	1
Y Carrier	85.6		30 - 110					08/24/23 09:42	09/11/23 12:09	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Client Sample ID: EB-001-F-A4-20230818-01

Lab Sample ID: 240-190489-4

Date Collected: 08/18/23 11:15

Matrix: Water

Date Received: 08/22/23 08:00

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	-0.0845	U	0.269	0.269	5.00	0.527	pCi/L		09/20/23 14:56	1

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Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
240-190489-1	BAC-14-F-A4-20230818-01	80.5	
240-190489-2	BAC-12-F-A4-20230818-01	82.7	
240-190489-3	DUP-002-BAC-12-F-A4-20230818-01	71.4	
240-190489-4	EB-001-F-A4-20230818-01	86.2	
LCS 160-625310/2-A	Lab Control Sample	98.5	
MB 160-625310/1-A	Method Blank	91.0	

Tracer/Carrier Legend
Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-190489-1	BAC-14-F-A4-20230818-01	80.5	83.7
240-190489-2	BAC-12-F-A4-20230818-01	82.7	83.0
240-190489-3	DUP-002-BAC-12-F-A4-20230818-01	71.4	84.5
240-190489-4	EB-001-F-A4-20230818-01	86.2	85.6
LCS 160-625311/2-A	Lab Control Sample	98.5	87.9
MB 160-625311/1-A	Method Blank	91.0	83.7

Tracer/Carrier Legend
Ba = Ba Carrier
Y = Y Carrier

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-584878/1-A
Matrix: Water
Analysis Batch: 585084

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 584878

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		08/23/23 17:30	08/24/23 12:22	1
Arsenic	ND		5.0	0.75	ug/L		08/23/23 17:30	08/24/23 12:22	1
Barium	ND		5.0	2.2	ug/L		08/23/23 17:30	08/24/23 12:22	1
Beryllium	ND		1.0	0.62	ug/L		08/23/23 17:30	08/24/23 12:22	1
Cadmium	ND		1.0	0.20	ug/L		08/23/23 17:30	08/24/23 12:22	1
Chromium	ND		5.0	1.2	ug/L		08/23/23 17:30	08/24/23 12:22	1
Cobalt	ND		1.0	0.19	ug/L		08/23/23 17:30	08/24/23 12:22	1
Lead	ND		1.0	0.45	ug/L		08/23/23 17:30	08/24/23 12:22	1
Lithium	ND	^+	8.0	1.7	ug/L		08/23/23 17:30	08/24/23 12:22	1
Magnesium	ND		1000	61	ug/L		08/23/23 17:30	08/24/23 12:22	1
Molybdenum	ND		5.0	1.1	ug/L		08/23/23 17:30	08/24/23 12:22	1
Potassium	ND		1000	220	ug/L		08/23/23 17:30	08/24/23 12:22	1
Selenium	ND		5.0	0.89	ug/L		08/23/23 17:30	08/24/23 12:22	1
Sodium	ND		1000	330	ug/L		08/23/23 17:30	08/24/23 12:22	1
Thallium	ND		1.0	0.20	ug/L		08/23/23 17:30	08/24/23 12:22	1

Lab Sample ID: LCS 240-584878/3-A
Matrix: Water
Analysis Batch: 585084

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 584878

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	102		ug/L		102	80 - 120
Arsenic	1000	979		ug/L		98	80 - 120
Barium	1000	973		ug/L		97	80 - 120
Beryllium	500	449		ug/L		90	80 - 120
Cadmium	500	483		ug/L		97	80 - 120
Chromium	500	485		ug/L		97	80 - 120
Cobalt	500	498		ug/L		100	80 - 120
Lead	500	496		ug/L		99	80 - 120
Lithium	500	487	^+	ug/L		97	80 - 120
Magnesium	25000	24300		ug/L		97	80 - 120
Molybdenum	500	499		ug/L		100	80 - 120
Potassium	25000	24400		ug/L		98	80 - 120
Selenium	1000	960		ug/L		96	80 - 120
Sodium	25000	24600		ug/L		98	80 - 120
Thallium	1000	952		ug/L		95	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-584877/1-A
Matrix: Water
Analysis Batch: 585098

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 584877

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		08/23/23 14:00	08/24/23 13:08	1

Eurofins Cleveland

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-584877/2-A
Matrix: Water
Analysis Batch: 585098

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 584877

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.23		ug/L		105	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-585070/30
Matrix: Water
Analysis Batch: 585070

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			08/23/23 17:31	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 17:31	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 17:31	1

Lab Sample ID: MB 240-585070/4
Matrix: Water
Analysis Batch: 585070

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			08/23/23 15:31	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 15:31	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 15:31	1

Lab Sample ID: LCS 240-585070/29
Matrix: Water
Analysis Batch: 585070

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	79.1		mg/L		98	86 - 123

Lab Sample ID: MB 240-585670/30
Matrix: Water
Analysis Batch: 585670

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			08/25/23 16:42	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/25/23 16:42	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/25/23 16:42	1

Lab Sample ID: MB 240-585670/4
Matrix: Water
Analysis Batch: 585670

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			08/25/23 14:47	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/25/23 14:47	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/25/23 14:47	1

Eurofins Cleveland

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Method: 2320B-1997 - Alkalinity, Total (Continued)

Lab Sample ID: LCS 240-585670/29
 Matrix: Water
 Analysis Batch: 585670

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	79.1		mg/L		98	86 - 123

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-586790/3
 Matrix: Water
 Analysis Batch: 586790

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			09/11/23 19:30	1

Lab Sample ID: LCS 240-586790/4
 Matrix: Water
 Analysis Batch: 586790

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.69		mg/L		108	90 - 110

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-625310/1-A
 Matrix: Water
 Analysis Batch: 628311

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 625310

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.04740	U	0.0779	0.0781	1.00	0.136	pCi/L	08/24/23 09:39	09/15/23 07:31	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.0		30 - 110					08/24/23 09:39	09/15/23 07:31	1

Lab Sample ID: LCS 160-625310/2-A
 Matrix: Water
 Analysis Batch: 628632

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 625310

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	11.3	9.802		1.03	1.00	0.111	pCi/L	87	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	98.5		30 - 110						

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-625311/1-A
Matrix: Water
Analysis Batch: 627476

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 625311

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	-0.4778	U	0.229	0.233	1.00	0.582	pCi/L	08/24/23 09:42	09/11/23 12:05	1
Carrier	MB %Yield	MB Qualifier	Limits				Prepared		Analyzed	Dil Fac
Ba Carrier	91.0		30 - 110				08/24/23 09:42		09/11/23 12:05	1
Y Carrier	83.7		30 - 110				08/24/23 09:42		09/11/23 12:05	1

Lab Sample ID: LCS 160-625311/2-A
Matrix: Water
Analysis Batch: 627477

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 625311

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-228	7.88	7.884		1.11	1.00	0.518	pCi/L	100	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	98.5		30 - 110						
Y Carrier	87.9		30 - 110						

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Metals

Prep Batch: 584877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190489-1	BAC-14-F-A4-20230818-01	Total/NA	Water	7470A	
240-190489-2	BAC-12-F-A4-20230818-01	Total/NA	Water	7470A	
240-190489-3	DUP-002-BAC-12-F-A4-20230818-01	Total/NA	Water	7470A	
240-190489-4	EB-001-F-A4-20230818-01	Total/NA	Water	7470A	
MB 240-584877/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-584877/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 584878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190489-1	BAC-14-F-A4-20230818-01	Total Recoverable	Water	3005A	
240-190489-2	BAC-12-F-A4-20230818-01	Total Recoverable	Water	3005A	
240-190489-3	DUP-002-BAC-12-F-A4-20230818-01	Total Recoverable	Water	3005A	
240-190489-4	EB-001-F-A4-20230818-01	Total Recoverable	Water	3005A	
MB 240-584878/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-584878/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 585084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-584878/1-A	Method Blank	Total Recoverable	Water	6020B	584878
LCS 240-584878/3-A	Lab Control Sample	Total Recoverable	Water	6020B	584878

Analysis Batch: 585098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190489-1	BAC-14-F-A4-20230818-01	Total/NA	Water	7470A	584877
240-190489-2	BAC-12-F-A4-20230818-01	Total/NA	Water	7470A	584877
240-190489-3	DUP-002-BAC-12-F-A4-20230818-01	Total/NA	Water	7470A	584877
240-190489-4	EB-001-F-A4-20230818-01	Total/NA	Water	7470A	584877
MB 240-584877/1-A	Method Blank	Total/NA	Water	7470A	584877
LCS 240-584877/2-A	Lab Control Sample	Total/NA	Water	7470A	584877

Analysis Batch: 585284

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190489-1	BAC-14-F-A4-20230818-01	Total Recoverable	Water	6020B	584878
240-190489-2	BAC-12-F-A4-20230818-01	Total Recoverable	Water	6020B	584878
240-190489-3	DUP-002-BAC-12-F-A4-20230818-01	Total Recoverable	Water	6020B	584878
240-190489-4	EB-001-F-A4-20230818-01	Total Recoverable	Water	6020B	584878

General Chemistry

Analysis Batch: 585070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190489-3	DUP-002-BAC-12-F-A4-20230818-01	Total/NA	Water	2320B-1997	
240-190489-4	EB-001-F-A4-20230818-01	Total/NA	Water	2320B-1997	
MB 240-585070/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-585070/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-585070/29	Lab Control Sample	Total/NA	Water	2320B-1997	

Analysis Batch: 585670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190489-1	BAC-14-F-A4-20230818-01	Total/NA	Water	2320B-1997	
240-190489-2	BAC-12-F-A4-20230818-01	Total/NA	Water	2320B-1997	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

General Chemistry (Continued)

Analysis Batch: 585670 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-585670/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-585670/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-585670/29	Lab Control Sample	Total/NA	Water	2320B-1997	

Analysis Batch: 586790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190489-1	BAC-14-F-A4-20230818-01	Total/NA	Water	300.0-1993 R2.1	
240-190489-2	BAC-12-F-A4-20230818-01	Total/NA	Water	300.0-1993 R2.1	
240-190489-3	DUP-002-BAC-12-F-A4-20230818-01	Total/NA	Water	300.0-1993 R2.1	
240-190489-4	EB-001-F-A4-20230818-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-586790/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-586790/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

Rad

Prep Batch: 625310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190489-1	BAC-14-F-A4-20230818-01	Total/NA	Water	PrecSep-21	
240-190489-2	BAC-12-F-A4-20230818-01	Total/NA	Water	PrecSep-21	
240-190489-3	DUP-002-BAC-12-F-A4-20230818-01	Total/NA	Water	PrecSep-21	
240-190489-4	EB-001-F-A4-20230818-01	Total/NA	Water	PrecSep-21	
MB 160-625310/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-625310/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 625311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190489-1	BAC-14-F-A4-20230818-01	Total/NA	Water	PrecSep_0	
240-190489-2	BAC-12-F-A4-20230818-01	Total/NA	Water	PrecSep_0	
240-190489-3	DUP-002-BAC-12-F-A4-20230818-01	Total/NA	Water	PrecSep_0	
240-190489-4	EB-001-F-A4-20230818-01	Total/NA	Water	PrecSep_0	
MB 160-625311/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-625311/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Client Sample ID: BAC-14-F-A4-20230818-01

Lab Sample ID: 240-190489-1

Date Collected: 08/18/23 09:59

Matrix: Water

Date Received: 08/22/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584878	GK	EET CLE	08/23/23 17:30
Total Recoverable	Analysis	6020B		1	585284	AJC	EET CLE	08/25/23 21:49
Total/NA	Prep	7470A			584877	GK	EET CLE	08/23/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 13:41
Total/NA	Analysis	2320B-1997		1	585670	JWW	EET CLE	08/25/23 17:37
Total/NA	Analysis	300.0-1993 R2.1		1	586790	JWW	EET CLE	09/12/23 05:15
Total/NA	Prep	PrecSep-21			625310	KAC	EET SL	08/24/23 09:39
Total/NA	Analysis	9315		1	628311	SCB	EET SL	09/15/23 07:35
Total/NA	Prep	PrecSep_0			625311	KAC	EET SL	08/24/23 09:42
Total/NA	Analysis	9320		1	627487	SCB	EET SL	09/11/23 12:08
Total/NA	Analysis	Ra226_Ra228		1	629020	SCB	EET SL	09/20/23 14:56

Client Sample ID: BAC-12-F-A4-20230818-01

Lab Sample ID: 240-190489-2

Date Collected: 08/18/23 10:56

Matrix: Water

Date Received: 08/22/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584878	GK	EET CLE	08/23/23 17:30
Total Recoverable	Analysis	6020B		1	585284	AJC	EET CLE	08/25/23 21:57
Total/NA	Prep	7470A			584877	GK	EET CLE	08/23/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 13:44
Total/NA	Analysis	2320B-1997		1	585670	JWW	EET CLE	08/25/23 18:23
Total/NA	Analysis	300.0-1993 R2.1		1	586790	JWW	EET CLE	09/12/23 05:37
Total/NA	Prep	PrecSep-21			625310	KAC	EET SL	08/24/23 09:39
Total/NA	Analysis	9315		1	628311	SCB	EET SL	09/15/23 07:35
Total/NA	Prep	PrecSep_0			625311	KAC	EET SL	08/24/23 09:42
Total/NA	Analysis	9320		1	627487	SCB	EET SL	09/11/23 12:08
Total/NA	Analysis	Ra226_Ra228		1	629020	SCB	EET SL	09/20/23 14:56

Client Sample ID: DUP-002-BAC-12-F-A4-20230818-01

Lab Sample ID: 240-190489-3

Date Collected: 08/18/23 10:56

Matrix: Water

Date Received: 08/22/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584878	GK	EET CLE	08/23/23 17:30
Total Recoverable	Analysis	6020B		1	585284	AJC	EET CLE	08/25/23 21:59
Total/NA	Prep	7470A			584877	GK	EET CLE	08/23/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 13:46
Total/NA	Analysis	2320B-1997		1	585070	JMR	EET CLE	08/23/23 18:16
Total/NA	Analysis	300.0-1993 R2.1		1	586790	JWW	EET CLE	09/12/23 05:59
Total/NA	Prep	PrecSep-21			625310	KAC	EET SL	08/24/23 09:39
Total/NA	Analysis	9315		1	628311	SCB	EET SL	09/15/23 07:35
Total/NA	Prep	PrecSep_0			625311	KAC	EET SL	08/24/23 09:42
Total/NA	Analysis	9320		1	627487	SCB	EET SL	09/11/23 12:08

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Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Client Sample ID: DUP-002-BAC-12-F-A4-20230818-01

Lab Sample ID: 240-190489-3

Date Collected: 08/18/23 10:56

Matrix: Water

Date Received: 08/22/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228		1	629020	SCB	EET SL	09/20/23 14:56

Client Sample ID: EB-001-F-A4-20230818-01

Lab Sample ID: 240-190489-4

Date Collected: 08/18/23 11:15

Matrix: Water

Date Received: 08/22/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584878	GK	EET CLE	08/23/23 17:30
Total Recoverable	Analysis	6020B		1	585284	AJC	EET CLE	08/25/23 22:02
Total/NA	Prep	7470A			584877	GK	EET CLE	08/23/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 13:48
Total/NA	Analysis	2320B-1997		1	585070	JMR	EET CLE	08/23/23 18:20
Total/NA	Analysis	300.0-1993 R2.1		1	586790	JWW	EET CLE	09/12/23 06:20
Total/NA	Prep	PrecSep-21			625310	KAC	EET SL	08/24/23 09:39
Total/NA	Analysis	9315		1	628177	SCB	EET SL	09/15/23 07:39
Total/NA	Prep	PrecSep_0			625311	KAC	EET SL	08/24/23 09:42
Total/NA	Analysis	9320		1	627487	SCB	EET SL	09/11/23 12:09
Total/NA	Analysis	Ra226_Ra228		1	629020	SCB	EET SL	09/20/23 14:56

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
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

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
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-24
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-24
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-24
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-24
Massachusetts	State	M-MO054	06-30-24
MI - RadChem Recognition	State	9005	06-30-24
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-24
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

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	07-31-24
North Dakota	State	R-207	06-30-24
Oregon	NELAP	4157	09-01-24
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23 *
Texas	NELAP	T104704193	07-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO000542021-14	07-31-24
Virginia	NELAP	10310	06-15-25
West Virginia DEP	State	381	10-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Client Information Client Contact: Taylor Huffman Phone: 740-373-4308 PWSID:		Lab PM: Cisneros, Roxanne E-Mail: roxanne.cisneros@Eurofins.com		Camer Tracking No(s): 240-93466-34578.1 Page: Page 1 of 1 Job #:	
Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: 2935505 WO #:		Analysis Requested Field Filtered Sample (Yes or No): Form Kept (Yes or No): 6020, 7470A 300.0, 28D - Fluoride 2320B - Alkalinity 9315, Ra226, 9320, Ra228, Ra228, Ra228, GFCP		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 Other: M - Hexane N - None O - AsN8O2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Address: 7397 OH-7 City: Cheshire State, Zip: OH, 45620 Phone: 740-925-3171(Tel) Email: taylor.huffman@lightstonegen.com		Project #: 24019633 SSOW#:		Total Number of Containers: <input checked="" type="checkbox"/>	
Project Name: Federal CCR Wells - App IV Site: <i>Oswin Plant</i>		Matrix (Inorganic, Organic, Dioxin/Furan, PCB) Sample Type (C=Comp, G=grab) Sample Time Sample Date Preservation Code:		Special Instructions/Note: Special Instructions/QC Requirements:	
Sample Identification BAC-14-F-A4-20230818-c1 BAC-12-F-A4-20230818-c1 DUP-02-BAC-12-F-A4-20230818-c1 EB-001-F-A4-20230818-c1		Field Filtered Sample (Yes or No): <input checked="" type="checkbox"/> Form Kept (Yes or No): <input checked="" type="checkbox"/> 6020, 7470A 300.0, 28D - Fluoride 2320B - Alkalinity 9315, Ra226, 9320, Ra228, Ra228, Ra228, GFCP		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Deliverable Requested: I, II, III, IV, Other (specify)		Empty Kit Relinquished by:	
Relinquished by: <i>[Signature]</i> Date/Time: 8-21-23 / 0833		Relinquished by: <i>[Signature]</i> Date/Time: 8-21-23 / 1700		Relinquished by: <i>[Signature]</i> Date/Time: 8-21-23 / 1130	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:	



Barberton Facility

Client Light Stone Site Name Site Name Cooler unpacked by: Nancy Rye
Cooler Received on 8-22-23 Opened on 8-22-23
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
IR GUN # 22 (CF -0.1 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

- 2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity each 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# HC312502
14. Were VOAs on the COC? Yes No
15. Were air bubbles >6 mm in any VOA vials? Yes No NA Larger than this.
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: _____

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container		Preservative	
			pH	Temp	Added (mls)	Lot #
BAC-14-F-A4-20230818-01	240-190489-C-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-14-F-A4-20230818-01	240-190489-D-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-14-F-A4-20230818-01	240-190489-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-12-F-A4-20230818-01	240-190489-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-12-F-A4-20230818-01	240-190489-D-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-12-F-A4-20230818-01	240-190489-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-002-BAC-12-F-A4-20230818-01	240-190489-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-002-BAC-12-F-A4-20230818-01	240-190489-D-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-002-BAC-12-F-A4-20230818-01	240-190489-E-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230818-01	240-190489-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230818-01	240-190489-D-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230818-01	240-190489-E-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Information		Lab PM: Cisneros, Roxanne		Carrier Tracking No(s): 240-93466-34578.1	
Client Contact: Taylor Huffman		E-Mail: roxanne.cisneros@Eurofinset.com		Page: Page 1 of 1	
Company: Lightstone Generation Gavin Power LLC		PWSID:		Job #:	
Address: 7397 OH-7		City: Cheshire		State: OH, 45620	
Phone: 740-925-3171(Tel)		PO #: 2935505		Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Email: taylor.huffman@lightstonegen.com		WO #:		TAT Requested (days):	
Project Name: Federal CCR Wells - App IV		Project #: 24019633		Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/>	
Site: <i>Gavin Plant</i>		SSOW#:		Form Marked (Yes or No) <input checked="" type="checkbox"/>	
Sample Identification		Sample Date		Sample Time	
BAC-14-F-A4-20230818-c1		8-18-23		0959	
BAC-12-F-A4-20230818-c1		8-18-23		1056	
DIP-002-BAC-12-F-A4-20230818-c1		8-18-23		1056	
EB-001-F-A4-20230818-c1		8-18-23		1115	
Matrix (Water, Spew, Oil, Other)		Sample Type (C=comp, G=grab)		Preservation Code:	
Water		G		6	
Water		G		6	
Water		G		6	
Water		G		6	
Water		G		6	
Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/>		300.0, 28D - Fluoride		2320B - Alkalinity	
9315, Ra226, 9320, Ra228, Ra226Ra228, GPC		D N D		D N D	
Total Number of Containers		Special Instructions/Note:		Preservation Codes:	
X				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 Other:	
M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)		Special Instructions/OC Requirements:		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Return To Client <input type="checkbox"/>		Disposal By Lab <input type="checkbox"/>		Archive For _____ Months	
Possible Hazard Identification		Poison B <input type="checkbox"/>		Unknown <input type="checkbox"/>	
Non-Hazard <input type="checkbox"/>		Skin Irritant <input type="checkbox"/>		Flammable <input type="checkbox"/>	
Deliverable Requested: I, II, III, IV, Other (specify)		Empty Kit Relinquished by:		Date:	
Relinquished by: <i>[Signature]</i>		Date/Time: 8-21-23 / 0833		Company: KENRAN	
Relinquished by: <i>[Signature]</i>		Date/Time: 8-21-23 / 1700		Company: E7A	
Relinquished by: <i>[Signature]</i>		Date/Time: 8-21-23 / 1130		Company: E7A	
Custody Seals Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Custody Seal No.:		Date/Time: 8-22-23 800	
Company: E7A		Company: E7A		Company: E7A	



Barberton Facility

Client Light Stone Site Name Cooler unpacked by:
Cooler Received on 8-22-23 Opened on 8-22-23
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
IR GUN # 22 (CF 0.1 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

- 2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity leach 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# HC312502
14. Were VOAs on the COC? Yes No
15. Were air bubbles >6 mm in any VOA vials? Yes No NA Larger than this.
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:

Blank lines for Chain of Custody and Sample Discrepancies.

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:

Eurofins - Canton Sample Receipt Multiple Cooler Form

Cooler Description (Circle)				IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)		
<u>EC</u>	Client	Box	Other	IR GUN #: <u>22</u>	<u>1.2</u>	<u>1.1</u>	<u>Wet Ice</u>	Blue Ice	Dry Ice
<u>EC</u>	Client	Box	Other	IR GUN #: <u>22</u>	<u>1.6</u>	<u>1.5</u>	<u>Wet Ice</u>	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice

See Temperature Excursion Form

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container		Preservative	
			pH	Temp	Added (mls)	Lot #
BAC-14-F-A4-20230818-01	240-190489-C-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-14-F-A4-20230818-01	240-190489-D-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-14-F-A4-20230818-01	240-190489-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-12-F-A4-20230818-01	240-190489-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-12-F-A4-20230818-01	240-190489-D-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-12-F-A4-20230818-01	240-190489-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-002-BAC-12-F-A4-20230818-01	240-190489-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-002-BAC-12-F-A4-20230818-01	240-190489-D-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-002-BAC-12-F-A4-20230818-01	240-190489-E-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230818-01	240-190489-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230818-01	240-190489-D-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230818-01	240-190489-E-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____



Chain of Custody Record



Environment Testing



Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Carrier Tracking No(s):		COC No:
Client Contact:		Phone:	Cisneros, Roxanne	State of Origin:		240-172679.1
Shipping/Receiving		E-Mail:	roxanne.cisneros@et.eurofinsus.com	Ohio		Page 1 of 1
Company:		Accreditations Required (See note):				
TestAmerica Laboratories, Inc.		240-190489-1				
Address:		Due Date Requested:				
13715 Rider Trail North,		9/5/2023				
City:		TAT Requested (days):				
Earth City						
State, Zip:		PO #:				
MO, 63045		WO #:				
Phone:		Project #:				
314-298-8566(Tel) 314-298-8757(Fax)		24019633				
Email:		SSOW#:				
Project Name:		Field Filtered Sample (Yes or No)				
Federal GWM Wells						
Site:		Matrix (Water, Solid, Other/Soil, BT-Tissue, Air)				
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Preservation Code:	Special Instructions/Note:
BAC-14-F-A4-20230818-01 (240-190489-1)	8/18/23	09:59 Eastern	Water			Recount of TAR after 21 day ingrowth if > action limit, save planchet
BAC-12-F-A4-20230818-01 (240-190489-2)	8/18/23	10:56 Eastern	Water			Recount of TAR after 21 day ingrowth if > action limit, save planchet
DUP-002-BAC-12-F-A4-20230818-01 (240-190489-3)	8/18/23	10:56 Eastern	Water			Recount of TAR after 21 day ingrowth if > action limit, save planchet
EB-001-F-A4-20230818-01 (240-190489-4)	8/18/23	11:15 Eastern	Water			Recount of TAR after 21 day ingrowth if > action limit, save planchet
Total Number of Containers						2
9315 Ra226/PreSep_21 Radium-226 (GFPC)						2
9320 Ra228/PreSep_0 Radium-228 (GFPC)						2
Radium-228						2
Radium-228 GFPC/ Combined Radium-226 and Radium-228						2
Field Filtered Sample (Yes or No)						
Matrix (Water, Solid, Other/Soil, BT-Tissue, Air)						
Sample Type (C=comp, G=grab)						
Preservation Code:						
Sample Date						
Sample Time						
Sample Type (C=comp, G=grab)						
Preservation Code:						
Special Instructions/Note:						
Recount of TAR after 21 day ingrowth if > action limit, save planchet						
Recount of TAR after 21 day ingrowth if > action limit, save planchet						
Recount of TAR after 21 day ingrowth if > action limit, save planchet						
Recount of TAR after 21 day ingrowth if > action limit, save planchet						

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/test/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 Return To Client Disposal By Lab Archive For Months

Deliverable Requested: I, II, III, IV, Other (specify) _____ Primary Deliverable Rank: 2

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

Requested by: *[Signature]* Company: *ETN* Received by: *[Signature]* Date/Time: *8/20/23 9:00* Company: *ETN*

Relinquished by: *[Signature]* Company: *ETN* Received by: *[Signature]* Date/Time: *8/23/23 09:00* Company: *ETN*

Relinquished by: *[Signature]* Company: *ETN* Received by: *[Signature]* Date/Time: _____ Company: _____

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



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-190489-1

Login Number: 190489

List Number: 2

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

List Creation: 08/23/23 01:57 PM

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



 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 10/26/2023 10:00:39 AM

JOB DESCRIPTION

Federal CCR Wells - App III

JOB NUMBER

240-193489-1

Eurofins Cleveland

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

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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.

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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Job ID: 240-193489-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-193489-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample 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 10/12/2023 2:25 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 7 coolers at receipt time were 0.5°C, 0.6°C, 3.5°C, 3.6°C, 3.8°C, 19.8°C and 20.2°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 - App III

Job ID: 240-193489-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
SM 2540C	Solids, Total Dissolved (TDS)	SM	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
Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-193489-1	BAC-23-F-A3-20231010-01	Water	10/10/23 13:08	10/12/23 14:25
240-193489-2	BAC-08-F-A3-20231010-01	Water	10/10/23 14:37	10/12/23 14:25
240-193489-3	BAC-21-F-A3-20231011-01	Water	10/11/23 09:46	10/12/23 14:25
240-193489-4	BAC-22-F-A3-20231011-01	Water	10/11/23 10:59	10/12/23 14:25
240-193489-5	BAC-18-F-A3-20231011-01	Water	10/11/23 12:09	10/12/23 14:25
240-193489-6	DUP-001-F-A3-20231011-01	Water	10/11/23 00:00	10/12/23 14:25
240-193489-7	BAC-10-F-A3-20231011-01	Water	10/11/23 13:17	10/12/23 14:25
240-193489-8	BAC-16-F-A3-20231011-01	Water	10/11/23 14:29	10/12/23 14:25
240-193489-9	EB-001-F-A3-20231011-01	Water	10/11/23 15:00	10/12/23 14:25

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Client Sample ID: BAC-23-F-A3-20231010-01

Lab Sample ID: 240-193489-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	270		100	57	ug/L	1		6010D	Total Recoverable
Calcium	130000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	16000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	20000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	45		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.15		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	150		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	490		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-08-F-A3-20231010-01

Lab Sample ID: 240-193489-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	110		100	57	ug/L	1		6010D	Total Recoverable
Calcium	92000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	12000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	12000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	24		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.14		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	83		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	390		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-21-F-A3-20231011-01

Lab Sample ID: 240-193489-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	370		100	57	ug/L	1		6010D	Total Recoverable
Calcium	130000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	16000	F1	1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2800	F1	1000	220	ug/L	1		6020B	Total Recoverable
Sodium	30000	F1	1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	77		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.10		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	130		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	550		10	7.8	mg/L	1		SM 2540C	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 - App III

Job ID: 240-193489-1

Client Sample ID: BAC-22-F-A3-20231011-01

Lab Sample ID: 240-193489-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	220		100	57	ug/L	1		6010D	Total Recoverable
Calcium	150000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	19000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	19000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	38		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.090		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	240		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	580		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-18-F-A3-20231011-01

Lab Sample ID: 240-193489-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1300		100	57	ug/L	1		6010D	Total Recoverable
Calcium	76000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1200		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	87		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	87		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	25		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.075		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	390		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-001-F-A3-20231011-01

Lab Sample ID: 240-193489-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1400		100	57	ug/L	1		6010D	Total Recoverable
Calcium	77000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	88		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	88		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	25		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.064		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	380		10	7.8	mg/L	1		SM 2540C	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 - App III

Job ID: 240-193489-1

Client Sample ID: BAC-10-F-A3-20231011-01

Lab Sample ID: 240-193489-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	510		100	57	ug/L	1		6010D	Total Recoverable
Calcium	110000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	27000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	47000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	48		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.17		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	210		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	580		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-16-F-A3-20231011-01

Lab Sample ID: 240-193489-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1500		100	57	ug/L	1		6010D	Total Recoverable
Calcium	97000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	28		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.065		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	560		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-001-F-A3-20231011-01

Lab Sample ID: 240-193489-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	41		10	7.8	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Client Sample ID: BAC-23-F-A3-20231010-01

Lab Sample ID: 240-193489-1

Date Collected: 10/10/23 13:08

Matrix: Water

Date Received: 10/12/23 14:25

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	270		100	57	ug/L		10/16/23 14:00	10/18/23 00:06	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130000		1000	250	ug/L		10/16/23 14:00	10/17/23 21:08	1
Magnesium	16000		1000	61	ug/L		10/16/23 14:00	10/17/23 21:08	1
Potassium	2000		1000	220	ug/L		10/16/23 14:00	10/17/23 21:08	1
Sodium	20000		1000	330	ug/L		10/16/23 14:00	10/17/23 21:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230		5.0	2.6	mg/L			10/13/23 20:19	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230		5.0	2.6	mg/L			10/13/23 20:19	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 20:19	1
Chloride (EPA 300.0)	45		1.0	0.13	mg/L			10/18/23 20:34	1
Fluoride (EPA 300.0)	0.15		0.050	0.024	mg/L			10/18/23 20:34	1
Sulfate (EPA 300.0)	150		1.0	0.35	mg/L			10/18/23 20:34	1
Total Dissolved Solids (SM 2540C)	490		10	7.8	mg/L			10/16/23 14:12	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Client Sample ID: BAC-08-F-A3-20231010-01

Lab Sample ID: 240-193489-2

Date Collected: 10/10/23 14:37

Matrix: Water

Date Received: 10/12/23 14:25

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	110		100	57	ug/L		10/16/23 14:00	10/18/23 00:10	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	92000		1000	250	ug/L		10/16/23 14:00	10/17/23 21:10	1
Magnesium	12000		1000	61	ug/L		10/16/23 14:00	10/17/23 21:10	1
Potassium	1500		1000	220	ug/L		10/16/23 14:00	10/17/23 21:10	1
Sodium	12000		1000	330	ug/L		10/16/23 14:00	10/17/23 21:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	190		5.0	2.6	mg/L			10/13/23 20:32	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	190		5.0	2.6	mg/L			10/13/23 20:32	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 20:32	1
Chloride (EPA 300.0)	24		1.0	0.13	mg/L			10/18/23 17:53	1
Fluoride (EPA 300.0)	0.14		0.050	0.024	mg/L			10/18/23 17:53	1
Sulfate (EPA 300.0)	83		1.0	0.35	mg/L			10/18/23 17:53	1
Total Dissolved Solids (SM 2540C)	390		10	7.8	mg/L			10/16/23 14:12	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Client Sample ID: BAC-21-F-A3-20231011-01

Lab Sample ID: 240-193489-3

Date Collected: 10/11/23 09:46

Matrix: Water

Date Received: 10/12/23 14:25

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	370		100	57	ug/L		10/16/23 14:00	10/17/23 23:28	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130000		1000	250	ug/L		10/16/23 14:00	10/17/23 20:45	1
Magnesium	16000	F1	1000	61	ug/L		10/16/23 14:00	10/17/23 20:45	1
Potassium	2800	F1	1000	220	ug/L		10/16/23 14:00	10/17/23 20:45	1
Sodium	30000	F1	1000	330	ug/L		10/16/23 14:00	10/17/23 20:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			10/13/23 18:11	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			10/13/23 18:11	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 18:11	1
Chloride (EPA 300.0)	77		1.0	0.13	mg/L			10/18/23 23:56	1
Fluoride (EPA 300.0)	0.10		0.050	0.024	mg/L			10/18/23 23:56	1
Sulfate (EPA 300.0)	130		1.0	0.35	mg/L			10/18/23 23:56	1
Total Dissolved Solids (SM 2540C)	550		10	7.8	mg/L			10/18/23 09:05	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Client Sample ID: BAC-22-F-A3-20231011-01

Lab Sample ID: 240-193489-4

Date Collected: 10/11/23 10:59

Matrix: Water

Date Received: 10/12/23 14:25

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	220		100	57	ug/L		10/16/23 14:00	10/18/23 00:15	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	150000		1000	250	ug/L		10/16/23 14:00	10/17/23 21:13	1
Magnesium	19000		1000	61	ug/L		10/16/23 14:00	10/17/23 21:13	1
Potassium	2900		1000	220	ug/L		10/16/23 14:00	10/17/23 21:13	1
Sodium	19000		1000	330	ug/L		10/16/23 14:00	10/17/23 21:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230		5.0	2.6	mg/L			10/13/23 20:37	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230		5.0	2.6	mg/L			10/13/23 20:37	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 20:37	1
Chloride (EPA 300.0)	38		1.0	0.13	mg/L			10/20/23 19:19	1
Fluoride (EPA 300.0)	0.090		0.050	0.024	mg/L			10/20/23 19:19	1
Sulfate (EPA 300.0)	240		5.0	1.7	mg/L			10/20/23 19:39	5
Total Dissolved Solids (SM 2540C)	580		10	7.8	mg/L			10/18/23 09:19	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Client Sample ID: BAC-18-F-A3-20231011-01

Lab Sample ID: 240-193489-5

Date Collected: 10/11/23 12:09

Matrix: Water

Date Received: 10/12/23 14:25

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1300		100	57	ug/L		10/16/23 14:00	10/18/23 00:19	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	76000		1000	250	ug/L		10/16/23 14:00	10/17/23 21:15	1
Magnesium	20000		1000	61	ug/L		10/16/23 14:00	10/17/23 21:15	1
Potassium	1200		1000	220	ug/L		10/16/23 14:00	10/17/23 21:15	1
Sodium	16000		1000	330	ug/L		10/16/23 14:00	10/17/23 21:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	87		5.0	2.6	mg/L			10/13/23 18:51	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	87		5.0	2.6	mg/L			10/13/23 18:51	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 18:51	1
Chloride (EPA 300.0)	25		1.0	0.13	mg/L			10/20/23 14:37	1
Fluoride (EPA 300.0)	0.075		0.050	0.024	mg/L			10/20/23 14:37	1
Sulfate (EPA 300.0)	190		1.0	0.35	mg/L			10/20/23 14:37	1
Total Dissolved Solids (SM 2540C)	390		10	7.8	mg/L			10/18/23 09:19	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Client Sample ID: DUP-001-F-A3-20231011-01

Lab Sample ID: 240-193489-6

Date Collected: 10/11/23 00:00

Matrix: Water

Date Received: 10/12/23 14:25

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1400		100	57	ug/L		10/16/23 14:00	10/18/23 00:23	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	77000		1000	250	ug/L		10/16/23 14:00	10/18/23 15:22	1
Magnesium	20000		1000	61	ug/L		10/16/23 14:00	10/18/23 15:22	1
Potassium	1300		1000	220	ug/L		10/16/23 14:00	10/18/23 15:22	1
Sodium	16000		1000	330	ug/L		10/16/23 14:00	10/18/23 15:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	88		5.0	2.6	mg/L			10/13/23 18:46	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	88		5.0	2.6	mg/L			10/13/23 18:46	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 18:46	1
Chloride (EPA 300.0)	25		1.0	0.13	mg/L			10/20/23 15:37	1
Fluoride (EPA 300.0)	0.064		0.050	0.024	mg/L			10/20/23 15:37	1
Sulfate (EPA 300.0)	190		1.0	0.35	mg/L			10/20/23 15:37	1
Total Dissolved Solids (SM 2540C)	380		10	7.8	mg/L			10/18/23 09:19	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Client Sample ID: BAC-10-F-A3-20231011-01

Lab Sample ID: 240-193489-7

Date Collected: 10/11/23 13:17

Matrix: Water

Date Received: 10/12/23 14:25

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	510		100	57	ug/L		10/16/23 14:00	10/18/23 00:28	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110000		1000	250	ug/L		10/16/23 14:00	10/18/23 15:25	1
Magnesium	27000		1000	61	ug/L		10/16/23 14:00	10/18/23 15:25	1
Potassium	1600		1000	220	ug/L		10/16/23 14:00	10/18/23 15:25	1
Sodium	47000		1000	330	ug/L		10/16/23 14:00	10/18/23 15:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			10/13/23 18:41	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			10/13/23 18:41	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 18:41	1
Chloride (EPA 300.0)	48		1.0	0.13	mg/L			10/20/23 19:59	1
Fluoride (EPA 300.0)	0.17		0.050	0.024	mg/L			10/20/23 19:59	1
Sulfate (EPA 300.0)	210		5.0	1.7	mg/L			10/20/23 20:19	5
Total Dissolved Solids (SM 2540C)	580		10	7.8	mg/L			10/18/23 09:19	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Client Sample ID: BAC-16-F-A3-20231011-01

Lab Sample ID: 240-193489-8

Date Collected: 10/11/23 14:29

Matrix: Water

Date Received: 10/12/23 14:25

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1500		100	57	ug/L		10/16/23 14:00	10/18/23 00:40	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	97000		1000	250	ug/L		10/16/23 14:00	10/18/23 15:27	1
Magnesium	22000		1000	61	ug/L		10/16/23 14:00	10/18/23 15:27	1
Potassium	1800		1000	220	ug/L		10/16/23 14:00	10/18/23 15:27	1
Sodium	15000		1000	330	ug/L		10/16/23 14:00	10/18/23 15:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	160		5.0	2.6	mg/L			10/13/23 19:21	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	160		5.0	2.6	mg/L			10/13/23 19:21	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 19:21	1
Chloride (EPA 300.0)	28		1.0	0.13	mg/L			10/20/23 15:58	1
Fluoride (EPA 300.0)	0.065		0.050	0.024	mg/L			10/20/23 15:58	1
Sulfate (EPA 300.0)	190		1.0	0.35	mg/L			10/20/23 15:58	1
Total Dissolved Solids (SM 2540C)	560		10	7.8	mg/L			10/18/23 09:19	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Client Sample ID: EB-001-F-A3-20231011-01

Lab Sample ID: 240-193489-9

Date Collected: 10/11/23 15:00

Matrix: Water

Date Received: 10/12/23 14:25

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		10/16/23 14:00	10/18/23 00:45	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		10/16/23 14:00	10/18/23 15:30	1
Magnesium	ND		1000	61	ug/L		10/16/23 14:00	10/18/23 15:30	1
Potassium	ND		1000	220	ug/L		10/16/23 14:00	10/18/23 15:30	1
Sodium	ND		1000	330	ug/L		10/16/23 14:00	10/18/23 15:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 19:18	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 19:18	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 19:18	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			10/20/23 16:18	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			10/20/23 16:18	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			10/20/23 16:18	1
Total Dissolved Solids (SM 2540C)	41		10	7.8	mg/L			10/18/23 09:19	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-590940/1-A
Matrix: Water
Analysis Batch: 591127

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 590940

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		10/16/23 14:00	10/17/23 23:19	1

Lab Sample ID: LCS 240-590940/2-A
Matrix: Water
Analysis Batch: 591127

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 590940

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1030		ug/L		103	80 - 120

Lab Sample ID: 240-193489-3 MS
Matrix: Water
Analysis Batch: 591127

Client Sample ID: BAC-21-F-A3-20231011-01
Prep Type: Total Recoverable
Prep Batch: 590940

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	370		1000	1420		ug/L		105	75 - 125

Lab Sample ID: 240-193489-3 MSD
Matrix: Water
Analysis Batch: 591127

Client Sample ID: BAC-21-F-A3-20231011-01
Prep Type: Total Recoverable
Prep Batch: 590940

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Boron	370		1000	1430		ug/L		105	75 - 125	0	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-590940/1-A
Matrix: Water
Analysis Batch: 591232

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 590940

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		10/16/23 14:00	10/17/23 20:40	1
Magnesium	ND		1000	61	ug/L		10/16/23 14:00	10/17/23 20:40	1
Potassium	ND		1000	220	ug/L		10/16/23 14:00	10/17/23 20:40	1
Sodium	ND		1000	330	ug/L		10/16/23 14:00	10/17/23 20:40	1

Lab Sample ID: LCS 240-590940/3-A
Matrix: Water
Analysis Batch: 591232

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 590940

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	23000		ug/L		92	80 - 120
Magnesium	25000	24200		ug/L		97	80 - 120
Potassium	25000	24000		ug/L		96	80 - 120
Sodium	25000	24000		ug/L		96	80 - 120

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

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

Lab Sample ID: 240-193489-3 MS
Matrix: Water
Analysis Batch: 591232

Client Sample ID: BAC-21-F-A3-20231011-01
Prep Type: Total Recoverable
Prep Batch: 590940

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier				Limits	
Calcium	130000		25000	152000	4	ug/L		88	80 - 120	
Magnesium	16000	F1	25000	38600		ug/L		92	80 - 120	
Potassium	2800	F1	25000	26200		ug/L		93	80 - 120	
Sodium	30000	F1	25000	52800		ug/L		91	80 - 120	

Lab Sample ID: 240-193489-3 MSD
Matrix: Water
Analysis Batch: 591232

Client Sample ID: BAC-21-F-A3-20231011-01
Prep Type: Total Recoverable
Prep Batch: 590940

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec		RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits			
Calcium	130000		25000	140000	4	ug/L		39	80 - 120		8	20
Magnesium	16000	F1	25000	34200	F1	ug/L		74	80 - 120		12	20
Potassium	2800	F1	25000	22500	F1	ug/L		79	80 - 120		15	20
Sodium	30000	F1	25000	48300	F1	ug/L		73	80 - 120		9	20

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-590918/30
Matrix: Water
Analysis Batch: 590918

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			10/13/23 20:16	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/13/23 20:16	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/13/23 20:16	1

Lab Sample ID: MB 240-590918/4
Matrix: Water
Analysis Batch: 590918

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			10/13/23 18:07	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/13/23 18:07	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/13/23 18:07	1

Lab Sample ID: LCS 240-590918/29
Matrix: Water
Analysis Batch: 590918

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Total Alkalinity	80.6	80.7		mg/L		100	86 - 123	

Lab Sample ID: LCS 240-590918/3
Matrix: Water
Analysis Batch: 590918

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Total Alkalinity	80.6	82.0		mg/L		102	86 - 123	

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Method: 2320B-1997 - Alkalinity, Total (Continued)

Lab Sample ID: 240-193489-1 DU
Matrix: Water
Analysis Batch: 590918

Client Sample ID: BAC-23-F-A3-20231010-01
Prep Type: Total/NA

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	RPD
	Result	Qualifier	Result	Qualifier				
Total Alkalinity	230		230		mg/L		0.3	20
Bicarbonate Alkalinity as CaCO3	230		230		mg/L		0.3	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Lab Sample ID: 240-193489-3 DU
Matrix: Water
Analysis Batch: 590918

Client Sample ID: BAC-21-F-A3-20231011-01
Prep Type: Total/NA

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	RPD
	Result	Qualifier	Result	Qualifier				
Total Alkalinity	240		244		mg/L		0.4	20
Bicarbonate Alkalinity as CaCO3	240		244		mg/L		0.4	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-591263/3
Matrix: Water
Analysis Batch: 591263

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	ND		1.0	0.13	mg/L			10/18/23 11:30	1
Fluoride	ND		0.050	0.024	mg/L			10/18/23 11:30	1
Sulfate	ND		1.0	0.35	mg/L			10/18/23 11:30	1

Lab Sample ID: LCS 240-591263/4
Matrix: Water
Analysis Batch: 591263

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.74		mg/L		109	90 - 110
Sulfate	50.0	53.8		mg/L		108	90 - 110

Lab Sample ID: MB 240-591286/3
Matrix: Water
Analysis Batch: 591286

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	ND		1.0	0.13	mg/L			10/18/23 23:16	1
Fluoride	ND		0.050	0.024	mg/L			10/18/23 23:16	1
Sulfate	ND		1.0	0.35	mg/L			10/18/23 23:16	1

Lab Sample ID: LCS 240-591286/4
Matrix: Water
Analysis Batch: 591286

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.75		mg/L		110	90 - 110
Sulfate	50.0	53.6		mg/L		107	90 - 110

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 240-193489-3 MS
Matrix: Water
Analysis Batch: 591286

Client Sample ID: BAC-21-F-A3-20231011-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	77		50.0	126		mg/L		99	80 - 120
Fluoride	0.10		2.50	2.86		mg/L		111	80 - 120
Sulfate	130		50.0	180		mg/L		96	80 - 120

Lab Sample ID: 240-193489-3 MSD
Matrix: Water
Analysis Batch: 591286

Client Sample ID: BAC-21-F-A3-20231011-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	77		50.0	128		mg/L		102	80 - 120	1	15
Fluoride	0.10		2.50	2.97		mg/L		115	80 - 120	4	15
Sulfate	130		50.0	182		mg/L		100	80 - 120	1	15

Lab Sample ID: MB 240-591603/3
Matrix: Water
Analysis Batch: 591603

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			10/20/23 13:57	1
Fluoride	ND		0.050	0.024	mg/L			10/20/23 13:57	1
Sulfate	ND		1.0	0.35	mg/L			10/20/23 13:57	1

Lab Sample ID: LCS 240-591603/4
Matrix: Water
Analysis Batch: 591603

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.4		mg/L		103	90 - 110
Fluoride	2.50	2.74		mg/L		109	90 - 110
Sulfate	50.0	54.2		mg/L		108	90 - 110

Lab Sample ID: 240-193489-5 MS
Matrix: Water
Analysis Batch: 591603

Client Sample ID: BAC-18-F-A3-20231011-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25		50.0	77.3		mg/L		105	80 - 120
Fluoride	0.075		2.50	2.86		mg/L		111	80 - 120

Lab Sample ID: 240-193489-5 MSD
Matrix: Water
Analysis Batch: 591603

Client Sample ID: BAC-18-F-A3-20231011-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	25		50.0	77.9		mg/L		107	80 - 120	1	15
Fluoride	0.075		2.50	2.91		mg/L		113	80 - 120	2	15

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

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

Lab Sample ID: MB 240-590981/1
Matrix: Water
Analysis Batch: 590981

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			10/16/23 14:12	1

Lab Sample ID: LCS 240-590981/2
Matrix: Water
Analysis Batch: 590981

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	336	317		mg/L		94	80 - 120

Lab Sample ID: MB 240-591231/1
Matrix: Water
Analysis Batch: 591231

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			10/18/23 09:05	1

Lab Sample ID: LCS 240-591231/2
Matrix: Water
Analysis Batch: 591231

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	336	303		mg/L		90	80 - 120

Lab Sample ID: 240-193489-3 DU
Matrix: Water
Analysis Batch: 591231

Client Sample ID: BAC-21-F-A3-20231011-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	550		550		mg/L		0.7	20

Lab Sample ID: MB 240-591249/1
Matrix: Water
Analysis Batch: 591249

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			10/18/23 09:19	1

Lab Sample ID: LCS 240-591249/2
Matrix: Water
Analysis Batch: 591249

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	336	317		mg/L		94	80 - 120

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Metals

Prep Batch: 590940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193489-1	BAC-23-F-A3-20231010-01	Total Recoverable	Water	3005A	
240-193489-2	BAC-08-F-A3-20231010-01	Total Recoverable	Water	3005A	
240-193489-3	BAC-21-F-A3-20231011-01	Total Recoverable	Water	3005A	
240-193489-4	BAC-22-F-A3-20231011-01	Total Recoverable	Water	3005A	
240-193489-5	BAC-18-F-A3-20231011-01	Total Recoverable	Water	3005A	
240-193489-6	DUP-001-F-A3-20231011-01	Total Recoverable	Water	3005A	
240-193489-7	BAC-10-F-A3-20231011-01	Total Recoverable	Water	3005A	
240-193489-8	BAC-16-F-A3-20231011-01	Total Recoverable	Water	3005A	
240-193489-9	EB-001-F-A3-20231011-01	Total Recoverable	Water	3005A	
MB 240-590940/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-590940/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-590940/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-193489-3 MS	BAC-21-F-A3-20231011-01	Total Recoverable	Water	3005A	
240-193489-3 MS	BAC-21-F-A3-20231011-01	Total Recoverable	Water	3005A	
240-193489-3 MSD	BAC-21-F-A3-20231011-01	Total Recoverable	Water	3005A	
240-193489-3 MSD	BAC-21-F-A3-20231011-01	Total Recoverable	Water	3005A	

Analysis Batch: 591127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193489-1	BAC-23-F-A3-20231010-01	Total Recoverable	Water	6010D	590940
240-193489-2	BAC-08-F-A3-20231010-01	Total Recoverable	Water	6010D	590940
240-193489-3	BAC-21-F-A3-20231011-01	Total Recoverable	Water	6010D	590940
240-193489-4	BAC-22-F-A3-20231011-01	Total Recoverable	Water	6010D	590940
240-193489-5	BAC-18-F-A3-20231011-01	Total Recoverable	Water	6010D	590940
240-193489-6	DUP-001-F-A3-20231011-01	Total Recoverable	Water	6010D	590940
240-193489-7	BAC-10-F-A3-20231011-01	Total Recoverable	Water	6010D	590940
240-193489-8	BAC-16-F-A3-20231011-01	Total Recoverable	Water	6010D	590940
240-193489-9	EB-001-F-A3-20231011-01	Total Recoverable	Water	6010D	590940
MB 240-590940/1-A	Method Blank	Total Recoverable	Water	6010D	590940
LCS 240-590940/2-A	Lab Control Sample	Total Recoverable	Water	6010D	590940
240-193489-3 MS	BAC-21-F-A3-20231011-01	Total Recoverable	Water	6010D	590940
240-193489-3 MSD	BAC-21-F-A3-20231011-01	Total Recoverable	Water	6010D	590940

Analysis Batch: 591232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193489-1	BAC-23-F-A3-20231010-01	Total Recoverable	Water	6020B	590940
240-193489-2	BAC-08-F-A3-20231010-01	Total Recoverable	Water	6020B	590940
240-193489-3	BAC-21-F-A3-20231011-01	Total Recoverable	Water	6020B	590940
240-193489-4	BAC-22-F-A3-20231011-01	Total Recoverable	Water	6020B	590940
240-193489-5	BAC-18-F-A3-20231011-01	Total Recoverable	Water	6020B	590940
MB 240-590940/1-A	Method Blank	Total Recoverable	Water	6020B	590940
LCS 240-590940/3-A	Lab Control Sample	Total Recoverable	Water	6020B	590940
240-193489-3 MS	BAC-21-F-A3-20231011-01	Total Recoverable	Water	6020B	590940
240-193489-3 MSD	BAC-21-F-A3-20231011-01	Total Recoverable	Water	6020B	590940

Analysis Batch: 591382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193489-6	DUP-001-F-A3-20231011-01	Total Recoverable	Water	6020B	590940
240-193489-7	BAC-10-F-A3-20231011-01	Total Recoverable	Water	6020B	590940
240-193489-8	BAC-16-F-A3-20231011-01	Total Recoverable	Water	6020B	590940
240-193489-9	EB-001-F-A3-20231011-01	Total Recoverable	Water	6020B	590940

Eurofins Cleveland

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

General Chemistry

Analysis Batch: 590918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193489-1	BAC-23-F-A3-20231010-01	Total/NA	Water	2320B-1997	
240-193489-2	BAC-08-F-A3-20231010-01	Total/NA	Water	2320B-1997	
240-193489-3	BAC-21-F-A3-20231011-01	Total/NA	Water	2320B-1997	
240-193489-4	BAC-22-F-A3-20231011-01	Total/NA	Water	2320B-1997	
240-193489-5	BAC-18-F-A3-20231011-01	Total/NA	Water	2320B-1997	
240-193489-6	DUP-001-F-A3-20231011-01	Total/NA	Water	2320B-1997	
240-193489-7	BAC-10-F-A3-20231011-01	Total/NA	Water	2320B-1997	
240-193489-8	BAC-16-F-A3-20231011-01	Total/NA	Water	2320B-1997	
240-193489-9	EB-001-F-A3-20231011-01	Total/NA	Water	2320B-1997	
MB 240-590918/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-590918/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-590918/29	Lab Control Sample	Total/NA	Water	2320B-1997	
LCS 240-590918/3	Lab Control Sample	Total/NA	Water	2320B-1997	
240-193489-1 DU	BAC-23-F-A3-20231010-01	Total/NA	Water	2320B-1997	
240-193489-3 DU	BAC-21-F-A3-20231011-01	Total/NA	Water	2320B-1997	

Analysis Batch: 590981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193489-1	BAC-23-F-A3-20231010-01	Total/NA	Water	SM 2540C	
240-193489-2	BAC-08-F-A3-20231010-01	Total/NA	Water	SM 2540C	
MB 240-590981/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-590981/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 591231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193489-3	BAC-21-F-A3-20231011-01	Total/NA	Water	SM 2540C	
MB 240-591231/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-591231/2	Lab Control Sample	Total/NA	Water	SM 2540C	
240-193489-3 DU	BAC-21-F-A3-20231011-01	Total/NA	Water	SM 2540C	

Analysis Batch: 591249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193489-4	BAC-22-F-A3-20231011-01	Total/NA	Water	SM 2540C	
240-193489-5	BAC-18-F-A3-20231011-01	Total/NA	Water	SM 2540C	
240-193489-6	DUP-001-F-A3-20231011-01	Total/NA	Water	SM 2540C	
240-193489-7	BAC-10-F-A3-20231011-01	Total/NA	Water	SM 2540C	
240-193489-8	BAC-16-F-A3-20231011-01	Total/NA	Water	SM 2540C	
240-193489-9	EB-001-F-A3-20231011-01	Total/NA	Water	SM 2540C	
MB 240-591249/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-591249/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 591263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193489-1	BAC-23-F-A3-20231010-01	Total/NA	Water	300.0	
240-193489-2	BAC-08-F-A3-20231010-01	Total/NA	Water	300.0	
MB 240-591263/3	Method Blank	Total/NA	Water	300.0	
LCS 240-591263/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 591286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193489-3	BAC-21-F-A3-20231011-01	Total/NA	Water	300.0	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

General Chemistry (Continued)

Analysis Batch: 591286 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-591286/3	Method Blank	Total/NA	Water	300.0	
LCS 240-591286/4	Lab Control Sample	Total/NA	Water	300.0	
240-193489-3 MS	BAC-21-F-A3-20231011-01	Total/NA	Water	300.0	
240-193489-3 MSD	BAC-21-F-A3-20231011-01	Total/NA	Water	300.0	

Analysis Batch: 591603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193489-4	BAC-22-F-A3-20231011-01	Total/NA	Water	300.0	
240-193489-4	BAC-22-F-A3-20231011-01	Total/NA	Water	300.0	
240-193489-5	BAC-18-F-A3-20231011-01	Total/NA	Water	300.0	
240-193489-6	DUP-001-F-A3-20231011-01	Total/NA	Water	300.0	
240-193489-7	BAC-10-F-A3-20231011-01	Total/NA	Water	300.0	
240-193489-7	BAC-10-F-A3-20231011-01	Total/NA	Water	300.0	
240-193489-8	BAC-16-F-A3-20231011-01	Total/NA	Water	300.0	
240-193489-9	EB-001-F-A3-20231011-01	Total/NA	Water	300.0	
MB 240-591603/3	Method Blank	Total/NA	Water	300.0	
LCS 240-591603/4	Lab Control Sample	Total/NA	Water	300.0	
240-193489-5 MS	BAC-18-F-A3-20231011-01	Total/NA	Water	300.0	
240-193489-5 MSD	BAC-18-F-A3-20231011-01	Total/NA	Water	300.0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Client Sample ID: BAC-23-F-A3-20231010-01

Lab Sample ID: 240-193489-1

Date Collected: 10/10/23 13:08

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6010D		1	591127	KLC	EET CLE	10/18/23 00:06
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 21:08
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 20:19
Total/NA	Analysis	300.0		1	591263	JWW	EET CLE	10/18/23 20:34
Total/NA	Analysis	SM 2540C		1	590981	QUY8	EET CLE	10/16/23 14:12

Client Sample ID: BAC-08-F-A3-20231010-01

Lab Sample ID: 240-193489-2

Date Collected: 10/10/23 14:37

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6010D		1	591127	KLC	EET CLE	10/18/23 00:10
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 21:10
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 20:32
Total/NA	Analysis	300.0		1	591263	JWW	EET CLE	10/18/23 17:53
Total/NA	Analysis	SM 2540C		1	590981	QUY8	EET CLE	10/16/23 14:12

Client Sample ID: BAC-21-F-A3-20231011-01

Lab Sample ID: 240-193489-3

Date Collected: 10/11/23 09:46

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6010D		1	591127	KLC	EET CLE	10/17/23 23:28
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 20:45
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 18:11
Total/NA	Analysis	300.0		1	591286	JWW	EET CLE	10/18/23 23:56
Total/NA	Analysis	SM 2540C		1	591231	QUY8	EET CLE	10/18/23 09:05

Client Sample ID: BAC-22-F-A3-20231011-01

Lab Sample ID: 240-193489-4

Date Collected: 10/11/23 10:59

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6010D		1	591127	KLC	EET CLE	10/18/23 00:15
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 21:13
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 20:37

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Client Sample ID: BAC-22-F-A3-20231011-01

Lab Sample ID: 240-193489-4

Date Collected: 10/11/23 10:59

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	591603	JWW	EET CLE	10/20/23 19:19
Total/NA	Analysis	300.0		5	591603	JWW	EET CLE	10/20/23 19:39
Total/NA	Analysis	SM 2540C		1	591249	QUY8	EET CLE	10/18/23 09:19

Client Sample ID: BAC-18-F-A3-20231011-01

Lab Sample ID: 240-193489-5

Date Collected: 10/11/23 12:09

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6010D		1	591127	KLC	EET CLE	10/18/23 00:19
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 21:15
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 18:51
Total/NA	Analysis	300.0		1	591603	JWW	EET CLE	10/20/23 14:37
Total/NA	Analysis	SM 2540C		1	591249	QUY8	EET CLE	10/18/23 09:19

Client Sample ID: DUP-001-F-A3-20231011-01

Lab Sample ID: 240-193489-6

Date Collected: 10/11/23 00:00

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6010D		1	591127	KLC	EET CLE	10/18/23 00:23
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591382	RKT	EET CLE	10/18/23 15:22
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 18:46
Total/NA	Analysis	300.0		1	591603	JWW	EET CLE	10/20/23 15:37
Total/NA	Analysis	SM 2540C		1	591249	QUY8	EET CLE	10/18/23 09:19

Client Sample ID: BAC-10-F-A3-20231011-01

Lab Sample ID: 240-193489-7

Date Collected: 10/11/23 13:17

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6010D		1	591127	KLC	EET CLE	10/18/23 00:28
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591382	RKT	EET CLE	10/18/23 15:25
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 18:41
Total/NA	Analysis	300.0		1	591603	JWW	EET CLE	10/20/23 19:59
Total/NA	Analysis	300.0		5	591603	JWW	EET CLE	10/20/23 20:19
Total/NA	Analysis	SM 2540C		1	591249	QUY8	EET CLE	10/18/23 09:19

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Client Sample ID: BAC-16-F-A3-20231011-01

Lab Sample ID: 240-193489-8

Date Collected: 10/11/23 14:29

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6010D		1	591127	KLC	EET CLE	10/18/23 00:40
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591382	RKT	EET CLE	10/18/23 15:27
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 19:21
Total/NA	Analysis	300.0		1	591603	JWW	EET CLE	10/20/23 15:58
Total/NA	Analysis	SM 2540C		1	591249	QUY8	EET CLE	10/18/23 09:19

Client Sample ID: EB-001-F-A3-20231011-01

Lab Sample ID: 240-193489-9

Date Collected: 10/11/23 15:00

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6010D		1	591127	KLC	EET CLE	10/18/23 00:45
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591382	RKT	EET CLE	10/18/23 15:30
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 19:18
Total/NA	Analysis	300.0		1	591603	JWW	EET CLE	10/20/23 16:18
Total/NA	Analysis	SM 2540C		1	591249	QUY8	EET CLE	10/18/23 09:19

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
Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Laboratory: Eurofins Cleveland

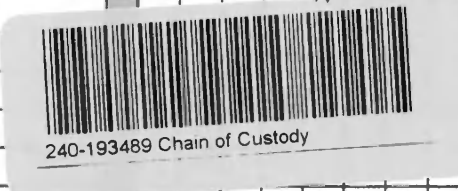
All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
Virginia	NELAP	460175	09-14-24
West Virginia DEP	State	210	12-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Chain of Custody Record

Client Information		Sampler: <i>Bobby Ciste</i>		Lab PM: Cisneros, Roxanne		Carrier Tracking No(s):		COC No: 240-93465-34577.1	
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:						Job #:	
Address: 7397 OH-7		City: Cheshire		State: OH, 45620		Due Date Requested:		Analysis Requested	
Phone: 740-925-3171(Tel)		TAT Requested (days):		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		Field Filtered Sample (Yes or No)		Total Number of Containers	
Email: taylor.huffman@lightstonegen.com		PO #: 2935505		WO #:		601B, 6020		2540C, Calcd, 300.0, 28D	
Project Name: Federal CCR Wells - App III		Project #: 24019633		SSOW#:		2320B - Alkalinity		2320B - Alkalinity	
Site: <i>GALH</i>									
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Sludge, Other)	Field Filtered Sample (Yes or No)	Preservation Code:	D	N	I
BAC-23-F-A3-20231010-01	10-10-23	1308	G	W	W	W			
BAC-08-F-A3-20231010-01	10-10-23	1437	G	W	W	W			
BAC-21-F-A3-20231011-01	10-11-23	0946	G	W	W	W			
BAC-21-F-A3-20231011-MS-01	10-11-23	0946	G	W	W	W			
BAC-21-F-A3-20231011-MSD-01	10-11-23	0946	G	W	W	W			
BAC-22-F-A3-20231011-01	10-11-23	1059	G	W	W	W			
BAC-18-F-A3-20231011-01	10-11-23	1209	G	W	W	W			
DUP-001-F-A3-20231011-01	10-11-23	-	G	W	W	W			
BAC-10-F-A3-20231011-01	10-11-23	1317	G	W	W	W			
ISAC-16-F-A3-20231011-01	10-11-23	1429	G	W	W	W			
EB-001-F-A3-20231011-01	10-11-23	1500	G	W	W	W			
Possible Hazard Identification									
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological									
Deliverable Requested: I, II, III, IV, Other (specify)									
Empty Kit Relinquished by:									
Relinquished by: <i>Bobby Ciste</i> Date: 10-12-23 / 0900									
Relinquished by: <i>HL</i> Date: 10-12-23 / 1430									
Relinquished by:									
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No									
Custody Seal No.:									
Cooler Temperature(s) °C and Other Remarks:									
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)									
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months									
Special Instructions/QC Requirements:									
Method of Shipment:									
Date/Time: 10-12-23 1230									
Date/Time: 10-12-23 1435									
Date/Time:									
Company: <i>Lightstone</i>									
Company: <i>FC</i>									



Eurofins - Cleveland Sample Receipt Form/Narrative
Barberton Facility

Login # : 193489

Client Lightstone Site Name _____
Cooler Received on 10-12-23 Opened on 10-13-23 Cooler unpacked by: Nancy Rye
FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

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

Eurofins Cooler # E5 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 -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 each
 - 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 NA
 - 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# HC316719
 14. Were VOAs on the COC? Yes No
 15. Were air bubbles >6 mm in any VOA vials? Yes No NA Larger than this.
 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: _____



Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-23-F-A3-20231010-01	240-193489-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-08-F-A3-20231010-01	240-193489-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-21-F-A3-20231011-01	240-193489-G-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-21-F-A3-20231011-01	240-193489-H-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-21-F-A3-20231011-01	240-193489-I-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-22-F-A3-20231011-01	240-193489-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-18-F-A3-20231011-01	240-193489-C-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-001-F-A3-20231011-01	240-193489-C-6	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-10-F-A3-20231011-01	240-193489-C-7	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-16-F-A3-20231011-01	240-193489-C-8	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A3-20231011-01	240-193489-C-9	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____

 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 11/10/2023 2:09:08 PM

JOB DESCRIPTION

Federal CCR Wells - App IV

JOB NUMBER

240-193490-1

Eurofins Cleveland

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
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

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.

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.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Job ID: 240-193490-1

Laboratory: Eurofins Cleveland

Narrative

**Job Narrative
240-193490-1**

Receipt

The samples were received on 10/12/2023 2:25 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 7 coolers at receipt time were 0.5° C, 0.6° C, 3.5° C, 3.6° C, 3.8° C, 19.8° C and 20.2° C.

RAD

Methods 9320: Radium-228 prep batch 160-632173: The following sample(s) did not meet the requested limit (RL) due to the reduced sample volume attributed to the presence of matrix interference. During preparation the analyst visually noted matrix effects. The data have been reported with this narrative. BAC-21-F-A4-20231011-01 (240-193490-3)

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

Metals

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

General Chemistry

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



Method Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0-1993 R2.1	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 - App IV

Job ID: 240-193490-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-193490-1	BAC-23-F-A4-20231010-01	Water	10/10/23 13:08	10/12/23 14:25
240-193490-2	BAC-08-F-A4-20231010-01	Water	10/10/23 14:37	10/12/23 14:25
240-193490-3	BAC-21-F-A4-20231011-01	Water	10/11/23 09:46	10/12/23 14:25
240-193490-4	BAC-22-F-A4-20231011-01	Water	10/11/23 10:59	10/12/23 14:25
240-193490-5	BAC-18-F-A4-20231011-01	Water	10/11/23 12:09	10/12/23 14:25
240-193490-6	DUP-001-F-A4-20231011-01	Water	10/11/23 00:00	10/12/23 14:25
240-193490-7	BAC-10-F-A4-20231011-01	Water	10/11/23 13:17	10/12/23 14:25
240-193490-8	BAC-16-F-A4-20231011-01	Water	10/11/23 14:29	10/12/23 14:25
240-193490-9	EB-001-F-A4-20231011-01	Water	10/11/23 15:00	10/12/23 14:25

- 1
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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-23-F-A4-20231010-01

Lab Sample ID: 240-193490-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.9	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	130		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.94	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	4.9	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	15000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	19000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.20	J B	1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.12		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-08-F-A4-20231010-01

Lab Sample ID: 240-193490-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.4	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	110		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.6		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	4.9	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	12000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	12000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.11		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-21-F-A4-20231011-01

Lab Sample ID: 240-193490-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	6.0		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	170		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	3.8	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.7		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	2.9		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	8.7		8.0	1.7	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 - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-21-F-A4-20231011-01 (Continued)

Lab Sample ID: 240-193490-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	15000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	27000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.10		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-22-F-A4-20231011-01

Lab Sample ID: 240-193490-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.3	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	140		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	1.3	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.2		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.4		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.8	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	19000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	19000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.070		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-18-F-A4-20231011-01

Lab Sample ID: 240-193490-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	26		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.2		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	8.2		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	88		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	88		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.030	J	0.050	0.024	mg/L	1		300.0-1993 R2.1	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 - App IV

Job ID: 240-193490-1

Client Sample ID: DUP-001-F-A4-20231011-01

Lab Sample ID: 240-193490-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	24		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	7.4	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	18000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1200		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	88		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	88		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.051		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-10-F-A4-20231011-01

Lab Sample ID: 240-193490-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.4	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	39		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	1.5	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.4		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.2		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	5.9	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	26000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	45000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.15		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-16-F-A4-20231011-01

Lab Sample ID: 240-193490-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.1	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	46		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.6		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.1		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	7.8	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	61	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 - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-16-F-A4-20231011-01 (Continued)

Lab Sample ID: 240-193490-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	1600		1000	220	ug/L	1		6020B	Total
									Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total
									Recoverable
Total Alkalinity	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.044	J	0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: EB-001-F-A4-20231011-01

Lab Sample ID: 240-193490-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity	3.0	J	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	3.0	J	5.0	2.6	mg/L	1		2320B-1997	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland



Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-23-F-A4-20231010-01

Lab Sample ID: 240-193490-1

Date Collected: 10/10/23 13:08

Matrix: Water

Date Received: 10/12/23 14:25

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		10/13/23 14:00	10/16/23 18:37	1
Arsenic	1.9	J	5.0	0.75	ug/L		10/13/23 14:00	10/16/23 18:37	1
Barium	130		5.0	2.2	ug/L		10/13/23 14:00	10/16/23 18:37	1
Beryllium	ND		1.0	0.62	ug/L		10/13/23 14:00	10/16/23 18:37	1
Cadmium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:37	1
Chromium	ND		5.0	1.2	ug/L		10/13/23 14:00	10/16/23 18:37	1
Cobalt	0.94	J	1.0	0.19	ug/L		10/13/23 14:00	10/16/23 18:37	1
Lead	ND		1.0	0.45	ug/L		10/13/23 14:00	10/16/23 18:37	1
Lithium	4.9	J	8.0	1.7	ug/L		10/13/23 14:00	10/17/23 18:23	1
Magnesium	15000		1000	61	ug/L		10/13/23 14:00	10/16/23 18:37	1
Molybdenum	ND		5.0	1.1	ug/L		10/13/23 14:00	10/16/23 18:37	1
Potassium	1900		1000	220	ug/L		10/13/23 14:00	10/16/23 18:37	1
Selenium	ND		5.0	0.89	ug/L		10/13/23 14:00	10/16/23 18:37	1
Sodium	19000		1000	330	ug/L		10/13/23 14:00	10/16/23 18:37	1
Thallium	0.20	J B	1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:37	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		10/13/23 14:00	10/17/23 13:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230		5.0	2.6	mg/L			10/13/23 18:21	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230		5.0	2.6	mg/L			10/13/23 18:21	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 18:21	1
Fluoride (EPA 300.0-1993 R2.1)	0.12		0.050	0.024	mg/L			10/31/23 17:57	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	0.252		0.105	0.108	1.00	0.103	pCi/L	10/17/23 10:23	11/08/23 13:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.4		30 - 110					10/17/23 10:23	11/08/23 13:28	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	0.729		0.441	0.446	1.00	0.657	pCi/L	10/17/23 10:26	11/03/23 11:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.4		30 - 110					10/17/23 10:26	11/03/23 11:36	1
Y Carrier	75.9		30 - 110					10/17/23 10:26	11/03/23 11:36	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-23-F-A4-20231010-01

Lab Sample ID: 240-193490-1

Date Collected: 10/10/23 13:08

Matrix: Water

Date Received: 10/12/23 14:25

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	0.981		0.453	0.459	5.00	0.657	pCi/L		11/10/23 09:28	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-08-F-A4-20231010-01

Lab Sample ID: 240-193490-2

Date Collected: 10/10/23 14:37

Matrix: Water

Date Received: 10/12/23 14:25

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		10/13/23 14:00	10/16/23 18:40	1
Arsenic	1.4	J	5.0	0.75	ug/L		10/13/23 14:00	10/16/23 18:40	1
Barium	110		5.0	2.2	ug/L		10/13/23 14:00	10/16/23 18:40	1
Beryllium	ND		1.0	0.62	ug/L		10/13/23 14:00	10/16/23 18:40	1
Cadmium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:40	1
Chromium	ND		5.0	1.2	ug/L		10/13/23 14:00	10/16/23 18:40	1
Cobalt	1.6		1.0	0.19	ug/L		10/13/23 14:00	10/16/23 18:40	1
Lead	ND		1.0	0.45	ug/L		10/13/23 14:00	10/16/23 18:40	1
Lithium	4.9	J	8.0	1.7	ug/L		10/13/23 14:00	10/17/23 18:26	1
Magnesium	12000		1000	61	ug/L		10/13/23 14:00	10/16/23 18:40	1
Molybdenum	ND		5.0	1.1	ug/L		10/13/23 14:00	10/16/23 18:40	1
Potassium	1400		1000	220	ug/L		10/13/23 14:00	10/16/23 18:40	1
Selenium	ND		5.0	0.89	ug/L		10/13/23 14:00	10/16/23 18:40	1
Sodium	12000		1000	330	ug/L		10/13/23 14:00	10/16/23 18:40	1
Thallium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:40	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		10/13/23 14:00	10/17/23 13:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	190		5.0	2.6	mg/L			10/13/23 18:26	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	190		5.0	2.6	mg/L			10/13/23 18:26	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 18:26	1
Fluoride (EPA 300.0-1993 R2.1)	0.11		0.050	0.024	mg/L			10/31/23 18:18	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.139	U	0.115	0.115	1.00	0.167	pCi/L	10/17/23 10:23	11/08/23 13:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.4		30 - 110					10/17/23 10:23	11/08/23 13:35	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.375	U	0.498	0.499	1.00	0.832	pCi/L	10/17/23 10:26	11/03/23 11:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.4		30 - 110					10/17/23 10:26	11/03/23 11:36	1
Y Carrier	74.0		30 - 110					10/17/23 10:26	11/03/23 11:36	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-08-F-A4-20231010-01

Lab Sample ID: 240-193490-2

Date Collected: 10/10/23 14:37

Matrix: Water

Date Received: 10/12/23 14:25

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	0.515	U	0.511	0.512	5.00	0.832	pCi/L		11/10/23 09:28	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-21-F-A4-20231011-01

Lab Sample ID: 240-193490-3

Date Collected: 10/11/23 09:46

Matrix: Water

Date Received: 10/12/23 14:25

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		10/13/23 14:00	10/16/23 18:20	1
Arsenic	6.0		5.0	0.75	ug/L		10/13/23 14:00	10/16/23 18:20	1
Barium	170		5.0	2.2	ug/L		10/13/23 14:00	10/16/23 18:20	1
Beryllium	ND		1.0	0.62	ug/L		10/13/23 14:00	10/16/23 18:20	1
Cadmium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:20	1
Chromium	3.8	J	5.0	1.2	ug/L		10/13/23 14:00	10/16/23 18:20	1
Cobalt	1.7		1.0	0.19	ug/L		10/13/23 14:00	10/16/23 18:20	1
Lead	2.9		1.0	0.45	ug/L		10/13/23 14:00	10/16/23 18:20	1
Lithium	8.7		8.0	1.7	ug/L		10/13/23 14:00	10/17/23 18:08	1
Magnesium	15000		1000	61	ug/L		10/13/23 14:00	10/16/23 18:20	1
Molybdenum	ND		5.0	1.1	ug/L		10/13/23 14:00	10/16/23 18:20	1
Potassium	2400		1000	220	ug/L		10/13/23 14:00	10/16/23 18:20	1
Selenium	ND		5.0	0.89	ug/L		10/13/23 14:00	10/16/23 18:20	1
Sodium	27000		1000	330	ug/L		10/13/23 14:00	10/16/23 18:20	1
Thallium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:20	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		10/13/23 14:00	10/17/23 13:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			10/13/23 19:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			10/13/23 19:06	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 19:06	1
Fluoride (EPA 300.0-1993 R2.1)	0.10		0.050	0.024	mg/L			11/02/23 10:55	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.527		0.210	0.215	1.00	0.228	pCi/L	10/17/23 10:23	11/08/23 13:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	70.4		30 - 110					10/17/23 10:23	11/08/23 13:35	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	1.31	G	0.730	0.740	1.00	1.05	pCi/L	10/17/23 10:26	11/03/23 11:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	70.4		30 - 110					10/17/23 10:26	11/03/23 11:36	1
Y Carrier	77.8		30 - 110					10/17/23 10:26	11/03/23 11:36	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-21-F-A4-20231011-01

Lab Sample ID: 240-193490-3

Date Collected: 10/11/23 09:46

Matrix: Water

Date Received: 10/12/23 14:25

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	1.84		0.760	0.771	5.00	1.05	pCi/L		11/10/23 09:28	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-22-F-A4-20231011-01

Lab Sample ID: 240-193490-4

Date Collected: 10/11/23 10:59

Matrix: Water

Date Received: 10/12/23 14:25

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		10/13/23 14:00	10/16/23 18:42	1
Arsenic	2.3	J	5.0	0.75	ug/L		10/13/23 14:00	10/16/23 18:42	1
Barium	140		5.0	2.2	ug/L		10/13/23 14:00	10/16/23 18:42	1
Beryllium	ND		1.0	0.62	ug/L		10/13/23 14:00	10/16/23 18:42	1
Cadmium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:42	1
Chromium	1.3	J	5.0	1.2	ug/L		10/13/23 14:00	10/16/23 18:42	1
Cobalt	1.2		1.0	0.19	ug/L		10/13/23 14:00	10/16/23 18:42	1
Lead	1.4		1.0	0.45	ug/L		10/13/23 14:00	10/16/23 18:42	1
Lithium	6.8	J	8.0	1.7	ug/L		10/13/23 14:00	10/17/23 18:28	1
Magnesium	19000		1000	61	ug/L		10/13/23 14:00	10/16/23 18:42	1
Molybdenum	ND		5.0	1.1	ug/L		10/13/23 14:00	10/16/23 18:42	1
Potassium	2800		1000	220	ug/L		10/13/23 14:00	10/16/23 18:42	1
Selenium	ND		5.0	0.89	ug/L		10/13/23 14:00	10/16/23 18:42	1
Sodium	19000		1000	330	ug/L		10/13/23 14:00	10/16/23 18:42	1
Thallium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:42	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		10/13/23 14:00	10/17/23 13:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230		5.0	2.6	mg/L			10/13/23 19:36	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230		5.0	2.6	mg/L			10/13/23 19:36	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 19:36	1
Fluoride (EPA 300.0-1993 R2.1)	0.070		0.050	0.024	mg/L			10/31/23 18:38	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	0.176	U	0.143	0.144	1.00	0.216	pCi/L	10/17/23 10:23	11/08/23 13:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.2		30 - 110					10/17/23 10:23	11/08/23 13:36	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	1.05		0.610	0.618	1.00	0.890	pCi/L	10/17/23 10:26	11/03/23 11:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.2		30 - 110					10/17/23 10:26	11/03/23 11:37	1
Y Carrier	72.1		30 - 110					10/17/23 10:26	11/03/23 11:37	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-22-F-A4-20231011-01

Lab Sample ID: 240-193490-4

Date Collected: 10/11/23 10:59

Matrix: Water

Date Received: 10/12/23 14:25

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	1.23		0.627	0.635	5.00	0.890	pCi/L		11/10/23 09:28	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-18-F-A4-20231011-01

Lab Sample ID: 240-193490-5

Date Collected: 10/11/23 12:09

Matrix: Water

Date Received: 10/12/23 14:25

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		10/13/23 14:00	10/16/23 18:50	1
Arsenic	ND		5.0	0.75	ug/L		10/13/23 14:00	10/16/23 18:50	1
Barium	26		5.0	2.2	ug/L		10/13/23 14:00	10/16/23 18:50	1
Beryllium	ND		1.0	0.62	ug/L		10/13/23 14:00	10/16/23 18:50	1
Cadmium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:50	1
Chromium	ND		5.0	1.2	ug/L		10/13/23 14:00	10/16/23 18:50	1
Cobalt	1.2		1.0	0.19	ug/L		10/13/23 14:00	10/16/23 18:50	1
Lead	ND		1.0	0.45	ug/L		10/13/23 14:00	10/16/23 18:50	1
Lithium	8.2		8.0	1.7	ug/L		10/13/23 14:00	10/17/23 18:31	1
Magnesium	20000		1000	61	ug/L		10/13/23 14:00	10/16/23 18:50	1
Molybdenum	ND		5.0	1.1	ug/L		10/13/23 14:00	10/16/23 18:50	1
Potassium	1300		1000	220	ug/L		10/13/23 14:00	10/16/23 18:50	1
Selenium	ND		5.0	0.89	ug/L		10/13/23 14:00	10/16/23 18:50	1
Sodium	16000		1000	330	ug/L		10/13/23 14:00	10/16/23 18:50	1
Thallium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:50	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		10/13/23 14:00	10/17/23 13:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	88		5.0	2.6	mg/L			10/13/23 19:52	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	88		5.0	2.6	mg/L			10/13/23 19:52	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 19:52	1
Fluoride (EPA 300.0-1993 R2.1)	0.030	J	0.050	0.024	mg/L			10/31/23 19:38	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.00400	U	0.0891	0.0891	1.00	0.178	pCi/L	10/17/23 10:23	11/08/23 13:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.9		30 - 110					10/17/23 10:23	11/08/23 13:36	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.442	U	0.424	0.426	1.00	0.678	pCi/L	10/17/23 10:26	11/03/23 11:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.9		30 - 110					10/17/23 10:26	11/03/23 11:37	1
Y Carrier	72.5		30 - 110					10/17/23 10:26	11/03/23 11:37	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-18-F-A4-20231011-01

Lab Sample ID: 240-193490-5

Date Collected: 10/11/23 12:09

Matrix: Water

Date Received: 10/12/23 14:25

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	0.438	U	0.433	0.435	5.00	0.678	pCi/L		11/10/23 09:28	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: DUP-001-F-A4-20231011-01

Lab Sample ID: 240-193490-6

Date Collected: 10/11/23 00:00

Matrix: Water

Date Received: 10/12/23 14:25

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		10/13/23 14:00	10/16/23 18:52	1
Arsenic	ND		5.0	0.75	ug/L		10/13/23 14:00	10/16/23 18:52	1
Barium	24		5.0	2.2	ug/L		10/13/23 14:00	10/16/23 18:52	1
Beryllium	ND		1.0	0.62	ug/L		10/13/23 14:00	10/16/23 18:52	1
Cadmium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:52	1
Chromium	ND		5.0	1.2	ug/L		10/13/23 14:00	10/16/23 18:52	1
Cobalt	1.1		1.0	0.19	ug/L		10/13/23 14:00	10/16/23 18:52	1
Lead	ND		1.0	0.45	ug/L		10/13/23 14:00	10/16/23 18:52	1
Lithium	7.4 J		8.0	1.7	ug/L		10/13/23 14:00	10/17/23 18:33	1
Magnesium	18000		1000	61	ug/L		10/13/23 14:00	10/16/23 18:52	1
Molybdenum	ND		5.0	1.1	ug/L		10/13/23 14:00	10/16/23 18:52	1
Potassium	1200		1000	220	ug/L		10/13/23 14:00	10/16/23 18:52	1
Selenium	ND		5.0	0.89	ug/L		10/13/23 14:00	10/16/23 18:52	1
Sodium	15000		1000	330	ug/L		10/13/23 14:00	10/16/23 18:52	1
Thallium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:52	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		10/13/23 14:00	10/17/23 13:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	88		5.0	2.6	mg/L			10/13/23 20:01	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	88		5.0	2.6	mg/L			10/13/23 20:01	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 20:01	1
Fluoride (EPA 300.0-1993 R2.1)	0.051		0.050	0.024	mg/L			11/02/23 11:56	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0855	U	0.0855	0.0858	1.00	0.133	pCi/L	10/17/23 10:23	11/08/23 13:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.8		30 - 110					10/17/23 10:23	11/08/23 13:36	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.845		0.439	0.446	1.00	0.610	pCi/L	10/17/23 10:26	11/03/23 11:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.8		30 - 110					10/17/23 10:26	11/03/23 11:37	1
Y Carrier	76.6		30 - 110					10/17/23 10:26	11/03/23 11:37	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: DUP-001-F-A4-20231011-01

Lab Sample ID: 240-193490-6

Date Collected: 10/11/23 00:00

Matrix: Water

Date Received: 10/12/23 14:25

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.930		0.447	0.454	5.00	0.610	pCi/L		11/10/23 09:28	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-10-F-A4-20231011-01

Lab Sample ID: 240-193490-7

Date Collected: 10/11/23 13:17

Matrix: Water

Date Received: 10/12/23 14:25

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		10/13/23 14:00	10/16/23 18:54	1
Arsenic	1.4	J	5.0	0.75	ug/L		10/13/23 14:00	10/16/23 18:54	1
Barium	39		5.0	2.2	ug/L		10/13/23 14:00	10/16/23 18:54	1
Beryllium	ND		1.0	0.62	ug/L		10/13/23 14:00	10/16/23 18:54	1
Cadmium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:54	1
Chromium	1.5	J	5.0	1.2	ug/L		10/13/23 14:00	10/16/23 18:54	1
Cobalt	1.4		1.0	0.19	ug/L		10/13/23 14:00	10/16/23 18:54	1
Lead	1.2		1.0	0.45	ug/L		10/13/23 14:00	10/16/23 18:54	1
Lithium	5.9	J	8.0	1.7	ug/L		10/13/23 14:00	10/17/23 18:36	1
Magnesium	26000		1000	61	ug/L		10/13/23 14:00	10/16/23 18:54	1
Molybdenum	ND		5.0	1.1	ug/L		10/13/23 14:00	10/16/23 18:54	1
Potassium	1600		1000	220	ug/L		10/13/23 14:00	10/16/23 18:54	1
Selenium	ND		5.0	0.89	ug/L		10/13/23 14:00	10/16/23 18:54	1
Sodium	45000		1000	330	ug/L		10/13/23 14:00	10/16/23 18:54	1
Thallium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:54	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		10/13/23 14:00	10/17/23 13:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			10/13/23 20:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			10/13/23 20:06	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 20:06	1
Fluoride (EPA 300.0-1993 R2.1)	0.15		0.050	0.024	mg/L			11/02/23 12:16	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0435	U	0.0937	0.0938	1.00	0.171	pCi/L	10/17/23 10:23	11/08/23 13:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.6		30 - 110					10/17/23 10:23	11/08/23 13:36	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.608	U	0.437	0.441	1.00	0.652	pCi/L	10/17/23 10:26	11/03/23 11:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.6		30 - 110					10/17/23 10:26	11/03/23 11:37	1
Y Carrier	75.1		30 - 110					10/17/23 10:26	11/03/23 11:37	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-10-F-A4-20231011-01

Lab Sample ID: 240-193490-7

Date Collected: 10/11/23 13:17

Matrix: Water

Date Received: 10/12/23 14:25

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	0.652		0.447	0.451	5.00	0.652	pCi/L		11/10/23 09:28	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-16-F-A4-20231011-01

Lab Sample ID: 240-193490-8

Date Collected: 10/11/23 14:29

Matrix: Water

Date Received: 10/12/23 14:25

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		10/13/23 14:00	10/16/23 18:57	1
Arsenic	1.1	J	5.0	0.75	ug/L		10/13/23 14:00	10/16/23 18:57	1
Barium	46		5.0	2.2	ug/L		10/13/23 14:00	10/16/23 18:57	1
Beryllium	ND		1.0	0.62	ug/L		10/13/23 14:00	10/16/23 18:57	1
Cadmium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:57	1
Chromium	ND		5.0	1.2	ug/L		10/13/23 14:00	10/16/23 18:57	1
Cobalt	1.6		1.0	0.19	ug/L		10/13/23 14:00	10/16/23 18:57	1
Lead	1.1		1.0	0.45	ug/L		10/13/23 14:00	10/16/23 18:57	1
Lithium	7.8	J	8.0	1.7	ug/L		10/13/23 14:00	10/17/23 18:38	1
Magnesium	22000		1000	61	ug/L		10/13/23 14:00	10/16/23 18:57	1
Molybdenum	ND		5.0	1.1	ug/L		10/13/23 14:00	10/16/23 18:57	1
Potassium	1600		1000	220	ug/L		10/13/23 14:00	10/16/23 18:57	1
Selenium	ND		5.0	0.89	ug/L		10/13/23 14:00	10/16/23 18:57	1
Sodium	15000		1000	330	ug/L		10/13/23 14:00	10/16/23 18:57	1
Thallium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:57	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		10/13/23 14:00	10/17/23 14:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	160		5.0	2.6	mg/L			10/13/23 18:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	160		5.0	2.6	mg/L			10/13/23 18:31	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 18:31	1
Fluoride (EPA 300.0-1993 R2.1)	0.044	J	0.050	0.024	mg/L			11/02/23 12:36	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.111	U	0.106	0.107	1.00	0.162	pCi/L	10/17/23 10:23	11/08/23 13:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.3		30 - 110					10/17/23 10:23	11/08/23 13:36	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.679	U	0.528	0.532	1.00	0.816	pCi/L	10/17/23 10:26	11/03/23 11:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.3		30 - 110					10/17/23 10:26	11/03/23 11:37	1
Y Carrier	77.8		30 - 110					10/17/23 10:26	11/03/23 11:37	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-16-F-A4-20231011-01

Lab Sample ID: 240-193490-8

Date Collected: 10/11/23 14:29

Matrix: Water

Date Received: 10/12/23 14:25

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.790	U	0.539	0.543	5.00	0.816	pCi/L		11/10/23 09:28	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: EB-001-F-A4-20231011-01

Lab Sample ID: 240-193490-9

Date Collected: 10/11/23 15:00

Matrix: Water

Date Received: 10/12/23 14:25

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		10/13/23 14:00	10/16/23 18:59	1
Arsenic	ND		5.0	0.75	ug/L		10/13/23 14:00	10/16/23 18:59	1
Barium	ND		5.0	2.2	ug/L		10/13/23 14:00	10/16/23 18:59	1
Beryllium	ND		1.0	0.62	ug/L		10/13/23 14:00	10/16/23 18:59	1
Cadmium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:59	1
Chromium	ND		5.0	1.2	ug/L		10/13/23 14:00	10/16/23 18:59	1
Cobalt	ND		1.0	0.19	ug/L		10/13/23 14:00	10/16/23 18:59	1
Lead	ND		1.0	0.45	ug/L		10/13/23 14:00	10/16/23 18:59	1
Lithium	ND		8.0	1.7	ug/L		10/13/23 14:00	10/17/23 18:41	1
Magnesium	ND		1000	61	ug/L		10/13/23 14:00	10/16/23 18:59	1
Molybdenum	ND		5.0	1.1	ug/L		10/13/23 14:00	10/16/23 18:59	1
Potassium	ND		1000	220	ug/L		10/13/23 14:00	10/16/23 18:59	1
Selenium	ND		5.0	0.89	ug/L		10/13/23 14:00	10/16/23 18:59	1
Sodium	ND		1000	330	ug/L		10/13/23 14:00	10/16/23 18:59	1
Thallium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:59	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		10/13/23 14:00	10/17/23 14:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	3.0	J	5.0	2.6	mg/L			10/13/23 18:38	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	3.0	J	5.0	2.6	mg/L			10/13/23 18:38	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 18:38	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			10/31/23 20:59	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0408	U	0.0674	0.0675	1.00	0.118	pCi/L	10/17/23 10:23	11/08/23 13:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.9		30 - 110					10/17/23 10:23	11/08/23 13:36	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.792		0.409	0.415	1.00	0.567	pCi/L	10/17/23 10:26	11/03/23 11:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.9		30 - 110					10/17/23 10:26	11/03/23 11:37	1
Y Carrier	75.9		30 - 110					10/17/23 10:26	11/03/23 11:37	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: EB-001-F-A4-20231011-01

Lab Sample ID: 240-193490-9

Date Collected: 10/11/23 15:00

Matrix: Water

Date Received: 10/12/23 14:25

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	0.833		0.415	0.420	5.00	0.567	pCi/L		11/10/23 14:59	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
240-193490-1	BAC-23-F-A4-20231010-01	95.4	
240-193490-2	BAC-08-F-A4-20231010-01	92.4	
240-193490-3	BAC-21-F-A4-20231011-01	70.4	
240-193490-3 MS	BAC-21-F-A4-20231011-01	63.6	
240-193490-3 MSD	BAC-21-F-A4-20231011-01	54.8	
240-193490-4	BAC-22-F-A4-20231011-01	92.2	
240-193490-5	BAC-18-F-A4-20231011-01	83.9	
240-193490-6	DUP-001-F-A4-20231011-01	84.8	
240-193490-7	BAC-10-F-A4-20231011-01	93.6	
240-193490-8	BAC-16-F-A4-20231011-01	87.3	
240-193490-9	EB-001-F-A4-20231011-01	93.9	
LCS 160-632172/A	Lab Control Sample	98.5	
MB 160-632172/1-A	Method Blank	96.1	
Tracer/Carrier Legend			
Ba = Ba Carrier			

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-193490-1	BAC-23-F-A4-20231010-01	95.4	75.9
240-193490-2	BAC-08-F-A4-20231010-01	92.4	74.0
240-193490-3	BAC-21-F-A4-20231011-01	70.4	77.8
240-193490-3 MS	BAC-21-F-A4-20231011-01	63.6	76.3
240-193490-3 MSD	BAC-21-F-A4-20231011-01	54.8	71.0
240-193490-4	BAC-22-F-A4-20231011-01	92.2	72.1
240-193490-5	BAC-18-F-A4-20231011-01	83.9	72.5
240-193490-6	DUP-001-F-A4-20231011-01	84.8	76.6
240-193490-7	BAC-10-F-A4-20231011-01	93.6	75.1
240-193490-8	BAC-16-F-A4-20231011-01	87.3	77.8
240-193490-9	EB-001-F-A4-20231011-01	93.9	75.9
LCS 160-632173/A	Lab Control Sample	98.5	88.6
MB 160-632173/1-A	Method Blank	96.1	75.9
Tracer/Carrier Legend			
Ba = Ba Carrier			
Y = Y Carrier			

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-590775/1-A
Matrix: Water
Analysis Batch: 591036

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 590775

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	ND		2.0	0.57	ug/L		10/13/23 14:00	10/16/23 18:10	1
Arsenic	ND		5.0	0.75	ug/L		10/13/23 14:00	10/16/23 18:10	1
Barium	ND		5.0	2.2	ug/L		10/13/23 14:00	10/16/23 18:10	1
Beryllium	ND		1.0	0.62	ug/L		10/13/23 14:00	10/16/23 18:10	1
Cadmium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:10	1
Chromium	ND		5.0	1.2	ug/L		10/13/23 14:00	10/16/23 18:10	1
Cobalt	ND		1.0	0.19	ug/L		10/13/23 14:00	10/16/23 18:10	1
Lead	ND		1.0	0.45	ug/L		10/13/23 14:00	10/16/23 18:10	1
Lithium	ND		8.0	1.7	ug/L		10/13/23 14:00	10/16/23 18:10	1
Magnesium	ND		1000	61	ug/L		10/13/23 14:00	10/16/23 18:10	1
Molybdenum	ND		5.0	1.1	ug/L		10/13/23 14:00	10/16/23 18:10	1
Potassium	ND		1000	220	ug/L		10/13/23 14:00	10/16/23 18:10	1
Selenium	ND		5.0	0.89	ug/L		10/13/23 14:00	10/16/23 18:10	1
Sodium	ND		1000	330	ug/L		10/13/23 14:00	10/16/23 18:10	1
Thallium	0.405	J	1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:10	1

Lab Sample ID: LCS 240-590775/2-A
Matrix: Water
Analysis Batch: 591036

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 590775

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	Limits
Antimony	100	102		ug/L		102	80 - 120	
Arsenic	1000	927		ug/L		93	80 - 120	
Barium	1000	929		ug/L		93	80 - 120	
Beryllium	500	486		ug/L		97	80 - 120	
Cadmium	500	476		ug/L		95	80 - 120	
Chromium	500	463		ug/L		93	80 - 120	
Cobalt	500	475		ug/L		95	80 - 120	
Lead	500	468		ug/L		94	80 - 120	
Lithium	500	484		ug/L		97	80 - 120	
Magnesium	25000	24000		ug/L		96	80 - 120	
Molybdenum	500	476		ug/L		95	80 - 120	
Potassium	25000	23900		ug/L		95	80 - 120	
Selenium	1000	941		ug/L		94	80 - 120	
Sodium	25000	23800		ug/L		95	80 - 120	
Thallium	1000	923		ug/L		92	80 - 120	

Lab Sample ID: 240-193490-3 MS
Matrix: Water
Analysis Batch: 591036

Client Sample ID: BAC-21-F-A4-20231011-01
Prep Type: Total Recoverable
Prep Batch: 590775

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec	Limits
	Result	Qualifier		Result	Qualifier					
Antimony	ND		100	103		ug/L		103	80 - 120	
Arsenic	6.0		1000	951		ug/L		95	80 - 120	
Barium	170		1000	1110		ug/L		94	80 - 120	
Beryllium	ND		500	492		ug/L		98	80 - 120	
Cadmium	ND		500	475		ug/L		95	80 - 120	
Chromium	3.8	J	500	480		ug/L		95	80 - 120	
Cobalt	1.7		500	482		ug/L		96	80 - 120	

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

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

Lab Sample ID: 240-193490-3 MS
Matrix: Water
Analysis Batch: 591036

Client Sample ID: BAC-21-F-A4-20231011-01
Prep Type: Total Recoverable
Prep Batch: 590775

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier				Limits	
Lead	2.9		500	474		ug/L		94	80 - 120	
Magnesium	15000		25000	38200		ug/L		93	80 - 120	
Molybdenum	ND		500	497		ug/L		99	80 - 120	
Potassium	2400		25000	26500		ug/L		97	80 - 120	
Selenium	ND		1000	956		ug/L		96	80 - 120	
Sodium	27000		25000	50200		ug/L		92	80 - 120	
Thallium	ND		1000	935		ug/L		93	80 - 120	

Lab Sample ID: 240-193490-3 MS
Matrix: Water
Analysis Batch: 591232

Client Sample ID: BAC-21-F-A4-20231011-01
Prep Type: Total Recoverable
Prep Batch: 590775

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier				Limits	
Lithium	8.7		500	492		ug/L		97	80 - 120	

Lab Sample ID: 240-193490-3 MSD
Matrix: Water
Analysis Batch: 591036

Client Sample ID: BAC-21-F-A4-20231011-01
Prep Type: Total Recoverable
Prep Batch: 590775

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec		RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit	
Antimony	ND		100	104		ug/L		104	80 - 120		1	20
Arsenic	6.0		1000	933		ug/L		93	80 - 120		2	20
Barium	170		1000	1120		ug/L		95	80 - 120		0	20
Beryllium	ND		500	487		ug/L		97	80 - 120		1	20
Cadmium	ND		500	475		ug/L		95	80 - 120		0	20
Chromium	3.8	J	500	477		ug/L		95	80 - 120		1	20
Cobalt	1.7		500	474		ug/L		94	80 - 120		2	20
Lead	2.9		500	474		ug/L		94	80 - 120		0	20
Magnesium	15000		25000	38600		ug/L		95	80 - 120		1	20
Molybdenum	ND		500	488		ug/L		98	80 - 120		2	20
Potassium	2400		25000	26500		ug/L		97	80 - 120		0	20
Selenium	ND		1000	940		ug/L		94	80 - 120		2	20
Sodium	27000		25000	50800		ug/L		95	80 - 120		1	20
Thallium	ND		1000	942		ug/L		94	80 - 120		1	20

Lab Sample ID: 240-193490-3 MSD
Matrix: Water
Analysis Batch: 591232

Client Sample ID: BAC-21-F-A4-20231011-01
Prep Type: Total Recoverable
Prep Batch: 590775

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec		RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit	
Lithium	8.7		500	494		ug/L		97	80 - 120		0	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-590777/1-A
Matrix: Water
Analysis Batch: 591097

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 590777

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.20	0.13	ug/L		10/13/23 14:00	10/17/23 13:29	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: LCS 240-590777/2-A
Matrix: Water
Analysis Batch: 591097

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 590777

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.42		ug/L		108	80 - 120

Lab Sample ID: 240-193490-3 MS
Matrix: Water
Analysis Batch: 591097

Client Sample ID: BAC-21-F-A4-20231011-01
Prep Type: Total/NA
Prep Batch: 590777

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		1.00	1.18		ug/L		118	80 - 120

Lab Sample ID: 240-193490-3 MSD
Matrix: Water
Analysis Batch: 591097

Client Sample ID: BAC-21-F-A4-20231011-01
Prep Type: Total/NA
Prep Batch: 590777

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	16	20

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-590918/4
Matrix: Water
Analysis Batch: 590918

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			10/13/23 18:07	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/13/23 18:07	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/13/23 18:07	1

Lab Sample ID: LCS 240-590918/3
Matrix: Water
Analysis Batch: 590918

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	82.0		mg/L		102	86 - 123

Lab Sample ID: 240-193490-3 DU
Matrix: Water
Analysis Batch: 590918

Client Sample ID: BAC-21-F-A4-20231011-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	240		241		mg/L		0.3	20
Bicarbonate Alkalinity as CaCO3	240		241		mg/L		0.3	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-592910/3
Matrix: Water
Analysis Batch: 592910

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			10/31/23 15:36	1

Lab Sample ID: LCS 240-592910/4
Matrix: Water
Analysis Batch: 592910

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.56		mg/L		102	90 - 110

Lab Sample ID: 240-193490-9 MS
Matrix: Water
Analysis Batch: 592910

Client Sample ID: EB-001-F-A4-20231011-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	ND		2.50	2.66		mg/L		106	80 - 120

Lab Sample ID: 240-193490-9 MSD
Matrix: Water
Analysis Batch: 592910

Client Sample ID: EB-001-F-A4-20231011-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	ND		2.50	2.63		mg/L		105	80 - 120	1	15

Lab Sample ID: MB 240-593006/3
Matrix: Water
Analysis Batch: 593006

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			11/02/23 10:15	1

Lab Sample ID: LCS 240-593006/4
Matrix: Water
Analysis Batch: 593006

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.62		mg/L		105	90 - 110

Lab Sample ID: 240-193490-3 MS
Matrix: Water
Analysis Batch: 593006

Client Sample ID: BAC-21-F-A4-20231011-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.10		2.50	2.68		mg/L		103	80 - 120

Lab Sample ID: 240-193490-3 MSD
Matrix: Water
Analysis Batch: 593006

Client Sample ID: BAC-21-F-A4-20231011-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.10		2.50	2.81		mg/L		108	80 - 120	5	15

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-632172/1-A
Matrix: Water
Analysis Batch: 635814

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 632172

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.01014	U	0.0528	0.0528	1.00	0.107	pCi/L	10/17/23 10:23	11/08/23 13:26	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	96.1		30 - 110		10/17/23 10:23	11/08/23 13:26	1			

Lab Sample ID: LCS 160-632172/2-A
Matrix: Water
Analysis Batch: 635814

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 632172

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	10.47		1.12	1.00	0.117	pCi/L	92	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	98.5		30 - 110						

Lab Sample ID: 240-193490-3 MS
Matrix: Water
Analysis Batch: 635860

Client Sample ID: BAC-21-F-A4-20231011-01
Prep Type: Total/NA
Prep Batch: 632172

Analyte	Sample	Sample	Spike Added	MS	MS	Total	RL	MDC	Unit	%Rec	%Rec Limits
	Result	Qual		Result	Qual	Uncert. (2σ+/-)					
Radium-226	0.527		15.1	12.98		1.51	1.00	0.287	pCi/L	82	60 - 140
Carrier	MS %Yield	MS Qualifier	Limits								
Ba Carrier	63.6		30 - 110								

Lab Sample ID: 240-193490-3 MSD
Matrix: Water
Analysis Batch: 635860

Client Sample ID: BAC-21-F-A4-20231011-01
Prep Type: Total/NA
Prep Batch: 632172

Analyte	Sample	Sample	Spike Added	MSD	MSD	Total	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
	Result	Qual		Result	Qual	Uncert. (2σ+/-)							
Radium-226	0.527		14.9	12.71		1.51	1.00	0.299	pCi/L	82	60 - 140	0.09	1
Carrier	MSD %Yield	MSD Qualifier	Limits										
Ba Carrier	54.8		30 - 110										

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-632173/1-A
Matrix: Water
Analysis Batch: 635024

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 632173

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.2967	U	0.481	0.481	1.00	0.820	pCi/L	10/17/23 10:26	11/03/23 14:55	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

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

Carrier	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Yield	Qualifier				
Ba Carrier	96.1		30 - 110	10/17/23 10:26	11/03/23 14:55	1
Y Carrier	75.9		30 - 110	10/17/23 10:26	11/03/23 14:55	1

Lab Sample ID: LCS 160-632173/2-A
 Matrix: Water
 Analysis Batch: 635024

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 632173

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	7.75	7.753		1.08	1.00	0.454	pCi/L	100	75 - 125

Carrier	LCS LCS		Limits
	%Yield	Qualifier	
Ba Carrier	98.5		30 - 110
Y Carrier	88.6		30 - 110

Lab Sample ID: 240-193490-3 MS
 Matrix: Water
 Analysis Batch: 635114

Client Sample ID: BAC-21-F-A4-20231011-01
 Prep Type: Total/NA
 Prep Batch: 632173

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	1.31	G	10.4	14.33		2.18	1.00	1.13	pCi/L	126	60 - 140

Carrier	MS MS		Limits
	%Yield	Qualifier	
Ba Carrier	63.6		30 - 110
Y Carrier	76.3		30 - 110

Lab Sample ID: 240-193490-3 MSD
 Matrix: Water
 Analysis Batch: 635114

Client Sample ID: BAC-21-F-A4-20231011-01
 Prep Type: Total/NA
 Prep Batch: 632173

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	Limit
Radium-228	1.31	G	10.2	12.07		2.12	1.00	1.36	pCi/L	105	60 - 140	0.53	1

Carrier	MSD MSD		Limits
	%Yield	Qualifier	
Ba Carrier	54.8		30 - 110
Y Carrier	71.0		30 - 110

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Metals

Prep Batch: 590775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193490-1	BAC-23-F-A4-20231010-01	Total Recoverable	Water	3005A	
240-193490-2	BAC-08-F-A4-20231010-01	Total Recoverable	Water	3005A	
240-193490-3	BAC-21-F-A4-20231011-01	Total Recoverable	Water	3005A	
240-193490-4	BAC-22-F-A4-20231011-01	Total Recoverable	Water	3005A	
240-193490-5	BAC-18-F-A4-20231011-01	Total Recoverable	Water	3005A	
240-193490-6	DUP-001-F-A4-20231011-01	Total Recoverable	Water	3005A	
240-193490-7	BAC-10-F-A4-20231011-01	Total Recoverable	Water	3005A	
240-193490-8	BAC-16-F-A4-20231011-01	Total Recoverable	Water	3005A	
240-193490-9	EB-001-F-A4-20231011-01	Total Recoverable	Water	3005A	
MB 240-590775/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-590775/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-193490-3 MS	BAC-21-F-A4-20231011-01	Total Recoverable	Water	3005A	
240-193490-3 MSD	BAC-21-F-A4-20231011-01	Total Recoverable	Water	3005A	

Prep Batch: 590777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193490-1	BAC-23-F-A4-20231010-01	Total/NA	Water	7470A	
240-193490-2	BAC-08-F-A4-20231010-01	Total/NA	Water	7470A	
240-193490-3	BAC-21-F-A4-20231011-01	Total/NA	Water	7470A	
240-193490-4	BAC-22-F-A4-20231011-01	Total/NA	Water	7470A	
240-193490-5	BAC-18-F-A4-20231011-01	Total/NA	Water	7470A	
240-193490-6	DUP-001-F-A4-20231011-01	Total/NA	Water	7470A	
240-193490-7	BAC-10-F-A4-20231011-01	Total/NA	Water	7470A	
240-193490-8	BAC-16-F-A4-20231011-01	Total/NA	Water	7470A	
240-193490-9	EB-001-F-A4-20231011-01	Total/NA	Water	7470A	
MB 240-590777/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-590777/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-193490-3 MS	BAC-21-F-A4-20231011-01	Total/NA	Water	7470A	
240-193490-3 MSD	BAC-21-F-A4-20231011-01	Total/NA	Water	7470A	

Analysis Batch: 591036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193490-1	BAC-23-F-A4-20231010-01	Total Recoverable	Water	6020B	590775
240-193490-2	BAC-08-F-A4-20231010-01	Total Recoverable	Water	6020B	590775
240-193490-3	BAC-21-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-4	BAC-22-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-5	BAC-18-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-6	DUP-001-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-7	BAC-10-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-8	BAC-16-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-9	EB-001-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
MB 240-590775/1-A	Method Blank	Total Recoverable	Water	6020B	590775
LCS 240-590775/2-A	Lab Control Sample	Total Recoverable	Water	6020B	590775
240-193490-3 MS	BAC-21-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-3 MSD	BAC-21-F-A4-20231011-01	Total Recoverable	Water	6020B	590775

Analysis Batch: 591097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193490-1	BAC-23-F-A4-20231010-01	Total/NA	Water	7470A	590777
240-193490-2	BAC-08-F-A4-20231010-01	Total/NA	Water	7470A	590777
240-193490-3	BAC-21-F-A4-20231011-01	Total/NA	Water	7470A	590777

Eurofins Cleveland

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Metals (Continued)

Analysis Batch: 591097 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193490-4	BAC-22-F-A4-20231011-01	Total/NA	Water	7470A	590777
240-193490-5	BAC-18-F-A4-20231011-01	Total/NA	Water	7470A	590777
240-193490-6	DUP-001-F-A4-20231011-01	Total/NA	Water	7470A	590777
240-193490-7	BAC-10-F-A4-20231011-01	Total/NA	Water	7470A	590777
240-193490-8	BAC-16-F-A4-20231011-01	Total/NA	Water	7470A	590777
240-193490-9	EB-001-F-A4-20231011-01	Total/NA	Water	7470A	590777
MB 240-590777/1-A	Method Blank	Total/NA	Water	7470A	590777
LCS 240-590777/2-A	Lab Control Sample	Total/NA	Water	7470A	590777
240-193490-3 MS	BAC-21-F-A4-20231011-01	Total/NA	Water	7470A	590777
240-193490-3 MSD	BAC-21-F-A4-20231011-01	Total/NA	Water	7470A	590777

Analysis Batch: 591232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193490-1	BAC-23-F-A4-20231010-01	Total Recoverable	Water	6020B	590775
240-193490-2	BAC-08-F-A4-20231010-01	Total Recoverable	Water	6020B	590775
240-193490-3	BAC-21-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-4	BAC-22-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-5	BAC-18-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-6	DUP-001-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-7	BAC-10-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-8	BAC-16-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-9	EB-001-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-3 MS	BAC-21-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-3 MSD	BAC-21-F-A4-20231011-01	Total Recoverable	Water	6020B	590775

General Chemistry

Analysis Batch: 590918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193490-1	BAC-23-F-A4-20231010-01	Total/NA	Water	2320B-1997	
240-193490-2	BAC-08-F-A4-20231010-01	Total/NA	Water	2320B-1997	
240-193490-3	BAC-21-F-A4-20231011-01	Total/NA	Water	2320B-1997	
240-193490-4	BAC-22-F-A4-20231011-01	Total/NA	Water	2320B-1997	
240-193490-5	BAC-18-F-A4-20231011-01	Total/NA	Water	2320B-1997	
240-193490-6	DUP-001-F-A4-20231011-01	Total/NA	Water	2320B-1997	
240-193490-7	BAC-10-F-A4-20231011-01	Total/NA	Water	2320B-1997	
240-193490-8	BAC-16-F-A4-20231011-01	Total/NA	Water	2320B-1997	
240-193490-9	EB-001-F-A4-20231011-01	Total/NA	Water	2320B-1997	
MB 240-590918/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-590918/3	Lab Control Sample	Total/NA	Water	2320B-1997	
240-193490-3 DU	BAC-21-F-A4-20231011-01	Total/NA	Water	2320B-1997	

Analysis Batch: 592910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193490-1	BAC-23-F-A4-20231010-01	Total/NA	Water	300.0-1993 R2.1	
240-193490-2	BAC-08-F-A4-20231010-01	Total/NA	Water	300.0-1993 R2.1	
240-193490-4	BAC-22-F-A4-20231011-01	Total/NA	Water	300.0-1993 R2.1	
240-193490-5	BAC-18-F-A4-20231011-01	Total/NA	Water	300.0-1993 R2.1	
240-193490-9	EB-001-F-A4-20231011-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-592910/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-592910/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

General Chemistry (Continued)

Analysis Batch: 592910 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193490-9 MS	EB-001-F-A4-20231011-01	Total/NA	Water	300.0-1993 R2.1	
240-193490-9 MSD	EB-001-F-A4-20231011-01	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 593006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193490-3	BAC-21-F-A4-20231011-01	Total/NA	Water	300.0-1993 R2.1	
240-193490-6	DUP-001-F-A4-20231011-01	Total/NA	Water	300.0-1993 R2.1	
240-193490-7	BAC-10-F-A4-20231011-01	Total/NA	Water	300.0-1993 R2.1	
240-193490-8	BAC-16-F-A4-20231011-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-593006/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-593006/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-193490-3 MS	BAC-21-F-A4-20231011-01	Total/NA	Water	300.0-1993 R2.1	
240-193490-3 MSD	BAC-21-F-A4-20231011-01	Total/NA	Water	300.0-1993 R2.1	

Rad

Prep Batch: 632172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193490-1	BAC-23-F-A4-20231010-01	Total/NA	Water	PrecSep-21	
240-193490-2	BAC-08-F-A4-20231010-01	Total/NA	Water	PrecSep-21	
240-193490-3	BAC-21-F-A4-20231011-01	Total/NA	Water	PrecSep-21	
240-193490-4	BAC-22-F-A4-20231011-01	Total/NA	Water	PrecSep-21	
240-193490-5	BAC-18-F-A4-20231011-01	Total/NA	Water	PrecSep-21	
240-193490-6	DUP-001-F-A4-20231011-01	Total/NA	Water	PrecSep-21	
240-193490-7	BAC-10-F-A4-20231011-01	Total/NA	Water	PrecSep-21	
240-193490-8	BAC-16-F-A4-20231011-01	Total/NA	Water	PrecSep-21	
240-193490-9	EB-001-F-A4-20231011-01	Total/NA	Water	PrecSep-21	
MB 160-632172/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-632172/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
240-193490-3 MS	BAC-21-F-A4-20231011-01	Total/NA	Water	PrecSep-21	
240-193490-3 MSD	BAC-21-F-A4-20231011-01	Total/NA	Water	PrecSep-21	

Prep Batch: 632173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193490-1	BAC-23-F-A4-20231010-01	Total/NA	Water	PrecSep_0	
240-193490-2	BAC-08-F-A4-20231010-01	Total/NA	Water	PrecSep_0	
240-193490-3	BAC-21-F-A4-20231011-01	Total/NA	Water	PrecSep_0	
240-193490-4	BAC-22-F-A4-20231011-01	Total/NA	Water	PrecSep_0	
240-193490-5	BAC-18-F-A4-20231011-01	Total/NA	Water	PrecSep_0	
240-193490-6	DUP-001-F-A4-20231011-01	Total/NA	Water	PrecSep_0	
240-193490-7	BAC-10-F-A4-20231011-01	Total/NA	Water	PrecSep_0	
240-193490-8	BAC-16-F-A4-20231011-01	Total/NA	Water	PrecSep_0	
240-193490-9	EB-001-F-A4-20231011-01	Total/NA	Water	PrecSep_0	
MB 160-632173/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-632173/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
240-193490-3 MS	BAC-21-F-A4-20231011-01	Total/NA	Water	PrecSep_0	
240-193490-3 MSD	BAC-21-F-A4-20231011-01	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-23-F-A4-20231010-01

Lab Sample ID: 240-193490-1

Date Collected: 10/10/23 13:08

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591036	RKT	EET CLE	10/16/23 18:37
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 18:23
Total/NA	Prep	7470A			590777	BN	EET CLE	10/13/23 14:00
Total/NA	Analysis	7470A		1	591097	GK	EET CLE	10/17/23 13:44
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 18:21
Total/NA	Analysis	300.0-1993 R2.1		1	592910	JWW	EET CLE	10/31/23 17:57
Total/NA	Prep	PrecSep-21			632172	KAC	EET SL	10/17/23 10:23
Total/NA	Analysis	9315		1	635814	SCB	EET SL	11/08/23 13:28
Total/NA	Prep	PrecSep_0			632173	KAC	EET SL	10/17/23 10:26
Total/NA	Analysis	9320		1	635114	SCB	EET SL	11/03/23 11:36
Total/NA	Analysis	Ra226_Ra228		1	636194	EMH	EET SL	11/10/23 09:28

Client Sample ID: BAC-08-F-A4-20231010-01

Lab Sample ID: 240-193490-2

Date Collected: 10/10/23 14:37

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591036	RKT	EET CLE	10/16/23 18:40
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 18:26
Total/NA	Prep	7470A			590777	BN	EET CLE	10/13/23 14:00
Total/NA	Analysis	7470A		1	591097	GK	EET CLE	10/17/23 13:46
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 18:26
Total/NA	Analysis	300.0-1993 R2.1		1	592910	JWW	EET CLE	10/31/23 18:18
Total/NA	Prep	PrecSep-21			632172	KAC	EET SL	10/17/23 10:23
Total/NA	Analysis	9315		1	635860	SCB	EET SL	11/08/23 13:35
Total/NA	Prep	PrecSep_0			632173	KAC	EET SL	10/17/23 10:26
Total/NA	Analysis	9320		1	635114	SCB	EET SL	11/03/23 11:36
Total/NA	Analysis	Ra226_Ra228		1	636194	EMH	EET SL	11/10/23 09:28

Client Sample ID: BAC-21-F-A4-20231011-01

Lab Sample ID: 240-193490-3

Date Collected: 10/11/23 09:46

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591036	RKT	EET CLE	10/16/23 18:20
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 18:08
Total/NA	Prep	7470A			590777	BN	EET CLE	10/13/23 14:00
Total/NA	Analysis	7470A		1	591097	GK	EET CLE	10/17/23 13:33

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-21-F-A4-20231011-01

Lab Sample ID: 240-193490-3

Date Collected: 10/11/23 09:46

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 19:06
Total/NA	Analysis	300.0-1993 R2.1		1	593006	JWW	EET CLE	11/02/23 10:55
Total/NA	Prep	PrecSep-21			632172	KAC	EET SL	10/17/23 10:23
Total/NA	Analysis	9315		1	635860	SCB	EET SL	11/08/23 13:35
Total/NA	Prep	PrecSep_0			632173	KAC	EET SL	10/17/23 10:26
Total/NA	Analysis	9320		1	635114	SCB	EET SL	11/03/23 11:36
Total/NA	Analysis	Ra226_Ra228		1	636194	EMH	EET SL	11/10/23 09:28

Client Sample ID: BAC-22-F-A4-20231011-01

Lab Sample ID: 240-193490-4

Date Collected: 10/11/23 10:59

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591036	RKT	EET CLE	10/16/23 18:42
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 18:28
Total/NA	Prep	7470A			590777	BN	EET CLE	10/13/23 14:00
Total/NA	Analysis	7470A		1	591097	GK	EET CLE	10/17/23 13:52
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 19:36
Total/NA	Analysis	300.0-1993 R2.1		1	592910	JWW	EET CLE	10/31/23 18:38
Total/NA	Prep	PrecSep-21			632172	KAC	EET SL	10/17/23 10:23
Total/NA	Analysis	9315		1	635860	SCB	EET SL	11/08/23 13:36
Total/NA	Prep	PrecSep_0			632173	KAC	EET SL	10/17/23 10:26
Total/NA	Analysis	9320		1	635114	SCB	EET SL	11/03/23 11:37
Total/NA	Analysis	Ra226_Ra228		1	636194	EMH	EET SL	11/10/23 09:28

Client Sample ID: BAC-18-F-A4-20231011-01

Lab Sample ID: 240-193490-5

Date Collected: 10/11/23 12:09

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591036	RKT	EET CLE	10/16/23 18:50
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 18:31
Total/NA	Prep	7470A			590777	BN	EET CLE	10/13/23 14:00
Total/NA	Analysis	7470A		1	591097	GK	EET CLE	10/17/23 13:54
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 19:52
Total/NA	Analysis	300.0-1993 R2.1		1	592910	JWW	EET CLE	10/31/23 19:38
Total/NA	Prep	PrecSep-21			632172	KAC	EET SL	10/17/23 10:23
Total/NA	Analysis	9315		1	635860	SCB	EET SL	11/08/23 13:36
Total/NA	Prep	PrecSep_0			632173	KAC	EET SL	10/17/23 10:26
Total/NA	Analysis	9320		1	635114	SCB	EET SL	11/03/23 11:37

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-18-F-A4-20231011-01

Lab Sample ID: 240-193490-5

Date Collected: 10/11/23 12:09

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228		1	636194	EMH	EET SL	11/10/23 09:28

Client Sample ID: DUP-001-F-A4-20231011-01

Lab Sample ID: 240-193490-6

Date Collected: 10/11/23 00:00

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591036	RKT	EET CLE	10/16/23 18:52
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 18:33
Total/NA	Prep	7470A			590777	BN	EET CLE	10/13/23 14:00
Total/NA	Analysis	7470A		1	591097	GK	EET CLE	10/17/23 13:56
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 20:01
Total/NA	Analysis	300.0-1993 R2.1		1	593006	JWW	EET CLE	11/02/23 11:56
Total/NA	Prep	PrecSep-21			632172	KAC	EET SL	10/17/23 10:23
Total/NA	Analysis	9315		1	635860	SCB	EET SL	11/08/23 13:36
Total/NA	Prep	PrecSep_0			632173	KAC	EET SL	10/17/23 10:26
Total/NA	Analysis	9320		1	635114	SCB	EET SL	11/03/23 11:37
Total/NA	Analysis	Ra226_Ra228		1	636194	EMH	EET SL	11/10/23 09:28

Client Sample ID: BAC-10-F-A4-20231011-01

Lab Sample ID: 240-193490-7

Date Collected: 10/11/23 13:17

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591036	RKT	EET CLE	10/16/23 18:54
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 18:36
Total/NA	Prep	7470A			590777	BN	EET CLE	10/13/23 14:00
Total/NA	Analysis	7470A		1	591097	GK	EET CLE	10/17/23 13:58
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 20:06
Total/NA	Analysis	300.0-1993 R2.1		1	593006	JWW	EET CLE	11/02/23 12:16
Total/NA	Prep	PrecSep-21			632172	KAC	EET SL	10/17/23 10:23
Total/NA	Analysis	9315		1	635860	SCB	EET SL	11/08/23 13:36
Total/NA	Prep	PrecSep_0			632173	KAC	EET SL	10/17/23 10:26
Total/NA	Analysis	9320		1	635114	SCB	EET SL	11/03/23 11:37
Total/NA	Analysis	Ra226_Ra228		1	636194	EMH	EET SL	11/10/23 09:28

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-16-F-A4-20231011-01

Lab Sample ID: 240-193490-8

Date Collected: 10/11/23 14:29

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591036	RKT	EET CLE	10/16/23 18:57
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 18:38
Total/NA	Prep	7470A			590777	BN	EET CLE	10/13/23 14:00
Total/NA	Analysis	7470A		1	591097	GK	EET CLE	10/17/23 14:00
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 18:31
Total/NA	Analysis	300.0-1993 R2.1		1	593006	JWW	EET CLE	11/02/23 12:36
Total/NA	Prep	PrecSep-21			632172	KAC	EET SL	10/17/23 10:23
Total/NA	Analysis	9315		1	635860	SCB	EET SL	11/08/23 13:36
Total/NA	Prep	PrecSep_0			632173	KAC	EET SL	10/17/23 10:26
Total/NA	Analysis	9320		1	635114	SCB	EET SL	11/03/23 11:37
Total/NA	Analysis	Ra226_Ra228		1	636194	EMH	EET SL	11/10/23 09:28

Client Sample ID: EB-001-F-A4-20231011-01

Lab Sample ID: 240-193490-9

Date Collected: 10/11/23 15:00

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591036	RKT	EET CLE	10/16/23 18:59
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 18:41
Total/NA	Prep	7470A			590777	BN	EET CLE	10/13/23 14:00
Total/NA	Analysis	7470A		1	591097	GK	EET CLE	10/17/23 14:02
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 18:38
Total/NA	Analysis	300.0-1993 R2.1		1	592910	JWW	EET CLE	10/31/23 20:59
Total/NA	Prep	PrecSep-21			632172	KAC	EET SL	10/17/23 10:23
Total/NA	Analysis	9315		1	635860	SCB	EET SL	11/08/23 13:36
Total/NA	Prep	PrecSep_0			632173	KAC	EET SL	10/17/23 10:26
Total/NA	Analysis	9320		1	635114	SCB	EET SL	11/03/23 11:37
Total/NA	Analysis	Ra226_Ra228		1	636194	EMH	EET SL	11/10/23 14:59

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
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

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
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
Virginia	NELAP	460175	09-14-24
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-24
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-24
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-24
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-24
Massachusetts	State	M-MO054	06-30-24
MI - RadChem Recognition	State	9005	06-30-24
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-24
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

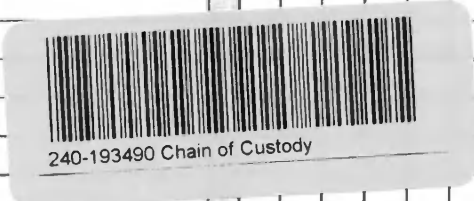
Laboratory: Eurofins St. Louis (Continued)

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 Dakota	State	R-207	06-30-24
Oklahoma	NELAP	9997	08-31-24
Oregon	NELAP	4157	09-01-24
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-24
Texas	NELAP	T104704193	07-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO000542021-14	07-31-24
Virginia	NELAP	10310	06-15-25
Washington	State	C592	08-30-24
West Virginia DEP	State	381	12-31-23

Chain of Custody Record

Client Information		Lab PM: Cisneros, Roxanne		Camer Tracking No(s): 240-93466-34578.1	
Client Contact: Taylor Huffman		E-Mail: roxanne.cisneros@Eurofinel.com		Page: Page 1 of 1	
Company: Lightstone Generation Gavin Power LLC		PWSID:		Job #:	
Address: 7397 OH-7		City: Cheshire		State of Origin:	
State, Zip: OH, 45620		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		Preservation Codes:	
Phone: 740-925-3171(Tel)		PO #: 2935505		M - Hexane N - None O - Acetaldehyde P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - EDTA Z - other (specify)	
Email: taylor.huffman@lightstonegen.com		WO #: 24019633		Other:	
Project Name: Federal CCR Wells - App IV		SSOWN:		Special Instructions/Note:	
Site: G3UH				Total Number of Containers: <input checked="" type="checkbox"/>	
Sample Identification		Sample Date		Sample Time	
BAC-23-F-A4-20231010-01		10-10-23		1308	
BAC-08-F-A4-20231010-01		10-10-23		1437	
BAC-21-F-A4-20231011-01		10-11-23		0946	
BAC-21-F-A4-20231011-MS-01		10-11-23		0946	
BAC-21-F-A4-20231011-MS-01		10-11-23		0946	
BAC-22-F-A4-20231011-01		10-11-23		1059	
BAC-18-F-A4-20231011-01		10-11-23		1209	
DUP-001-F-A4-20231011-01		10-11-23		-	
BAC-10-F-A4-20231011-01		10-11-23		1317	
BAC-16-F-A4-20231011-01		10-11-23		1429	
EB-001-F-A4-20231011-01		10-11-23		1500	
Possible Hazard Identification		<input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant		Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/QC Requirements:	
Empty Kit Relinquished by:		Date:		Method of Shipment:	
Relinquished by: <i>Taylor Huffman</i>		Date: 10-12-23 / 0900		Received by: <i>Hull</i>	
Relinquished by: <i>Hull</i>		Date: 10-12-23 / 1430		Received by: <i>Auto Optics</i>	
Relinquished by:		Date/Time:		Company: <i>Auto Optics</i>	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Company: <i>EC</i>	



Eurofins - Cleveland Sample Receipt Form/Narrative
Barberton Facility

Login # : 193490

Client Lightstone Site Name _____ Cooler unpacked by: Vanny Rye
Cooler Received on 10-12-23 Opened on 10-13-23
FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

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

Eurofins Cooler # EE 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 -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 each
 - 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# HC316719
 14. Were VOAs on the COC? Yes No
 15. Were air bubbles >6 mm in any VOA vials? Yes No NA Larger than this.
 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: _____

Eurofins - Canton 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 #: _____	0.8	0.6	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____	4.0	3.8	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____	0.7	0.5	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____	3.8	3.6	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____	20.0	19.8	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____	3.7	3.5	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____	20.4	20.2	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	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

W1-NC-099 Cooler Receipt Form Page 2 - Multiple Coolers



Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container		Preservative	
			pH	Temp	Added (mls)	Lot #
BAC-23-F-A4-20231010-01	240-193490-C-1	Plastic 500ml - with Nitric Acid				
BAC-23-F-A4-20231010-01	240-193490-D-1	Plastic 1 liter - Nitric Acid	<2			
BAC-23-F-A4-20231010-01	240-193490-E-1	Plastic 1 liter - Nitric Acid	<2			
BAC-08-F-A4-20231010-01	240-193490-C-2	Plastic 500ml - with Nitric Acid				
BAC-08-F-A4-20231010-01	240-193490-D-2	Plastic 1 liter - Nitric Acid	<2			
BAC-08-F-A4-20231010-01	240-193490-E-2	Plastic 1 liter - Nitric Acid	<2			
BAC-21-F-A4-20231011-01	240-193490-G-3	Plastic 500ml - with Nitric Acid	<2			
BAC-21-F-A4-20231011-01	240-193490-H-3	Plastic 500ml - with Nitric Acid	<2			
BAC-21-F-A4-20231011-01	240-193490-I-3	Plastic 500ml - with Nitric Acid	<2			
BAC-21-F-A4-20231011-01	240-193490-J-3	Plastic 1 liter - Nitric Acid	<2			
BAC-21-F-A4-20231011-01	240-193490-K-3	Plastic 1 liter - Nitric Acid	<2			
BAC-21-F-A4-20231011-01	240-193490-L-3	Plastic 1 liter - Nitric Acid	<2			
BAC-21-F-A4-20231011-01	240-193490-M-3	Plastic 1 liter - Nitric Acid	<2			
BAC-21-F-A4-20231011-01	240-193490-N-3	Plastic 1 liter - Nitric Acid	<2			
BAC-21-F-A4-20231011-01	240-193490-O-3	Plastic 1 liter - Nitric Acid	<2			
BAC-22-F-A4-20231011-01	240-193490-C-4	Plastic 500ml - with Nitric Acid				
BAC-22-F-A4-20231011-01	240-193490-D-4	Plastic 1 liter - Nitric Acid	<2			
BAC-22-F-A4-20231011-01	240-193490-E-4	Plastic 1 liter - Nitric Acid	<2			
BAC-18-F-A4-20231011-01	240-193490-C-5	Plastic 500ml - with Nitric Acid				
BAC-18-F-A4-20231011-01	240-193490-D-5	Plastic 1 liter - Nitric Acid	<2			
BAC-18-F-A4-20231011-01	240-193490-E-5	Plastic 1 liter - Nitric Acid	<2			
DUP-001-F-A4-20231011-01	240-193490-C-6	Plastic 500ml - with Nitric Acid				
DUP-001-F-A4-20231011-01	240-193490-D-6	Plastic 1 liter - Nitric Acid	<2			
DUP-001-F-A4-20231011-01	240-193490-E-6	Plastic 1 liter - Nitric Acid	<2			
BAC-10-F-A4-20231011-01	240-193490-C-7	Plastic 500ml - with Nitric Acid				
BAC-10-F-A4-20231011-01	240-193490-D-7	Plastic 1 liter - Nitric Acid	<2			
BAC-10-F-A4-20231011-01	240-193490-E-7	Plastic 1 liter - Nitric Acid	<2			
BAC-16-F-A4-20231011-01	240-193490-C-8	Plastic 500ml - with Nitric Acid				
BAC-16-F-A4-20231011-01	240-193490-D-8	Plastic 1 liter - Nitric Acid	<2			
BAC-16-F-A4-20231011-01	240-193490-E-8	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-A4-20231011-01	240-193490-C-9	Plastic 500ml - with Nitric Acid				
EB-001-F-A4-20231011-01	240-193490-D-9	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-A4-20231011-01	240-193490-E-9	Plastic 1 liter - Nitric Acid	<2			

Chain of Custody Record



Client Information (Sub Contract Lab)		Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No: 240-175262.1
Client Contact: Test/America Laboratories, Inc.		E-Mail: roxanne.cisneros@et.eurofins.com	State of Origin: Ohio	Page 1 of 2
Shipping/Receiving		Job #: 240-193490-1		
Company: Test/America Laboratories, Inc.		Preservation Codes: M - Hexane N - None 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 Other:		
Address: 13715 Rider Trail North,		Analysis Requested		
City: Earth City		Total Number of Containers		
State, Zip: MO, 63045		9315_Ra226/Presep_21 Radium-226 (GFP)		
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		9320_Ra228/Presep_0 Radium-228 (GFP)		
Email:		9326Ra228_GFP/Combined Radium-226 and		
Project Name: Federal GWM Wells		Field Filtered Sample (Yes or No)		
Site:		Perform MS/MSD (Yes or No)		
Due Date Requested: 10/25/2023		Special Instructions/Note:		
TAT Requested (days):		Recount of TAR after 21 day ingrowth if > action limit; save planchet		
PO #:		Recount of TAR after 21 day ingrowth if > action limit; save planchet		
WO #:		Recount of TAR after 21 day ingrowth if > action limit; save planchet		
Project #: 24019633		Recount of TAR after 21 day ingrowth if > action limit; save planchet		
SSOW#:		Recount of TAR after 21 day ingrowth if > action limit; save planchet		
Sample Identification - Client ID (Lab ID)		Recount of TAR after 21 day ingrowth if > action limit; save planchet		
BAC-23-F-A4-20231010-01 (240-193490-1)	Sample Date: 10/10/23	Sample Time: 13:08 Eastern	Sample Type (C=Comp, G=grab):	Matrix (W=water, S=solid, O=soil, BR=Tissue, Ash):
BAC-08-F-A4-20231010-01 (240-193490-2)	Sample Date: 10/10/23	Sample Time: 14:37 Eastern		Water
BAC-21-F-A4-20231011-01 (240-193490-3)	Sample Date: 10/11/23	Sample Time: 09:46 Eastern		Water
BAC-21-F-A4-20231011-01 (240-193490-3MS)	Sample Date: 10/11/23	Sample Time: 09:46 Eastern	MS	Water
BAC-21-F-A4-20231011-01 (240-193490-3MSD)	Sample Date: 10/11/23	Sample Time: 09:46 Eastern	MSD	Water
BAC-22-F-A4-20231011-01 (240-193490-4)	Sample Date: 10/11/23	Sample Time: 10:59 Eastern		Water
BAC-18-F-A4-20231011-01 (240-193490-5)	Sample Date: 10/11/23	Sample Time: 12:09 Eastern		Water
DUP-001-F-A4-20231011-01 (240-193490-6)	Sample Date: 10/11/23	Sample Time: Eastern		Water
BAC-10-F-A4-20231011-01 (240-193490-7)	Sample Date: 10/11/23	Sample Time: 13:17 Eastern		Water

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/test/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
 Deliverable Requested: I, II, III, IV, Other (specify) _____
 Primary Deliverable Rank: 2
 Date: _____ Time: _____
 Empty Kit Relinquished by: _____ Date: _____ Time: _____
 Relinquished by: _____ Date/Time: _____ Company: _____
 Relinquished by: _____ Date/Time: _____ Company: _____
 Relinquished by: _____ Date/Time: _____ Company: _____
 Custody Seals Intact: _____ Custody Seal No.: _____
 Δ Yes Δ No
 Cooler Temperature(s) °C and Other Remarks: _____

Special Instructions/QC Requirements:
 Return To Client Disposal By Lab Archive For _____ Months
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Chain of Custody Record



Client Information (Sub Contract Lab)
 Client Contact: Cisneros, Roxanne
 Shipping/Receiving: roxanne.cisneros@et.eurofins.com
 TestAmerica Laboratories, Inc.
 Address: 13715 Rider Trail North.
 City: Earth City
 State, Zip: MO, 63045
 Phone: 314-298-8566(Tel) 314-298-8757(Fax)
 Email:
 Project Name: Federal GWM Wells
 Site:
 Lab PM: Cisneros, Roxanne
 E-Mail: roxanne.cisneros@et.eurofins.com
 State of Origin: Ohio
 Carrier Tracking No(s):
 COC No: 240-175262.2
 Page: Page 2 of 2
 Job #: 240-193490-1

Due Date Requested: 10/25/2023
TAT Requested (days):
PO #:
WO #:
Project #: 24019633
SSOW#:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soil, BT=tissue, A=air)	Field Filtered Sample (Yes or No)	Perform MSMSD (Yes or No)	9315_Ra226/PreSep_21 Radium-226 (GFP)	9320_Ra226/PreSep_0 Radium-226 (GFP)	Ra226Ra228_GFP/ Combined Radium-226 and Radium-228	Total Number of Containers	Special Instructions/Note:
BAC-16-F-A4-20231011-01 (240-193490-8)	10/11/23	14:29 Eastern	Water	Water	X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit: save planchet
EB-001-F-A4-20231011-01 (240-193490-9)	10/11/23	15:00 Eastern	Water	Water	X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit: save planchet

Analysis Requested

Preservation Codes:
 A - HCl
 B - NaOH
 O - AsNaO2
 P - Na2OAS
 D - Nitric Acid
 E - NaHSO4
 F - MeOH
 G - Amchlor
 H - Ascorbic Acid
 I - Ice
 J - DI Water
 K - EDTA
 L - EDA
 V - MCAA
 W - pH 4.5
 Y - Trizma
 Z - other (specify)
 Other:

Other:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
 Special Instructions/QC Requirements:

Received by: James Arant
Date/Time: 10/10/23 09:00
Company: ETSI
Received by:
Date/Time:
Company:
Received by:
Date/Time:
Company:
 Cooler Temperature(s) °C and Other Remarks:

Primary Deliverable Rank: 2
Empty Kit Relinquished by: M. Slocum
Date: 10/13/23
Relinquished by:
Date/Time:
Company:
Relinquished by:
Date/Time:
Company:
Custody Seals Intact: Yes No
Custody Seal No.:

Method of Shipment:
Received by:
Date/Time:
Company:
Received by:
Date/Time:
Company:
Received by:
Date/Time:
Company:



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-193490-1

Login Number: 193490

List Number: 2

Creator: Pinette, Meadow L

List Source: Eurofins St. Louis

List Creation: 10/16/23 03:23 PM

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



 **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 - App III

JOB NUMBER

240-193601-1

Eurofins Cleveland

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



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Job ID: 240-193601-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-193601-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample 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 10/14/2023 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 0.7°C and 14.5°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 - App III

Job ID: 240-193601-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
SM 2540C	Solids, Total Dissolved (TDS)	SM	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
Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-193601-1	BAC-14-F-A3-20231012-01	Water	10/12/23 10:09	10/14/23 08:00
240-193601-2	DUP-002-F-A3-20231012-01	Water	10/12/23 00:00	10/14/23 08:00
240-193601-3	BAC-12-F-A3-20231012-01	Water	10/12/23 11:11	10/14/23 08:00
240-193601-4	FIELD BLANK-001-F-A3-20231012-01	Water	10/12/23 11:30	10/14/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Client Sample ID: BAC-14-F-A3-20231012-01

Lab Sample ID: 240-193601-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2700		100	57	ug/L	1		6010D	Total Recoverable
Calcium	75000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	23000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	82		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	82		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	33		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.066		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	220		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	430		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-002-F-A3-20231012-01

Lab Sample ID: 240-193601-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2800		100	57	ug/L	1		6010D	Total Recoverable
Calcium	76000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	23000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	82		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	82		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	33		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.070		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	230		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	440		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-12-F-A3-20231012-01

Lab Sample ID: 240-193601-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1900		100	57	ug/L	1		6010D	Total Recoverable
Calcium	82000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	3100		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	32000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	86		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	86		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	64		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.095		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	500		10	7.8	mg/L	1		SM 2540C	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 - App III

Job ID: 240-193601-1

Client Sample ID: FIELD BLANK-001-F-A3-20231012-01

Lab Sample ID: 240-193601-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	59		10	7.8	mg/L	1		SM 2540C	Total/NA

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Client Sample ID: BAC-14-F-A3-20231012-01

Lab Sample ID: 240-193601-1

Date Collected: 10/12/23 10:09

Matrix: Water

Date Received: 10/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2700		100	57	ug/L		10/16/23 14:00	10/17/23 23:01	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	75000		1000	250	ug/L		10/16/23 14:00	10/17/23 16:16	1
Magnesium	22000		1000	61	ug/L		10/16/23 14:00	10/17/23 16:16	1
Potassium	1600		1000	220	ug/L		10/16/23 14:00	10/17/23 16:16	1
Sodium	23000		1000	330	ug/L		10/16/23 14:00	10/17/23 16:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	82		5.0	2.6	mg/L			10/16/23 13:50	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	82		5.0	2.6	mg/L			10/16/23 13:50	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/16/23 13:50	1
Chloride (EPA 300.0)	33		1.0	0.13	mg/L			10/20/23 20:40	1
Fluoride (EPA 300.0)	0.066		0.050	0.024	mg/L			10/20/23 20:40	1
Sulfate (EPA 300.0)	220		5.0	1.7	mg/L			10/30/23 18:47	5
Total Dissolved Solids (SM 2540C)	430		10	7.8	mg/L			10/18/23 09:19	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Client Sample ID: DUP-002-F-A3-20231012-01

Lab Sample ID: 240-193601-2

Date Collected: 10/12/23 00:00

Matrix: Water

Date Received: 10/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2800		100	57	ug/L		10/16/23 14:00	10/17/23 23:06	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	76000		1000	250	ug/L		10/16/23 14:00	10/17/23 16:23	1
Magnesium	22000		1000	61	ug/L		10/16/23 14:00	10/17/23 16:23	1
Potassium	1700		1000	220	ug/L		10/16/23 14:00	10/17/23 16:23	1
Sodium	23000		1000	330	ug/L		10/16/23 14:00	10/17/23 16:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	82		5.0	2.6	mg/L			10/16/23 13:55	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	82		5.0	2.6	mg/L			10/16/23 13:55	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/16/23 13:55	1
Chloride (EPA 300.0)	33		1.0	0.13	mg/L			10/20/23 22:20	1
Fluoride (EPA 300.0)	0.070		0.050	0.024	mg/L			10/20/23 22:20	1
Sulfate (EPA 300.0)	230		5.0	1.7	mg/L			10/30/23 19:07	5
Total Dissolved Solids (SM 2540C)	440		10	7.8	mg/L			10/18/23 09:19	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Client Sample ID: BAC-12-F-A3-20231012-01

Lab Sample ID: 240-193601-3

Date Collected: 10/12/23 11:11

Matrix: Water

Date Received: 10/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1900		100	57	ug/L		10/16/23 14:00	10/17/23 23:10	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	82000		1000	250	ug/L		10/16/23 14:00	10/17/23 16:26	1
Magnesium	20000		1000	61	ug/L		10/16/23 14:00	10/17/23 16:26	1
Potassium	3100		1000	220	ug/L		10/16/23 14:00	10/17/23 16:26	1
Sodium	32000		1000	330	ug/L		10/16/23 14:00	10/17/23 16:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	86		5.0	2.6	mg/L			10/16/23 14:00	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	86		5.0	2.6	mg/L			10/16/23 14:00	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/16/23 14:00	1
Chloride (EPA 300.0)	64		1.0	0.13	mg/L			10/21/23 02:02	1
Fluoride (EPA 300.0)	0.095		0.050	0.024	mg/L			10/21/23 02:02	1
Sulfate (EPA 300.0)	190		5.0	1.7	mg/L			10/30/23 19:27	5
Total Dissolved Solids (SM 2540C)	500		10	7.8	mg/L			10/18/23 09:19	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Client Sample ID: FIELD BLANK-001-F-A3-20231012-01

Lab Sample ID: 240-193601-4

Date Collected: 10/12/23 11:30

Matrix: Water

Date Received: 10/14/23 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		10/16/23 14:00	10/17/23 23:15	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		10/16/23 14:00	10/17/23 16:28	1
Magnesium	ND		1000	61	ug/L		10/16/23 14:00	10/17/23 16:28	1
Potassium	ND		1000	220	ug/L		10/16/23 14:00	10/17/23 16:28	1
Sodium	ND		1000	330	ug/L		10/16/23 14:00	10/17/23 16:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/16/23 14:04	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/16/23 14:04	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/16/23 14:04	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			10/21/23 09:45	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			10/21/23 09:45	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			10/21/23 09:45	1
Total Dissolved Solids (SM 2540C)	59		10	7.8	mg/L			10/18/23 09:19	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-590942/1-A
 Matrix: Water
 Analysis Batch: 591127

Client Sample ID: Method Blank
 Prep Type: Total Recoverable
 Prep Batch: 590942

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		10/16/23 14:00	10/17/23 20:51	1

Lab Sample ID: LCS 240-590942/2-A
 Matrix: Water
 Analysis Batch: 591127

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 590942

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 240-590942/1-A
 Matrix: Water
 Analysis Batch: 591232

Client Sample ID: Method Blank
 Prep Type: Total Recoverable
 Prep Batch: 590942

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		10/16/23 14:00	10/17/23 15:26	1
Magnesium	ND		1000	61	ug/L		10/16/23 14:00	10/17/23 15:26	1
Potassium	ND		1000	220	ug/L		10/16/23 14:00	10/17/23 15:26	1
Sodium	ND		1000	330	ug/L		10/16/23 14:00	10/17/23 15:26	1

Lab Sample ID: LCS 240-590942/3-A
 Matrix: Water
 Analysis Batch: 591232

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 590942

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	23600		ug/L		94	80 - 120
Magnesium	25000	24400		ug/L		97	80 - 120
Potassium	25000	24400		ug/L		97	80 - 120
Sodium	25000	24000		ug/L		96	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-590996/4
 Matrix: Water
 Analysis Batch: 590996

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			10/16/23 12:17	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/16/23 12:17	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/16/23 12:17	1

Lab Sample ID: LCS 240-590996/3
 Matrix: Water
 Analysis Batch: 590996

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	82.1		mg/L		102	86 - 123

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-591603/3
Matrix: Water
Analysis Batch: 591603

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			10/20/23 13:57	1
Fluoride	ND		0.050	0.024	mg/L			10/20/23 13:57	1
Sulfate	ND		1.0	0.35	mg/L			10/20/23 13:57	1

Lab Sample ID: LCS 240-591603/4
Matrix: Water
Analysis Batch: 591603

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.4		mg/L		103	90 - 110
Fluoride	2.50	2.74		mg/L		109	90 - 110
Sulfate	50.0	54.2		mg/L		108	90 - 110

Lab Sample ID: 240-193601-1 MS
Matrix: Water
Analysis Batch: 591603

Client Sample ID: BAC-14-F-A3-20231012-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	33		50.0	84.8		mg/L		104	80 - 120
Fluoride	0.066		2.50	2.82		mg/L		110	80 - 120

Lab Sample ID: 240-193601-1 MSD
Matrix: Water
Analysis Batch: 591603

Client Sample ID: BAC-14-F-A3-20231012-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	33		50.0	85.5		mg/L		105	80 - 120	1	15
Fluoride	0.066		2.50	2.85		mg/L		111	80 - 120	1	15

Lab Sample ID: MB 240-591640/3
Matrix: Water
Analysis Batch: 591640

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			10/21/23 01:22	1
Fluoride	ND		0.050	0.024	mg/L			10/21/23 01:22	1
Sulfate	ND		1.0	0.35	mg/L			10/21/23 01:22	1

Lab Sample ID: LCS 240-591640/4
Matrix: Water
Analysis Batch: 591640

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.7		mg/L		103	90 - 110
Fluoride	2.50	2.74		mg/L		110	90 - 110
Sulfate	50.0	54.2		mg/L		108	90 - 110

Eurofins Cleveland

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-193601-3 MS
Matrix: Water
Analysis Batch: 591640

Client Sample ID: BAC-12-F-A3-20231012-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	64		50.0	113		mg/L		99	80 - 120
Fluoride	0.095		2.50	2.83		mg/L		109	80 - 120

Lab Sample ID: 240-193601-3 MSD
Matrix: Water
Analysis Batch: 591640

Client Sample ID: BAC-12-F-A3-20231012-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	64		50.0	112		mg/L		96	80 - 120	2	15
Fluoride	0.095		2.50	2.74		mg/L		106	80 - 120	3	15

Lab Sample ID: 240-193601-4 MS
Matrix: Water
Analysis Batch: 591640

Client Sample ID: FIELD BLANK-001-F-A3-20231012-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	ND		50.0	54.1		mg/L		108	80 - 120
Fluoride	ND		2.50	2.87		mg/L		115	80 - 120
Sulfate	ND		50.0	55.7		mg/L		111	80 - 120

Lab Sample ID: 240-193601-4 MSD
Matrix: Water
Analysis Batch: 591640

Client Sample ID: FIELD BLANK-001-F-A3-20231012-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND		50.0	55.2		mg/L		110	80 - 120	2	15
Fluoride	ND		2.50	2.92		mg/L		117	80 - 120	2	15
Sulfate	ND		50.0	56.9		mg/L		114	80 - 120	2	15

Lab Sample ID: MB 240-592755/3
Matrix: Water
Analysis Batch: 592755

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			10/30/23 13:33	1
Fluoride	ND		0.050	0.024	mg/L			10/30/23 13:33	1
Sulfate	ND		1.0	0.35	mg/L			10/30/23 13:33	1

Lab Sample ID: LCS 240-592755/4
Matrix: Water
Analysis Batch: 592755

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	50.3		mg/L		101	90 - 110
Fluoride	2.50	2.60		mg/L		104	90 - 110
Sulfate	50.0	51.8		mg/L		104	90 - 110

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

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

Lab Sample ID: MB 240-591249/1
 Matrix: Water
 Analysis Batch: 591249

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			10/18/23 09:19	1

Lab Sample ID: LCS 240-591249/2
 Matrix: Water
 Analysis Batch: 591249

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	336	317		mg/L		94	80 - 120

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Metals

Prep Batch: 590942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193601-1	BAC-14-F-A3-20231012-01	Total Recoverable	Water	3005A	
240-193601-2	DUP-002-F-A3-20231012-01	Total Recoverable	Water	3005A	
240-193601-3	BAC-12-F-A3-20231012-01	Total Recoverable	Water	3005A	
240-193601-4	FIELD BLANK-001-F-A3-20231012-01	Total Recoverable	Water	3005A	
MB 240-590942/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-590942/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-590942/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 591127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193601-1	BAC-14-F-A3-20231012-01	Total Recoverable	Water	6010D	590942
240-193601-2	DUP-002-F-A3-20231012-01	Total Recoverable	Water	6010D	590942
240-193601-3	BAC-12-F-A3-20231012-01	Total Recoverable	Water	6010D	590942
240-193601-4	FIELD BLANK-001-F-A3-20231012-01	Total Recoverable	Water	6010D	590942
MB 240-590942/1-A	Method Blank	Total Recoverable	Water	6010D	590942
LCS 240-590942/2-A	Lab Control Sample	Total Recoverable	Water	6010D	590942

Analysis Batch: 591232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193601-1	BAC-14-F-A3-20231012-01	Total Recoverable	Water	6020B	590942
240-193601-2	DUP-002-F-A3-20231012-01	Total Recoverable	Water	6020B	590942
240-193601-3	BAC-12-F-A3-20231012-01	Total Recoverable	Water	6020B	590942
240-193601-4	FIELD BLANK-001-F-A3-20231012-01	Total Recoverable	Water	6020B	590942
MB 240-590942/1-A	Method Blank	Total Recoverable	Water	6020B	590942
LCS 240-590942/3-A	Lab Control Sample	Total Recoverable	Water	6020B	590942

General Chemistry

Analysis Batch: 590996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193601-1	BAC-14-F-A3-20231012-01	Total/NA	Water	2320B-1997	
240-193601-2	DUP-002-F-A3-20231012-01	Total/NA	Water	2320B-1997	
240-193601-3	BAC-12-F-A3-20231012-01	Total/NA	Water	2320B-1997	
240-193601-4	FIELD BLANK-001-F-A3-20231012-01	Total/NA	Water	2320B-1997	
MB 240-590996/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-590996/3	Lab Control Sample	Total/NA	Water	2320B-1997	

Analysis Batch: 591249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193601-1	BAC-14-F-A3-20231012-01	Total/NA	Water	SM 2540C	
240-193601-2	DUP-002-F-A3-20231012-01	Total/NA	Water	SM 2540C	
240-193601-3	BAC-12-F-A3-20231012-01	Total/NA	Water	SM 2540C	
240-193601-4	FIELD BLANK-001-F-A3-20231012-01	Total/NA	Water	SM 2540C	
MB 240-591249/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-591249/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 591603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193601-1	BAC-14-F-A3-20231012-01	Total/NA	Water	300.0	
240-193601-2	DUP-002-F-A3-20231012-01	Total/NA	Water	300.0	
MB 240-591603/3	Method Blank	Total/NA	Water	300.0	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

General Chemistry (Continued)

Analysis Batch: 591603 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-591603/4	Lab Control Sample	Total/NA	Water	300.0	
240-193601-1 MS	BAC-14-F-A3-20231012-01	Total/NA	Water	300.0	
240-193601-1 MSD	BAC-14-F-A3-20231012-01	Total/NA	Water	300.0	

Analysis Batch: 591640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193601-3	BAC-12-F-A3-20231012-01	Total/NA	Water	300.0	
240-193601-4	FIELD BLANK-001-F-A3-20231012-01	Total/NA	Water	300.0	
MB 240-591640/3	Method Blank	Total/NA	Water	300.0	
LCS 240-591640/4	Lab Control Sample	Total/NA	Water	300.0	
240-193601-3 MS	BAC-12-F-A3-20231012-01	Total/NA	Water	300.0	
240-193601-3 MSD	BAC-12-F-A3-20231012-01	Total/NA	Water	300.0	
240-193601-4 MS	FIELD BLANK-001-F-A3-20231012-01	Total/NA	Water	300.0	
240-193601-4 MSD	FIELD BLANK-001-F-A3-20231012-01	Total/NA	Water	300.0	

Analysis Batch: 592755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193601-1	BAC-14-F-A3-20231012-01	Total/NA	Water	300.0	
240-193601-2	DUP-002-F-A3-20231012-01	Total/NA	Water	300.0	
240-193601-3	BAC-12-F-A3-20231012-01	Total/NA	Water	300.0	
MB 240-592755/3	Method Blank	Total/NA	Water	300.0	
LCS 240-592755/4	Lab Control Sample	Total/NA	Water	300.0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Client Sample ID: BAC-14-F-A3-20231012-01

Lab Sample ID: 240-193601-1

Date Collected: 10/12/23 10:09

Matrix: Water

Date Received: 10/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590942	S4FJ	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6010D		1	591127	KLC	EET CLE	10/17/23 23:01
Total Recoverable	Prep	3005A			590942	S4FJ	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 16:16
Total/NA	Analysis	2320B-1997		1	590996	QUY8	EET CLE	10/16/23 13:50
Total/NA	Analysis	300.0		1	591603	JWW	EET CLE	10/20/23 20:40
Total/NA	Analysis	300.0		5	592755	JWW	EET CLE	10/30/23 18:47
Total/NA	Analysis	SM 2540C		1	591249	QUY8	EET CLE	10/18/23 09:19

Client Sample ID: DUP-002-F-A3-20231012-01

Lab Sample ID: 240-193601-2

Date Collected: 10/12/23 00:00

Matrix: Water

Date Received: 10/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590942	S4FJ	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6010D		1	591127	KLC	EET CLE	10/17/23 23:06
Total Recoverable	Prep	3005A			590942	S4FJ	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 16:23
Total/NA	Analysis	2320B-1997		1	590996	QUY8	EET CLE	10/16/23 13:55
Total/NA	Analysis	300.0		1	591603	JWW	EET CLE	10/20/23 22:20
Total/NA	Analysis	300.0		5	592755	JWW	EET CLE	10/30/23 19:07
Total/NA	Analysis	SM 2540C		1	591249	QUY8	EET CLE	10/18/23 09:19

Client Sample ID: BAC-12-F-A3-20231012-01

Lab Sample ID: 240-193601-3

Date Collected: 10/12/23 11:11

Matrix: Water

Date Received: 10/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590942	S4FJ	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6010D		1	591127	KLC	EET CLE	10/17/23 23:10
Total Recoverable	Prep	3005A			590942	S4FJ	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 16:26
Total/NA	Analysis	2320B-1997		1	590996	QUY8	EET CLE	10/16/23 14:00
Total/NA	Analysis	300.0		1	591640	JWW	EET CLE	10/21/23 02:02
Total/NA	Analysis	300.0		5	592755	JWW	EET CLE	10/30/23 19:27
Total/NA	Analysis	SM 2540C		1	591249	QUY8	EET CLE	10/18/23 09:19

Client Sample ID: FIELD BLANK-001-F-A3-20231012-01

Lab Sample ID: 240-193601-4

Date Collected: 10/12/23 11:30

Matrix: Water

Date Received: 10/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590942	S4FJ	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6010D		1	591127	KLC	EET CLE	10/17/23 23:15

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Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Client Sample ID: FIELD BLANK-001-F-A3-20231012-01

Lab Sample ID: 240-193601-4

Date Collected: 10/12/23 11:30

Matrix: Water

Date Received: 10/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590942	S4FJ	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 16:28
Total/NA	Analysis	2320B-1997		1	590996	QUY8	EET CLE	10/16/23 14:04
Total/NA	Analysis	300.0		1	591640	JWW	EET CLE	10/21/23 09:45
Total/NA	Analysis	SM 2540C		1	591249	QUY8	EET CLE	10/18/23 09:19

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
Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

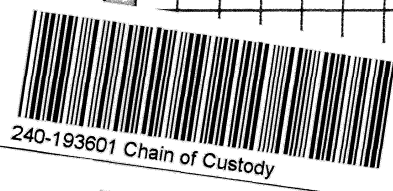
Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
Virginia	NELAP	460175	09-14-24
West Virginia DEP	State	210	12-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Client Information		Sampler: <i>Bobby Caste</i>		Lab PM		Carrier Tracking No(s)		COC No	
Taylor Huffman		Phone: <i>740-373-4308</i>		E-Mail: <i>roxanne.cisneros@Eurofins.com</i>		State of Origin:		Page: <i>1 of 1</i>	
Company: <i>Lightstone Generation Gavin Power LLC</i>		PWSID:		Analysis Requested		Job #		Preservation Codes:	
Address: <i>7397 OH-7</i>		Due Date Requested:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of Containers	
City: <i>Cheshire</i>		TAT Requested (days):		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
State, Zip: <i>OH, 45620</i>		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		Matrix (Water, Swab, On-water, Air)		Preservation Code:		Special Instructions/Note:	
Phone: <i>740-925-3171 (Tel)</i>		PO #: <i>2935505</i>		Sample Date		Sample Time		Special Instructions/Note:	
Email: <i>taylor.huffman@lightstonegen.com</i>		WO #: <i>24019633</i>		Sample Date		Sample Time		Special Instructions/Note:	
Project Name: <i>Federal CCR Wells - App III</i>		Project #: <i>24019633</i>		Sample Date		Sample Time		Special Instructions/Note:	
Site: <i>Gruh</i>		SSOW#: <i>24019633</i>		Sample Date		Sample Time		Special Instructions/Note:	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (Water, Swab, On-water, Air)	
<i>BAC-14-F-A3-20231012-01</i>		<i>10-12-23</i>		<i>1009</i>		<i>G</i>		<i>W</i>	
<i>DUP-02-F-A3-20231012-01</i>		<i>10-12-23</i>		<i>-</i>		<i>G</i>		<i>W</i>	
<i>BAC-12-F-A3-20231012-01</i>		<i>10-12-23</i>		<i>1111</i>		<i>G</i>		<i>W</i>	
<i>Field Blanks-01-F-A3-20231012-01</i>		<i>10-12-23</i>		<i>1130</i>		<i>G</i>		<i>W</i>	
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard		<input type="checkbox"/> Flammable		<input type="checkbox"/> Skin Irritant		<input type="checkbox"/> Radiological	
Deliverable Requested: <i>I, II, III, IV, Other (specify)</i>		<input type="checkbox"/> Poison B		<input type="checkbox"/> Unknown		<input type="checkbox"/> Unknown		<input type="checkbox"/> Radiological	
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:		Special Instructions/IOC Requirements:	
Relinquished by: <i>Yuan Smith</i>		<i>10-13-23 10915</i>		<i>10-13-23 1700</i>		<i>ASNEY DEAL</i>		<i>ASNEY DEAL</i>	
Relinquished by: <i>ASNEY DEAL</i>		<i>10/13/23 1700</i>		<i>10/13/23 1700</i>		<i>ASNEY DEAL</i>		<i>ASNEY DEAL</i>	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Company: <i>ETA</i>		Company: <i>ETA</i>	



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193601

Eurofins - Cleveland Sample Receipt Form/Narrative

Login # : _____

Barberton Facility

Client Lightstone

Site Name _____

Cooler unpacked by: _____

Cooler Received on 10-14-23

Opened on 10-14-23

Nancy Rye

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 # 22 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C


- 2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity leach 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 NA
- Were tamper/custody seals intact and uncompromised? Yes No NA

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

- 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# HC316719
- 14. Were VOAs on the COC? Yes No NA
- 15. Were air bubbles >6 mm in any VOA vials? Yes No NA  ← Larger than this.
- 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: _____

Eurofins - Canton 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 #: 22	14.6	14.5	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: 22	0.8	0.7	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	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

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-14-F-A3-20231012-01	240-193601-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-002-F-A3-20231012-01	240-193601-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-12-F-A3-20231012-01	240-193601-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
FIELD BLANK-001-F-A3-20231012-01	240-193601-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____

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ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 11/13/2023 4:18:32 PM

JOB DESCRIPTION

Federal CCR Wells - App IV

JOB NUMBER

240-193603-1

Eurofins Cleveland

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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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

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
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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Job ID: 240-193603-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-193603-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample 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 10/14/2023 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 0.7°C and 14.5°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 160-632483: The following sample(s) did not meet the requested limit (RL) due to the reduced sample volume attributed to the presence of matrix interference. During preparation the analyst visually noted matrix effects. The data have been reported with this narrative. BAC-14-F-A4-20231012-01 (240-193603-1) and BAC-12-F-A4-20231012-01 (240-193603-3)

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
Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0-1993 R2.1	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 - App IV

Job ID: 240-193603-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-193603-1	BAC-14-F-A4-20231012-01	Water	10/12/23 10:09	10/14/23 08:00
240-193603-2	DUP-002-F-A4-20231012-01	Water	10/12/23 00:00	10/14/23 08:00
240-193603-3	BAC-12-F-A4-20231012-01	Water	10/12/23 11:11	10/14/23 08:00
240-193603-4	FIELD BLANK-001-F-A4-20231012-01	Water	10/12/23 11:13	10/14/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Client Sample ID: BAC-14-F-A4-20231012-01

Lab Sample ID: 240-193603-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.9	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	99		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	1.5	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.0		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.93	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	7.4	J B	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	22000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	82		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	82		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.056	F2	0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: DUP-002-F-A4-20231012-01

Lab Sample ID: 240-193603-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.1	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	100		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	1.6	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.0		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.99	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	7.9	J B	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	23000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	81		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	81		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.046	J	0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-12-F-A4-20231012-01

Lab Sample ID: 240-193603-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	6.0		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	110		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.21	J	1.0	0.20	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 - App IV

Job ID: 240-193603-1

Client Sample ID: BAC-12-F-A4-20231012-01 (Continued)

Lab Sample ID: 240-193603-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	2.9	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	8.0		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	4.5		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	11	B	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	3000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	32000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	86		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	86		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.061		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: FIELD BLANK-001-F-A4-20231012-01

Lab Sample ID: 240-193603-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	1.9	J B	8.0	1.7	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Client Sample ID: BAC-14-F-A4-20231012-01

Lab Sample ID: 240-193603-1

Date Collected: 10/12/23 10:09

Matrix: Water

Date Received: 10/14/23 08:00

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		10/16/23 14:00	10/17/23 19:43	1
Arsenic	1.9	J	5.0	0.75	ug/L		10/16/23 14:00	10/17/23 19:43	1
Barium	99		5.0	2.2	ug/L		10/16/23 14:00	10/17/23 19:43	1
Beryllium	ND		1.0	0.62	ug/L		10/16/23 14:00	10/17/23 19:43	1
Cadmium	ND		1.0	0.20	ug/L		10/16/23 14:00	10/17/23 19:43	1
Chromium	1.5	J	5.0	1.2	ug/L		10/16/23 14:00	10/17/23 19:43	1
Cobalt	2.0		1.0	0.19	ug/L		10/16/23 14:00	10/17/23 19:43	1
Lead	0.93	J	1.0	0.45	ug/L		10/16/23 14:00	10/17/23 19:43	1
Lithium	7.4	J B	8.0	1.7	ug/L		10/16/23 14:00	10/17/23 19:43	1
Magnesium	21000		1000	61	ug/L		10/16/23 14:00	10/17/23 19:43	1
Molybdenum	ND		5.0	1.1	ug/L		10/16/23 14:00	10/17/23 19:43	1
Potassium	1600		1000	220	ug/L		10/16/23 14:00	10/17/23 19:43	1
Selenium	ND		5.0	0.89	ug/L		10/16/23 14:00	10/17/23 19:43	1
Sodium	22000		1000	330	ug/L		10/16/23 14:00	10/17/23 19:43	1
Thallium	ND		1.0	0.20	ug/L		10/16/23 14:00	10/17/23 19:43	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		10/16/23 14:00	10/18/23 16:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	82		5.0	2.6	mg/L			10/16/23 14:08	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	82		5.0	2.6	mg/L			10/16/23 14:08	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/16/23 14:08	1
Fluoride (EPA 300.0-1993 R2.1)	0.056	F2	0.050	0.024	mg/L			11/06/23 16:28	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.250	U	0.192	0.193	1.00	0.278	pCi/L	10/18/23 09:10	11/09/23 21:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.2		30 - 110					10/18/23 09:10	11/09/23 21:08	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.745	U G	0.671	0.674	1.00	1.07	pCi/L	10/18/23 09:12	11/07/23 11:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.2		30 - 110					10/18/23 09:12	11/07/23 11:18	1
Y Carrier	73.3		30 - 110					10/18/23 09:12	11/07/23 11:18	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Client Sample ID: BAC-14-F-A4-20231012-01

Lab Sample ID: 240-193603-1

Date Collected: 10/12/23 10:09

Matrix: Water

Date Received: 10/14/23 08:00

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	0.995	U	0.698	0.701	5.00	1.07	pCi/L		11/10/23 17:32	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Client Sample ID: DUP-002-F-A4-20231012-01

Lab Sample ID: 240-193603-2

Date Collected: 10/12/23 00:00

Matrix: Water

Date Received: 10/14/23 08:00

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		10/16/23 14:00	10/17/23 19:46	1
Arsenic	2.1	J	5.0	0.75	ug/L		10/16/23 14:00	10/17/23 19:46	1
Barium	100		5.0	2.2	ug/L		10/16/23 14:00	10/17/23 19:46	1
Beryllium	ND		1.0	0.62	ug/L		10/16/23 14:00	10/17/23 19:46	1
Cadmium	ND		1.0	0.20	ug/L		10/16/23 14:00	10/17/23 19:46	1
Chromium	1.6	J	5.0	1.2	ug/L		10/16/23 14:00	10/17/23 19:46	1
Cobalt	2.0		1.0	0.19	ug/L		10/16/23 14:00	10/17/23 19:46	1
Lead	0.99	J	1.0	0.45	ug/L		10/16/23 14:00	10/17/23 19:46	1
Lithium	7.9	J B	8.0	1.7	ug/L		10/16/23 14:00	10/17/23 19:46	1
Magnesium	22000		1000	61	ug/L		10/16/23 14:00	10/17/23 19:46	1
Molybdenum	ND		5.0	1.1	ug/L		10/16/23 14:00	10/17/23 19:46	1
Potassium	1600		1000	220	ug/L		10/16/23 14:00	10/17/23 19:46	1
Selenium	ND		5.0	0.89	ug/L		10/16/23 14:00	10/17/23 19:46	1
Sodium	23000		1000	330	ug/L		10/16/23 14:00	10/17/23 19:46	1
Thallium	ND		1.0	0.20	ug/L		10/16/23 14:00	10/17/23 19:46	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		10/16/23 14:00	10/18/23 16:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	81		5.0	2.6	mg/L			10/16/23 14:12	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	81		5.0	2.6	mg/L			10/16/23 14:12	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/16/23 14:12	1
Fluoride (EPA 300.0-1993 R2.1)	0.046	J	0.050	0.024	mg/L			11/06/23 22:58	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	0.382		0.172	0.176	1.00	0.160	pCi/L	10/18/23 09:10	11/09/23 21:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.5		30 - 110					10/18/23 09:10	11/09/23 21:08	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	1.01		0.503	0.511	1.00	0.693	pCi/L	10/18/23 09:12	11/07/23 11:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.5		30 - 110					10/18/23 09:12	11/07/23 11:18	1
Y Carrier	84.5		30 - 110					10/18/23 09:12	11/07/23 11:18	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Client Sample ID: DUP-002-F-A4-20231012-01

Lab Sample ID: 240-193603-2

Date Collected: 10/12/23 00:00

Matrix: Water

Date Received: 10/14/23 08:00

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	1.39		0.532	0.540	5.00	0.693	pCi/L		11/10/23 17:32	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Client Sample ID: BAC-12-F-A4-20231012-01

Lab Sample ID: 240-193603-3

Date Collected: 10/12/23 11:11

Matrix: Water

Date Received: 10/14/23 08:00

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		10/16/23 14:00	10/17/23 19:53	1
Arsenic	6.0		5.0	0.75	ug/L		10/16/23 14:00	10/17/23 19:53	1
Barium	110		5.0	2.2	ug/L		10/16/23 14:00	10/17/23 19:53	1
Beryllium	ND		1.0	0.62	ug/L		10/16/23 14:00	10/17/23 19:53	1
Cadmium	0.21	J	1.0	0.20	ug/L		10/16/23 14:00	10/17/23 19:53	1
Chromium	2.9	J	5.0	1.2	ug/L		10/16/23 14:00	10/17/23 19:53	1
Cobalt	8.0		1.0	0.19	ug/L		10/16/23 14:00	10/17/23 19:53	1
Lead	4.5		1.0	0.45	ug/L		10/16/23 14:00	10/17/23 19:53	1
Lithium	11	B	8.0	1.7	ug/L		10/16/23 14:00	10/17/23 19:53	1
Magnesium	20000		1000	61	ug/L		10/16/23 14:00	10/17/23 19:53	1
Molybdenum	ND		5.0	1.1	ug/L		10/16/23 14:00	10/17/23 19:53	1
Potassium	3000		1000	220	ug/L		10/16/23 14:00	10/17/23 19:53	1
Selenium	ND		5.0	0.89	ug/L		10/16/23 14:00	10/17/23 19:53	1
Sodium	32000		1000	330	ug/L		10/16/23 14:00	10/17/23 19:53	1
Thallium	ND		1.0	0.20	ug/L		10/16/23 14:00	10/17/23 19:53	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		10/16/23 14:00	10/18/23 16:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	86		5.0	2.6	mg/L			10/16/23 14:25	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	86		5.0	2.6	mg/L			10/16/23 14:25	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/16/23 14:25	1
Fluoride (EPA 300.0-1993 R2.1)	0.061		0.050	0.024	mg/L			10/20/23 16:38	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.245	U	0.254	0.254	1.00	0.401	pCi/L	10/18/23 09:10	11/09/23 21:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.5		30 - 110					10/18/23 09:10	11/09/23 21:08	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.902	U G	0.745	0.750	1.00	1.16	pCi/L	10/18/23 09:12	11/07/23 11:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.5		30 - 110					10/18/23 09:12	11/07/23 11:18	1
Y Carrier	83.0		30 - 110					10/18/23 09:12	11/07/23 11:18	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Client Sample ID: BAC-12-F-A4-20231012-01

Lab Sample ID: 240-193603-3

Date Collected: 10/12/23 11:11

Matrix: Water

Date Received: 10/14/23 08:00

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	0.787	0.792	5.00	1.16	pCi/L		11/10/23 17:32	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Client Sample ID: FIELD BLANK-001-F-A4-20231012-01

Lab Sample ID: 240-193603-4

Date Collected: 10/12/23 11:13

Matrix: Water

Date Received: 10/14/23 08:00

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		10/16/23 14:00	10/17/23 19:55	1
Arsenic	ND		5.0	0.75	ug/L		10/16/23 14:00	10/17/23 19:55	1
Barium	ND		5.0	2.2	ug/L		10/16/23 14:00	10/17/23 19:55	1
Beryllium	ND		1.0	0.62	ug/L		10/16/23 14:00	10/17/23 19:55	1
Cadmium	ND		1.0	0.20	ug/L		10/16/23 14:00	10/17/23 19:55	1
Chromium	ND		5.0	1.2	ug/L		10/16/23 14:00	10/17/23 19:55	1
Cobalt	ND		1.0	0.19	ug/L		10/16/23 14:00	10/17/23 19:55	1
Lead	ND		1.0	0.45	ug/L		10/16/23 14:00	10/17/23 19:55	1
Lithium	1.9	J B	8.0	1.7	ug/L		10/16/23 14:00	10/17/23 19:55	1
Magnesium	ND		1000	61	ug/L		10/16/23 14:00	10/17/23 19:55	1
Molybdenum	ND		5.0	1.1	ug/L		10/16/23 14:00	10/17/23 19:55	1
Potassium	ND		1000	220	ug/L		10/16/23 14:00	10/17/23 19:55	1
Selenium	ND		5.0	0.89	ug/L		10/16/23 14:00	10/17/23 19:55	1
Sodium	ND		1000	330	ug/L		10/16/23 14:00	10/17/23 19:55	1
Thallium	ND		1.0	0.20	ug/L		10/16/23 14:00	10/17/23 19:55	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		10/16/23 14:00	10/18/23 16:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/16/23 14:36	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/16/23 14:36	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/16/23 14:36	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			10/20/23 16:58	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.00334	U	0.0904	0.0904	1.00	0.181	pCi/L	10/18/23 09:10	11/09/23 21:08	1
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Ba Carrier</i>	92.9		30 - 110					10/18/23 09:10	11/09/23 21:08	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.963		0.363	0.373	1.00	0.437	pCi/L	10/18/23 09:12	11/07/23 11:20	1
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Ba Carrier</i>	92.9		30 - 110					10/18/23 09:12	11/07/23 11:20	1
<i>Y Carrier</i>	86.7		30 - 110					10/18/23 09:12	11/07/23 11:20	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Client Sample ID: FIELD BLANK-001-F-A4-20231012-01

Lab Sample ID: 240-193603-4

Date Collected: 10/12/23 11:13

Matrix: Water

Date Received: 10/14/23 08:00

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	0.966		0.374	0.384	5.00	0.437	pCi/L		11/10/23 17:32	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
240-193603-1	BAC-14-F-A4-20231012-01	78.2	
240-193603-2	DUP-002-F-A4-20231012-01	90.5	
240-193603-3	BAC-12-F-A4-20231012-01	78.5	
240-193603-4	FIELD BLANK-001-F-A4-20231012-01	92.9	
LCS 160-632482/2-A	Lab Control Sample	88.0	
MB 160-632482/1-A	Method Blank	92.7	

Tracer/Carrier Legend
Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-193603-1	BAC-14-F-A4-20231012-01	78.2	73.3
240-193603-2	DUP-002-F-A4-20231012-01	90.5	84.5
240-193603-3	BAC-12-F-A4-20231012-01	78.5	83.0
240-193603-4	FIELD BLANK-001-F-A4-20231012-01	92.9	86.7
LCS 160-632483/2-A	Lab Control Sample	88.0	83.4
MB 160-632483/1-A	Method Blank	92.7	84.9

Tracer/Carrier Legend
Ba = Ba Carrier
Y = Y Carrier

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-590936/1-A
Matrix: Water
Analysis Batch: 591232

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 590936

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		10/16/23 14:00	10/17/23 19:01	1
Arsenic	ND		5.0	0.75	ug/L		10/16/23 14:00	10/17/23 19:01	1
Barium	ND		5.0	2.2	ug/L		10/16/23 14:00	10/17/23 19:01	1
Beryllium	ND		1.0	0.62	ug/L		10/16/23 14:00	10/17/23 19:01	1
Cadmium	ND		1.0	0.20	ug/L		10/16/23 14:00	10/17/23 19:01	1
Chromium	ND		5.0	1.2	ug/L		10/16/23 14:00	10/17/23 19:01	1
Cobalt	ND		1.0	0.19	ug/L		10/16/23 14:00	10/17/23 19:01	1
Lead	ND		1.0	0.45	ug/L		10/16/23 14:00	10/17/23 19:01	1
Lithium	2.11	J	8.0	1.7	ug/L		10/16/23 14:00	10/17/23 19:01	1
Magnesium	ND		1000	61	ug/L		10/16/23 14:00	10/17/23 19:01	1
Molybdenum	ND		5.0	1.1	ug/L		10/16/23 14:00	10/17/23 19:01	1
Potassium	ND		1000	220	ug/L		10/16/23 14:00	10/17/23 19:01	1
Selenium	ND		5.0	0.89	ug/L		10/16/23 14:00	10/17/23 19:01	1
Sodium	ND		1000	330	ug/L		10/16/23 14:00	10/17/23 19:01	1
Thallium	ND		1.0	0.20	ug/L		10/16/23 14:00	10/17/23 19:01	1

Lab Sample ID: LCS 240-590936/2-A
Matrix: Water
Analysis Batch: 591232

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 590936

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	102		ug/L		102	80 - 120
Arsenic	1000	951		ug/L		95	80 - 120
Barium	1000	944		ug/L		94	80 - 120
Beryllium	500	494		ug/L		99	80 - 120
Cadmium	500	479		ug/L		96	80 - 120
Chromium	500	485		ug/L		97	80 - 120
Cobalt	500	477		ug/L		95	80 - 120
Lead	500	490		ug/L		98	80 - 120
Lithium	500	470		ug/L		94	80 - 120
Magnesium	25000	23500		ug/L		94	80 - 120
Molybdenum	500	478		ug/L		96	80 - 120
Potassium	25000	23700		ug/L		95	80 - 120
Selenium	1000	949		ug/L		95	80 - 120
Sodium	25000	23800		ug/L		95	80 - 120
Thallium	1000	929		ug/L		93	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-590941/1-A
Matrix: Water
Analysis Batch: 591320

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 590941

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		10/16/23 14:00	10/18/23 15:35	1

Eurofins Cleveland

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-590941/2-A
 Matrix: Water
 Analysis Batch: 591320

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 590941

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.85		ug/L		97	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-590996/30
 Matrix: Water
 Analysis Batch: 590996

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			10/16/23 14:22	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/16/23 14:22	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/16/23 14:22	1

Lab Sample ID: MB 240-590996/4
 Matrix: Water
 Analysis Batch: 590996

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			10/16/23 12:17	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/16/23 12:17	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/16/23 12:17	1

Lab Sample ID: LCS 240-590996/29
 Matrix: Water
 Analysis Batch: 590996

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	80.4		mg/L		100	86 - 123

Lab Sample ID: LCS 240-590996/3
 Matrix: Water
 Analysis Batch: 590996

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	82.1		mg/L		102	86 - 123

Lab Sample ID: 240-193603-3 DU
 Matrix: Water
 Analysis Batch: 590996

Client Sample ID: BAC-12-F-A4-20231012-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	86		86.0		mg/L		0.5	20
Bicarbonate Alkalinity as CaCO3	86		86.0		mg/L		0.5	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-591603/3
Matrix: Water
Analysis Batch: 591603

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			10/20/23 13:57	1

Lab Sample ID: LCS 240-591603/4
Matrix: Water
Analysis Batch: 591603

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.74		mg/L		109	90 - 110

Lab Sample ID: MB 240-593596/3
Matrix: Water
Analysis Batch: 593596

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			11/06/23 15:45	1

Lab Sample ID: LCS 240-593596/4
Matrix: Water
Analysis Batch: 593596

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.67		mg/L		107	90 - 110

Lab Sample ID: 240-193603-1 MS
Matrix: Water
Analysis Batch: 593596

Client Sample ID: BAC-14-F-A4-20231012-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.056	F2	2.50	2.65		mg/L		104	80 - 120

Lab Sample ID: 240-193603-1 MSD
Matrix: Water
Analysis Batch: 593596

Client Sample ID: BAC-14-F-A4-20231012-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.056	F2	2.50	2.19	F2	mg/L		85	80 - 120	19	15

Lab Sample ID: 240-193603-2 MS
Matrix: Water
Analysis Batch: 593596

Client Sample ID: DUP-002-F-A4-20231012-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.046	J	2.50	2.56		mg/L		101	80 - 120

Lab Sample ID: 240-193603-2 MSD
Matrix: Water
Analysis Batch: 593596

Client Sample ID: DUP-002-F-A4-20231012-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.046	J	2.50	2.56		mg/L		101	80 - 120	0	15

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-632482/1-A
Matrix: Water
Analysis Batch: 636166

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 632482

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.06510	U	0.108	0.108	1.00	0.188	pCi/L	10/18/23 09:10	11/09/23 21:08	1
Carrier	MB %Yield	MB Qualifier	Limits				Prepared		Analyzed	
Ba Carrier	92.7		30 - 110				10/18/23 09:10		11/09/23 21:08	

Lab Sample ID: LCS 160-632482/2-A
Matrix: Water
Analysis Batch: 636166

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 632482

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	10.88		1.24	1.00	0.229	pCi/L	96	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	88.0		30 - 110						

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-632483/1-A
Matrix: Water
Analysis Batch: 635681

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 632483

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.6466		0.328	0.334	1.00	0.446	pCi/L	10/18/23 09:12	11/07/23 11:15	1
Carrier	MB %Yield	MB Qualifier	Limits				Prepared		Analyzed	
Ba Carrier	92.7		30 - 110				10/18/23 09:12		11/07/23 11:15	
Y Carrier	84.9		30 - 110				10/18/23 09:12		11/07/23 11:15	

Lab Sample ID: LCS 160-632483/2-A
Matrix: Water
Analysis Batch: 635681

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 632483

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-228	7.74	8.655		1.21	1.00	0.462	pCi/L	112	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	88.0		30 - 110						
Y Carrier	83.4		30 - 110						

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Metals

Prep Batch: 590936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193603-1	BAC-14-F-A4-20231012-01	Total Recoverable	Water	3005A	
240-193603-2	DUP-002-F-A4-20231012-01	Total Recoverable	Water	3005A	
240-193603-3	BAC-12-F-A4-20231012-01	Total Recoverable	Water	3005A	
240-193603-4	FIELD BLANK-001-F-A4-20231012-01	Total Recoverable	Water	3005A	
MB 240-590936/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-590936/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 590941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193603-1	BAC-14-F-A4-20231012-01	Total/NA	Water	7470A	
240-193603-2	DUP-002-F-A4-20231012-01	Total/NA	Water	7470A	
240-193603-3	BAC-12-F-A4-20231012-01	Total/NA	Water	7470A	
240-193603-4	FIELD BLANK-001-F-A4-20231012-01	Total/NA	Water	7470A	
MB 240-590941/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-590941/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 591232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193603-1	BAC-14-F-A4-20231012-01	Total Recoverable	Water	6020B	590936
240-193603-2	DUP-002-F-A4-20231012-01	Total Recoverable	Water	6020B	590936
240-193603-3	BAC-12-F-A4-20231012-01	Total Recoverable	Water	6020B	590936
240-193603-4	FIELD BLANK-001-F-A4-20231012-01	Total Recoverable	Water	6020B	590936
MB 240-590936/1-A	Method Blank	Total Recoverable	Water	6020B	590936
LCS 240-590936/2-A	Lab Control Sample	Total Recoverable	Water	6020B	590936

Analysis Batch: 591320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193603-1	BAC-14-F-A4-20231012-01	Total/NA	Water	7470A	590941
240-193603-2	DUP-002-F-A4-20231012-01	Total/NA	Water	7470A	590941
240-193603-3	BAC-12-F-A4-20231012-01	Total/NA	Water	7470A	590941
240-193603-4	FIELD BLANK-001-F-A4-20231012-01	Total/NA	Water	7470A	590941
MB 240-590941/1-A	Method Blank	Total/NA	Water	7470A	590941
LCS 240-590941/2-A	Lab Control Sample	Total/NA	Water	7470A	590941

General Chemistry

Analysis Batch: 590996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193603-1	BAC-14-F-A4-20231012-01	Total/NA	Water	2320B-1997	
240-193603-2	DUP-002-F-A4-20231012-01	Total/NA	Water	2320B-1997	
240-193603-3	BAC-12-F-A4-20231012-01	Total/NA	Water	2320B-1997	
240-193603-4	FIELD BLANK-001-F-A4-20231012-01	Total/NA	Water	2320B-1997	
MB 240-590996/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-590996/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-590996/29	Lab Control Sample	Total/NA	Water	2320B-1997	
LCS 240-590996/3	Lab Control Sample	Total/NA	Water	2320B-1997	
240-193603-3 DU	BAC-12-F-A4-20231012-01	Total/NA	Water	2320B-1997	

Analysis Batch: 591603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193603-3	BAC-12-F-A4-20231012-01	Total/NA	Water	300.0-1993 R2.1	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

General Chemistry (Continued)

Analysis Batch: 591603 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193603-4	FIELD BLANK-001-F-A4-20231012-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-591603/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-591603/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 593596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193603-1	BAC-14-F-A4-20231012-01	Total/NA	Water	300.0-1993 R2.1	
240-193603-2	DUP-002-F-A4-20231012-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-593596/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-593596/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-193603-1 MS	BAC-14-F-A4-20231012-01	Total/NA	Water	300.0-1993 R2.1	
240-193603-1 MSD	BAC-14-F-A4-20231012-01	Total/NA	Water	300.0-1993 R2.1	
240-193603-2 MS	DUP-002-F-A4-20231012-01	Total/NA	Water	300.0-1993 R2.1	
240-193603-2 MSD	DUP-002-F-A4-20231012-01	Total/NA	Water	300.0-1993 R2.1	

Rad

Prep Batch: 632482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193603-1	BAC-14-F-A4-20231012-01	Total/NA	Water	PrecSep-21	
240-193603-2	DUP-002-F-A4-20231012-01	Total/NA	Water	PrecSep-21	
240-193603-3	BAC-12-F-A4-20231012-01	Total/NA	Water	PrecSep-21	
240-193603-4	FIELD BLANK-001-F-A4-20231012-01	Total/NA	Water	PrecSep-21	
MB 160-632482/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-632482/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 632483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193603-1	BAC-14-F-A4-20231012-01	Total/NA	Water	PrecSep_0	
240-193603-2	DUP-002-F-A4-20231012-01	Total/NA	Water	PrecSep_0	
240-193603-3	BAC-12-F-A4-20231012-01	Total/NA	Water	PrecSep_0	
240-193603-4	FIELD BLANK-001-F-A4-20231012-01	Total/NA	Water	PrecSep_0	
MB 160-632483/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-632483/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Client Sample ID: BAC-14-F-A4-20231012-01

Lab Sample ID: 240-193603-1

Date Collected: 10/12/23 10:09

Matrix: Water

Date Received: 10/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590936	S4FJ	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 19:43
Total/NA	Prep	7470A			590941	S4FJ	EET CLE	10/16/23 14:00
Total/NA	Analysis	7470A		1	591320	GK	EET CLE	10/18/23 16:11
Total/NA	Analysis	2320B-1997		1	590996	QUY8	EET CLE	10/16/23 14:08
Total/NA	Analysis	300.0-1993 R2.1		1	593596	JWW	EET CLE	11/06/23 16:28
Total/NA	Prep	PrecSep-21			632482	KAC	EET SL	10/18/23 09:10
Total/NA	Analysis	9315		1	636168	SCB	EET SL	11/09/23 21:08
Total/NA	Prep	PrecSep_0			632483	KAC	EET SL	10/18/23 09:12
Total/NA	Analysis	9320		1	635643	CMM	EET SL	11/07/23 11:18
Total/NA	Analysis	Ra226_Ra228		1	636395	EMH	EET SL	11/10/23 17:32

Client Sample ID: DUP-002-F-A4-20231012-01

Lab Sample ID: 240-193603-2

Date Collected: 10/12/23 00:00

Matrix: Water

Date Received: 10/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590936	S4FJ	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 19:46
Total/NA	Prep	7470A			590941	S4FJ	EET CLE	10/16/23 14:00
Total/NA	Analysis	7470A		1	591320	GK	EET CLE	10/18/23 16:13
Total/NA	Analysis	2320B-1997		1	590996	QUY8	EET CLE	10/16/23 14:12
Total/NA	Analysis	300.0-1993 R2.1		1	593596	JWW	EET CLE	11/06/23 22:58
Total/NA	Prep	PrecSep-21			632482	KAC	EET SL	10/18/23 09:10
Total/NA	Analysis	9315		1	636168	SCB	EET SL	11/09/23 21:08
Total/NA	Prep	PrecSep_0			632483	KAC	EET SL	10/18/23 09:12
Total/NA	Analysis	9320		1	635643	CMM	EET SL	11/07/23 11:18
Total/NA	Analysis	Ra226_Ra228		1	636395	EMH	EET SL	11/10/23 17:32

Client Sample ID: BAC-12-F-A4-20231012-01

Lab Sample ID: 240-193603-3

Date Collected: 10/12/23 11:11

Matrix: Water

Date Received: 10/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590936	S4FJ	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 19:53
Total/NA	Prep	7470A			590941	S4FJ	EET CLE	10/16/23 14:00
Total/NA	Analysis	7470A		1	591320	GK	EET CLE	10/18/23 16:15
Total/NA	Analysis	2320B-1997		1	590996	QUY8	EET CLE	10/16/23 14:25
Total/NA	Analysis	300.0-1993 R2.1		1	591603	JWW	EET CLE	10/20/23 16:38
Total/NA	Prep	PrecSep-21			632482	KAC	EET SL	10/18/23 09:10
Total/NA	Analysis	9315		1	636168	SCB	EET SL	11/09/23 21:08
Total/NA	Prep	PrecSep_0			632483	KAC	EET SL	10/18/23 09:12
Total/NA	Analysis	9320		1	635643	CMM	EET SL	11/07/23 11:18

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Client Sample ID: BAC-12-F-A4-20231012-01

Lab Sample ID: 240-193603-3

Date Collected: 10/12/23 11:11

Matrix: Water

Date Received: 10/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228		1	636395	EMH	EET SL	11/10/23 17:32

Client Sample ID: FIELD BLANK-001-F-A4-20231012-01

Lab Sample ID: 240-193603-4

Date Collected: 10/12/23 11:13

Matrix: Water

Date Received: 10/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590936	S4FJ	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 19:55
Total/NA	Prep	7470A			590941	S4FJ	EET CLE	10/16/23 14:00
Total/NA	Analysis	7470A		1	591320	GK	EET CLE	10/18/23 16:17
Total/NA	Analysis	2320B-1997		1	590996	QUY8	EET CLE	10/16/23 14:36
Total/NA	Analysis	300.0-1993 R2.1		1	591603	JWW	EET CLE	10/20/23 16:58
Total/NA	Prep	PrecSep-21			632482	KAC	EET SL	10/18/23 09:10
Total/NA	Analysis	9315		1	636168	SCB	EET SL	11/09/23 21:08
Total/NA	Prep	PrecSep_0			632483	KAC	EET SL	10/18/23 09:12
Total/NA	Analysis	9320		1	635643	CMM	EET SL	11/07/23 11:20
Total/NA	Analysis	Ra226_Ra228		1	636395	EMH	EET SL	11/10/23 17:32

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
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

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
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
Virginia	NELAP	460175	09-14-24
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-24
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-24
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-24
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-24
Massachusetts	State	M-MO054	06-30-24
MI - RadChem Recognition	State	9005	06-30-24
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-24
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

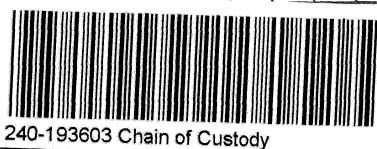
Job ID: 240-193603-1

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 Dakota	State	R-207	06-30-24
Oklahoma	NELAP	9997	08-31-24
Oregon	NELAP	4157	09-01-24
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-24
Texas	NELAP	T104704193	07-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO000542021-14	07-31-24
Virginia	NELAP	10310	06-15-25
Washington	State	C592	08-30-24
West Virginia DEP	State	381	12-31-23

Client Information		Lab PM		Carrier Tracking No(s)		COC No.					
Client Contact: Bobby Castro		Cisneros, Roxanne		240-93466-34578.1		240-93466-34578.1					
Company: Taylor Huffman		E-Mail: roxanne.cisneros@Eurolfins.com		State of Origin:		Page: Page 1 of 1					
Address: Lightstone Generation Gavin Power LLC		Due Date Requested:		Analysis Requested		Job #					
City: Cheshire		TAT Requested (days):		Preservation Codes:		M - Hexane					
State, Zip: OH, 45620		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		A - HCL		N - None					
Phone: 740-925-3171(Tel)		PO #: 2935505		B - NaOH		O - AsNaO2					
Email: taylor.huffman@lightstonegen.com		WO #:		C - Zn Acetate		P - Na2O4S					
Project Name: Federal CCR Wells - App IV		Project #: 24019633		D - Nitric Acid		Q - Na2SO3					
Site: Gvnh		SSOW#:		E - NaHSO4		R - Na2SO3					
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Soil, On-water, Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020, 7470A	300, 28D - Fluoride	2220B - Alkalinity	9315, Ra226, 9320, Ra228, Ra226Ra228, GPPC	Special Instructions/Note:
BAG-14-F-A4-20231012-01	10-12-23	1009	G	Water	X	X					
Dup-w-2-F-A4-20231012-01	10-12-23	-	G	Water							
BAG-12-F-A4-20231012-01	10-12-23	1111	G	Water							
Field Blanks-col-F-A4-20231012-01	10-12-23	1130	G	Water							
				Water							



Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological
 Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For Months

Special Instructions/QC Requirements:

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

Relinquished by: *Ashley Peal* Date/Time: 10/13/23 1700 Company: EJA

Relinquished by: *Ashley Peal* Date/Time: 10/13/23 1700 Company: EJA

Relinquished by: *Ashley Peal* Date/Time: 10/13/23 1700 Company: EJA

Relinquished by: *Ashley Peal* Date/Time: 10/13/23 1700 Company: EJA

Relinquished by: *Ashley Peal* Date/Time: 10/13/23 1700 Company: EJA

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Relinquished by: *Ashley Peal* Date/Time: 10/13/23 1700 Company: EJA

Relinquished by: *Ashley Peal* Date/Time: 10/13/23 1700 Company: EJA

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Eurofins - Cleveland Sample Receipt Form/Narrative
 Barberton Facility
 Client Lightstone Site Name _____
 Cooler Received on 10-14-23 Opened on 10-14-23 Cooler unpacked by: Nancy Rye
 FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____
 Receipt After-hours: Drop-off Date/Time _____ Storage Location _____
 Eurofins Cooler # ES ~~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 # 22 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity leach 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 NA
 -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# HC316719
 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 _____

Tests that are not checked for pH by Receiving:
 VOAs
 Oil and Grease
 TOC

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: _____

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-14-F-A4-20231012-01	240-193603-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-14-F-A4-20231012-01	240-193603-D-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-14-F-A4-20231012-01	240-193603-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-002-F-A4-20231012-01	240-193603-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-002-F-A4-20231012-01	240-193603-D-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-002-F-A4-20231012-01	240-193603-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-12-F-A4-20231012-01	240-193603-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-12-F-A4-20231012-01	240-193603-D-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-12-F-A4-20231012-01	240-193603-E-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
FIELD BLANK-001-F-A4-20231012-01	240-193603-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
FIELD BLANK-001-F-A4-20231012-01	240-193603-D-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
FIELD BLANK-001-F-A4-20231012-01	240-193603-E-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

Chain of Custody Record



Environment Testing



Client Information (Sub Contract Lab)		Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): 240-175339-1
Client Contact: Shipping/Receiving		E-Mail: roxanne.cisneros@et.eurofins.com	State of Origin: Ohio
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):	
Address: 13715 Rider Trail North,		COC No: 240-193603-1	
City: Earth City		Page: Page 1 of 1	
State, Zip: MO, 63045		Job #: 240-193603-1	
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		Preservation Codes:	
Email:		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)	
Project Name: Federal GWM Wells		Analysis Requested	
Site: SOW#:		Total Number of Containers	
Due Date Requested: 10/30/2023		9315_Ra226/PreSep_21 Radium-226 (GFC)	
TAT Requested (days):		9320_Ra226/PreSep_0 Radium-226 (GFC)	
PO #:		Raz26Ra228 GFC/ Combined Radium-226 and Radium-228	
WO #:		Perform MS/MSD (Yes or No)	
Project #:		Field Filtered Sample (Yes or No)	
SSOW#:		Preservation Code:	
		Matrix (Water, Solid, On-site, B1-tissue, AA)	
		Sample Type (C=Comp, G=grab)	
		Sample Time	
		Sample Date	
		Special Instructions/Note:	
BAC-14-F-A4-20231012-01 (240-193603-1)		2 Recount of TAR after 21 day ingrowth if > action limit; save planchet	
DUP-002-F-A4-20231012-01 (240-193603-2)		2 Recount of TAR after 21 day ingrowth if > action limit; save planchet	
BAC-12-F-A4-20231012-01 (240-193603-3)		2 Recount of TAR after 21 day ingrowth if > action limit; save planchet	
FIELD BLANK-001-F-A4-20231012-01 (240-193603-4)		2 Recount of TAR after 21 day ingrowth if > action limit; save planchet	
<p>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/test/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.</p>			
Possible Hazard Identification			
Unconfirmed			
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2			
Empty Kit Relinquished by:			
Relinquished by: <i>Michelle Hamilton</i> Date: 10/16/23 9:40			
Relinquished by: <i>Fedex</i> Date/Time: 10/17/2023 08:45			
Relinquished by:			
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No			
Custody Seal No.:			
Cooler Temperature(s) °C and Other Remarks:			
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)			
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Special Instructions/QC Requirements:			
Method of Shipment:			
Received by: <i>Michelle Hamilton</i> Date/Time: 10/17/2023 08:45			
Company: <i>Fedex</i>			
Received by: <i>M. Cisneros</i> Date/Time: 10/17/2023 08:45			
Company: <i>Fedex</i>			



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-193603-1

Login Number: 193603

List Number: 2

Creator: Pinette, Meadow L

List Source: Eurofins St. Louis

List Creation: 10/17/23 03:05 PM

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



 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 12/11/2023 4:48:06 PM

JOB DESCRIPTION

Federal CCR Wells Appendix III

JOB NUMBER

240-195797-1

Eurofins Cleveland

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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12/11/2023 4:48:06 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells Appendix III

Job ID: 240-195797-1

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.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells Appendix III

Job ID: 240-195797-1

Job ID: 240-195797-1

Laboratory: Eurofins Cleveland

Narrative

**Job Narrative
240-195797-1**

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample 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 11/18/2023 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 5.4°C and 16.3°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 Appendix III

Job ID: 240-195797-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
SM 2540C	Solids, Total Dissolved (TDS)	SM	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
Project/Site: Federal CCR Wells Appendix III

Job ID: 240-195797-1

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Collected</u>	<u>Received</u>
240-195797-1	OHIO RIVER	Water	11/16/23 10:05	11/18/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix III

Job ID: 240-195797-1

Client Sample ID: OHIO RIVER

Lab Sample ID: 240-195797-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	81	J	100	57	ug/L	1		6010D	Total Recoverable
Calcium	40000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	11000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	3200		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	33000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	79		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	79		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	38		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	79		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	240		10	7.8	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix III

Job ID: 240-195797-1

Client Sample ID: OHIO RIVER

Lab Sample ID: 240-195797-1

Date Collected: 11/16/23 10:05

Matrix: Water

Date Received: 11/18/23 08:00

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		11/21/23 14:00	11/22/23 10:12	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	40000		1000	250	ug/L		11/21/23 14:00	11/22/23 11:05	1
Magnesium	11000		1000	61	ug/L		11/21/23 14:00	11/22/23 11:05	1
Potassium	3200		1000	220	ug/L		11/21/23 14:00	11/22/23 11:05	1
Sodium	33000		1000	330	ug/L		11/21/23 14:00	11/22/23 11:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	79		5.0	2.6	mg/L			11/22/23 14:20	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	79		5.0	2.6	mg/L			11/22/23 14:20	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			11/22/23 14:20	1
Chloride (EPA 300.0)	38		1.0	0.13	mg/L			12/02/23 00:14	1
Fluoride (EPA 300.0)	0.11		0.050	0.024	mg/L			12/08/23 14:59	1
Sulfate (EPA 300.0)	79		1.0	0.35	mg/L			12/02/23 00:14	1
Total Dissolved Solids (SM 2540C)	240		10	7.8	mg/L			11/22/23 16:45	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix III

Job ID: 240-195797-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-595403/1-A
 Matrix: Water
 Analysis Batch: 595603

Client Sample ID: Method Blank
 Prep Type: Total Recoverable
 Prep Batch: 595403

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		11/21/23 14:00	11/22/23 07:53	1

Lab Sample ID: LCS 240-595403/3-A
 Matrix: Water
 Analysis Batch: 595603

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 595403

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1020		ug/L		102	80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-595403/1-A
 Matrix: Water
 Analysis Batch: 595723

Client Sample ID: Method Blank
 Prep Type: Total Recoverable
 Prep Batch: 595403

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		11/21/23 14:00	11/22/23 11:00	1
Magnesium	ND		1000	61	ug/L		11/21/23 14:00	11/22/23 11:00	1
Potassium	ND		1000	220	ug/L		11/21/23 14:00	11/22/23 11:00	1
Sodium	ND		1000	330	ug/L		11/21/23 14:00	11/22/23 11:00	1

Lab Sample ID: LCS 240-595403/2-A
 Matrix: Water
 Analysis Batch: 595723

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 595403

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	25200		ug/L		101	80 - 120
Magnesium	25000	25600		ug/L		102	80 - 120
Potassium	25000	25100		ug/L		100	80 - 120
Sodium	25000	24900		ug/L		100	80 - 120

Lab Sample ID: 240-195797-1 MS
 Matrix: Water
 Analysis Batch: 595723

Client Sample ID: OHIO RIVER
 Prep Type: Total Recoverable
 Prep Batch: 595403

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	40000		25000	66200		ug/L		105	80 - 120
Magnesium	11000		25000	37300		ug/L		105	80 - 120
Potassium	3200		25000	29200		ug/L		104	80 - 120
Sodium	33000		25000	58800		ug/L		105	80 - 120

Lab Sample ID: 240-195797-1 MSD
 Matrix: Water
 Analysis Batch: 595723

Client Sample ID: OHIO RIVER
 Prep Type: Total Recoverable
 Prep Batch: 595403

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	40000		25000	65300		ug/L		101	80 - 120	1	20
Magnesium	11000		25000	36700		ug/L		102	80 - 120	2	20
Potassium	3200		25000	29100		ug/L		104	80 - 120	0	20
Sodium	33000		25000	57600		ug/L		100	80 - 120	2	20

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix III

Job ID: 240-195797-1

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-595656/4
 Matrix: Water
 Analysis Batch: 595656

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			11/22/23 13:47	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			11/22/23 13:47	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			11/22/23 13:47	1

Lab Sample ID: LCS 240-595656/3
 Matrix: Water
 Analysis Batch: 595656

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Total Alkalinity	80.6	82.1		mg/L		102	86 - 123

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-596336/3
 Matrix: Water
 Analysis Batch: 596336

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	ND		1.0	0.13	mg/L			12/01/23 21:13	1
Sulfate	ND		1.0	0.35	mg/L			12/01/23 21:13	1

Lab Sample ID: LCS 240-596336/4
 Matrix: Water
 Analysis Batch: 596336

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Chloride	50.0	51.3		mg/L		103	90 - 110
Sulfate	50.0	53.5		mg/L		107	90 - 110

Lab Sample ID: MB 240-597010/3
 Matrix: Water
 Analysis Batch: 597010

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	ND		1.0	0.13	mg/L			12/08/23 11:44	1
Fluoride	ND		0.050	0.024	mg/L			12/08/23 11:44	1
Sulfate	ND		1.0	0.35	mg/L			12/08/23 11:44	1

Lab Sample ID: LCS 240-597010/4
 Matrix: Water
 Analysis Batch: 597010

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Chloride	50.0	46.3		mg/L		93	90 - 110
Fluoride	2.50	2.34		mg/L		94	90 - 110
Sulfate	50.0	47.9		mg/L		96	90 - 110

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix III

Job ID: 240-195797-1

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

Lab Sample ID: MB 240-595655/1

Matrix: Water

Analysis Batch: 595655

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			11/22/23 16:45	1

Lab Sample ID: LCS 240-595655/2

Matrix: Water

Analysis Batch: 595655

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	564	528		mg/L		94	80 - 120



QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix III

Job ID: 240-195797-1

Metals

Prep Batch: 595403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195797-1	OHIO RIVER	Total Recoverable	Water	3005A	
MB 240-595403/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-595403/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-595403/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-195797-1 MS	OHIO RIVER	Total Recoverable	Water	3005A	
240-195797-1 MSD	OHIO RIVER	Total Recoverable	Water	3005A	

Analysis Batch: 595603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195797-1	OHIO RIVER	Total Recoverable	Water	6010D	595403
MB 240-595403/1-A	Method Blank	Total Recoverable	Water	6010D	595403
LCS 240-595403/3-A	Lab Control Sample	Total Recoverable	Water	6010D	595403

Analysis Batch: 595723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195797-1	OHIO RIVER	Total Recoverable	Water	6020B	595403
MB 240-595403/1-A	Method Blank	Total Recoverable	Water	6020B	595403
LCS 240-595403/2-A	Lab Control Sample	Total Recoverable	Water	6020B	595403
240-195797-1 MS	OHIO RIVER	Total Recoverable	Water	6020B	595403
240-195797-1 MSD	OHIO RIVER	Total Recoverable	Water	6020B	595403

General Chemistry

Analysis Batch: 595655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195797-1	OHIO RIVER	Total/NA	Water	SM 2540C	
MB 240-595655/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-595655/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 595656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195797-1	OHIO RIVER	Total/NA	Water	2320B-1997	
MB 240-595656/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-595656/3	Lab Control Sample	Total/NA	Water	2320B-1997	

Analysis Batch: 596336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195797-1	OHIO RIVER	Total/NA	Water	300.0	
MB 240-596336/3	Method Blank	Total/NA	Water	300.0	
LCS 240-596336/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 597010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195797-1	OHIO RIVER	Total/NA	Water	300.0	
MB 240-597010/3	Method Blank	Total/NA	Water	300.0	
LCS 240-597010/4	Lab Control Sample	Total/NA	Water	300.0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix III

Job ID: 240-195797-1

Client Sample ID: OHIO RIVER

Lab Sample ID: 240-195797-1

Date Collected: 11/16/23 10:05

Matrix: Water

Date Received: 11/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			595403	S4FJ	EET CLE	11/21/23 14:00
Total Recoverable	Analysis	6010D		1	595603	KLC	EET CLE	11/22/23 10:12
Total Recoverable	Prep	3005A			595403	S4FJ	EET CLE	11/21/23 14:00
Total Recoverable	Analysis	6020B		1	595723	RKT	EET CLE	11/22/23 11:05
Total/NA	Analysis	2320B-1997		1	595656	QUY8	EET CLE	11/22/23 14:20
Total/NA	Analysis	300.0		1	597010	JWW	EET CLE	12/08/23 14:59
Total/NA	Analysis	300.0		1	596336	JWW	EET CLE	12/02/23 00:14
Total/NA	Analysis	SM 2540C		1	595655	C5SV	EET CLE	11/22/23 16:45

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
 Project/Site: Federal CCR Wells Appendix III

Job ID: 240-195797-1

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
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
Virginia	NELAP	460175	09-14-24
West Virginia DEP	State	210	12-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.



Chain of Custody Record



Environment Testing
 America

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: Federal - CCR Wells Appendix 3 Site: Ohio		Lab PM: Cisneros, Roxanne E-Mail: roxanne.cisneros@Eurofinsnet.com Carrier Tracking No(s): State or Origin: Page 1 of 1 Job #:	
Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: 2935505 WO #: 24019633 Project #: 24019633 SSO#:		Analysis Requested 2540C, Calcd, 300.0, 280(Chloride, Fluoride, Sulfate) 6010B, 7470, 6020(See Metals List) 2320B(Carbonate Alkalinity/Bi-Carbonate Alkalinity)	
Sample Identification Ohio River		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 Other: 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)	
Sample Date: 11-16-23 Sample Time: 1005 Sample Type (C=Comp, G=grab): G Matrix (Water, Solid, Other): W		Field Filtered Sample (Yes or No): <input checked="" type="checkbox"/> Yes Perform MS/MSD (Yes or No): <input checked="" type="checkbox"/> Yes 2540C, Calcd, 300.0, 280(Chloride, Fluoride, Sulfate) 6010B, 7470, 6020(See Metals List) 2320B(Carbonate Alkalinity/Bi-Carbonate Alkalinity)	
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)		Total Number of Containers: 2 Special Instructions/Note: Appendix III Parameters	
Empty Kit Relinquished by: Relinquished by: [Signature] Date/Time: 11/17/23 05:00 Relinquished by: [Signature] Date/Time:		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.:		Received by: [Signature] Date/Time: 11-18-23 9:30 Company: [Signature] Received by: [Signature] Date/Time: [Signature] Company: [Signature]	
Cooler Temperature(s) °C and Other Remarks:		Method of Shipment:	



Barberton Facility

Client Light Stone

Site Name _____

Cooler unpacked by: _____

Cooler Received on 11-18-23

Opened on 11-18-23

Wang Page

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 # 22 (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 lead 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 NA

-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# HC316719

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 _____

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

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: _____

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u> <u>pH</u>	<u>Temp</u>	<u>Preservation</u> <u>Added</u>	<u>Preservation</u> <u>Lot Number</u>
OHIO RIVER	240-195797-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____



ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 12/22/2023 4:58:20 PM

JOB DESCRIPTION

Federal CCR Wells Appendix IV

JOB NUMBER

240-195798-1

Eurofins Cleveland

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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12/22/2023 4:58:20 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

Job ID: 240-195798-1

Eurofins Cleveland

Job Narrative 240-195798-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample 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 11/18/2023 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 5.4°C and 16.3°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.

Eurofins Cleveland

Method Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0-1993 R2.1	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 Appendix IV

Job ID: 240-195798-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-195798-1	OHIO RIVER	Water	11/16/23 10:05	11/18/23 08:00

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

Client Sample ID: OHIO RIVER

Lab Sample ID: 240-195798-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.86	J	2.0	0.57	ug/L	1		6020B	Total Recoverable
Arsenic	1.2	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	43		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.22	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Calcium	40000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	0.49	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.60	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	7.5	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	11000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	2.9	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	3200		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	33000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	1.3		1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	81		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	81		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.12		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

Client Sample ID: OHIO RIVER

Lab Sample ID: 240-195798-1

Date Collected: 11/16/23 10:05

Matrix: Water

Date Received: 11/18/23 08:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.86	J	2.0	0.57	ug/L		11/21/23 14:00	11/22/23 11:21	1
Arsenic	1.2	J	5.0	0.75	ug/L		11/21/23 14:00	11/22/23 11:21	1
Barium	43		5.0	2.2	ug/L		11/21/23 14:00	11/22/23 11:21	1
Beryllium	ND		1.0	0.62	ug/L		11/21/23 14:00	11/22/23 11:21	1
Cadmium	0.22	J	1.0	0.20	ug/L		11/21/23 14:00	11/22/23 11:21	1
Calcium	40000		1000	250	ug/L		11/21/23 14:00	11/22/23 11:21	1
Chromium	ND		5.0	1.2	ug/L		11/21/23 14:00	11/22/23 11:21	1
Cobalt	0.49	J	1.0	0.19	ug/L		11/21/23 14:00	11/22/23 11:21	1
Lead	0.60	J	1.0	0.45	ug/L		11/21/23 14:00	11/22/23 11:21	1
Lithium	7.5	J	8.0	1.7	ug/L		11/21/23 14:00	11/22/23 11:21	1
Magnesium	11000		1000	61	ug/L		11/21/23 14:00	11/22/23 11:21	1
Molybdenum	2.9	J	5.0	1.1	ug/L		11/21/23 14:00	11/22/23 11:21	1
Potassium	3200		1000	220	ug/L		11/21/23 14:00	11/22/23 11:21	1
Selenium	ND		5.0	0.89	ug/L		11/21/23 14:00	11/22/23 11:21	1
Sodium	33000		1000	330	ug/L		11/21/23 14:00	11/22/23 11:21	1
Thallium	1.3		1.0	0.20	ug/L		11/21/23 14:00	11/22/23 11:21	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		11/21/23 14:00	11/22/23 13:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	81		5.0	2.6	mg/L			11/22/23 14:25	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	81		5.0	2.6	mg/L			11/22/23 14:25	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			11/22/23 14:25	1
Fluoride (EPA 300.0-1993 R2.1)	0.12		0.050	0.024	mg/L			12/05/23 21:13	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	0.179	U	0.195	0.195	1.00	0.313	pCi/L	11/27/23 10:49	12/22/23 14:27	1
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Ba Carrier</i>	89.5		30 - 110					11/27/23 10:49	12/22/23 14:27	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	0.0746	U	0.413	0.413	1.00	0.757	pCi/L	11/27/23 10:59	12/19/23 16:30	1
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Ba Carrier</i>	89.5		30 - 110					11/27/23 10:59	12/19/23 16:30	1
<i>Y Carrier</i>	80.0		30 - 110					11/27/23 10:59	12/19/23 16:30	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

Client Sample ID: OHIO RIVER

Lab Sample ID: 240-195798-1

Date Collected: 11/16/23 10:05

Matrix: Water

Date Received: 11/18/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.254	U	0.457	0.457	5.00	0.757	pCi/L		12/22/23 17:49	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
240-195798-1	OHIO RIVER	89.5	
LCS 160-638356/2-A	Lab Control Sample	96.4	
MB 160-638356/1-A	Method Blank	102	
Tracer/Carrier Legend			
Ba = Ba Carrier			

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-195798-1	OHIO RIVER	89.5	80.0
LCS 160-638358/2-A	Lab Control Sample	96.4	83.4
MB 160-638358/1-A	Method Blank	102	85.6
Tracer/Carrier Legend			
Ba = Ba Carrier			
Y = Y Carrier			

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-595403/1-A
Matrix: Water
Analysis Batch: 595723

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 595403

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	ND		2.0	0.57	ug/L		11/21/23 14:00	11/22/23 11:00	1
Arsenic	ND		5.0	0.75	ug/L		11/21/23 14:00	11/22/23 11:00	1
Barium	ND		5.0	2.2	ug/L		11/21/23 14:00	11/22/23 11:00	1
Beryllium	ND		1.0	0.62	ug/L		11/21/23 14:00	11/22/23 11:00	1
Cadmium	ND		1.0	0.20	ug/L		11/21/23 14:00	11/22/23 11:00	1
Calcium	ND		1000	250	ug/L		11/21/23 14:00	11/22/23 11:00	1
Chromium	ND		5.0	1.2	ug/L		11/21/23 14:00	11/22/23 11:00	1
Cobalt	ND		1.0	0.19	ug/L		11/21/23 14:00	11/22/23 11:00	1
Lead	ND		1.0	0.45	ug/L		11/21/23 14:00	11/22/23 11:00	1
Lithium	ND		8.0	1.7	ug/L		11/21/23 14:00	11/22/23 11:00	1
Magnesium	ND		1000	61	ug/L		11/21/23 14:00	11/22/23 11:00	1
Molybdenum	ND		5.0	1.1	ug/L		11/21/23 14:00	11/22/23 11:00	1
Potassium	ND		1000	220	ug/L		11/21/23 14:00	11/22/23 11:00	1
Selenium	ND		5.0	0.89	ug/L		11/21/23 14:00	11/22/23 11:00	1
Sodium	ND		1000	330	ug/L		11/21/23 14:00	11/22/23 11:00	1
Thallium	ND		1.0	0.20	ug/L		11/21/23 14:00	11/22/23 11:00	1

Lab Sample ID: LCS 240-595403/2-A
Matrix: Water
Analysis Batch: 595723

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 595403

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Antimony	100	106		ug/L		106	80 - 120
Arsenic	1000	1010		ug/L		101	80 - 120
Barium	1000	966		ug/L		97	80 - 120
Beryllium	500	506		ug/L		101	80 - 120
Cadmium	500	498		ug/L		100	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	506		ug/L		101	80 - 120
Lithium	500	489		ug/L		98	80 - 120
Magnesium	25000	25600		ug/L		102	80 - 120
Molybdenum	500	483		ug/L		97	80 - 120
Potassium	25000	25100		ug/L		100	80 - 120
Selenium	1000	970		ug/L		97	80 - 120
Sodium	25000	24900		ug/L		100	80 - 120
Thallium	1000	1000		ug/L		100	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-595412/1-A
Matrix: Water
Analysis Batch: 595618

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 595412

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.20	0.13	ug/L		11/21/23 14:00	11/22/23 13:16	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-595412/2-A
 Matrix: Water
 Analysis Batch: 595618

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 595412

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.49		ug/L		110	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-595656/4
 Matrix: Water
 Analysis Batch: 595656

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			11/22/23 13:47	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			11/22/23 13:47	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			11/22/23 13:47	1

Lab Sample ID: LCS 240-595656/3
 Matrix: Water
 Analysis Batch: 595656

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	82.1		mg/L		102	86 - 123

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-596610/3
 Matrix: Water
 Analysis Batch: 596610

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			12/05/23 15:26	1

Lab Sample ID: LCS 240-596610/4
 Matrix: Water
 Analysis Batch: 596610

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.34		mg/L		94	90 - 110

Lab Sample ID: 240-195798-1 MS
 Matrix: Water
 Analysis Batch: 596610

Client Sample ID: OHIO RIVER
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.12		2.50	2.74		mg/L		105	80 - 120

Lab Sample ID: 240-195798-1 MSD
 Matrix: Water
 Analysis Batch: 596610

Client Sample ID: OHIO RIVER
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.12		2.50	2.71		mg/L		104	80 - 120	1	15

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-638356/1-A
Matrix: Water
Analysis Batch: 641880

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 638356

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.06469	U	0.132	0.133	1.00	0.237	pCi/L	11/27/23 10:49	12/22/23 14:25	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	102		30 - 110		11/27/23 10:49	12/22/23 14:25	1			

Lab Sample ID: LCS 160-638356/2-A
Matrix: Water
Analysis Batch: 641880

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 638356

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	13.65		1.56	1.00	0.278	pCi/L	120	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	96.4		30 - 110						

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-638358/1-A
Matrix: Water
Analysis Batch: 641298

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 638358

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.4002	U	0.311	0.314	1.00	0.480	pCi/L	11/27/23 10:59	12/19/23 16:26	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	102		30 - 110		11/27/23 10:59	12/19/23 16:26	1			
Y Carrier	85.6		30 - 110		11/27/23 10:59	12/19/23 16:26	1			

Lab Sample ID: LCS 160-638358/2-A
Matrix: Water
Analysis Batch: 641298

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 638358

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-228	7.63	8.197		1.16	1.00	0.478	pCi/L	107	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	96.4		30 - 110						
Y Carrier	83.4		30 - 110						

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

Metals

Prep Batch: 595403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195798-1	OHIO RIVER	Total Recoverable	Water	3005A	
MB 240-595403/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-595403/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 595412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195798-1	OHIO RIVER	Total/NA	Water	7470A	
MB 240-595412/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-595412/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 595618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195798-1	OHIO RIVER	Total/NA	Water	7470A	595412
MB 240-595412/1-A	Method Blank	Total/NA	Water	7470A	595412
LCS 240-595412/2-A	Lab Control Sample	Total/NA	Water	7470A	595412

Analysis Batch: 595723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195798-1	OHIO RIVER	Total Recoverable	Water	6020B	595403
MB 240-595403/1-A	Method Blank	Total Recoverable	Water	6020B	595403
LCS 240-595403/2-A	Lab Control Sample	Total Recoverable	Water	6020B	595403

General Chemistry

Analysis Batch: 595656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195798-1	OHIO RIVER	Total/NA	Water	2320B-1997	
MB 240-595656/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-595656/3	Lab Control Sample	Total/NA	Water	2320B-1997	

Analysis Batch: 596610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195798-1	OHIO RIVER	Total/NA	Water	300.0-1993 R2.1	
MB 240-596610/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-596610/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-195798-1 MS	OHIO RIVER	Total/NA	Water	300.0-1993 R2.1	
240-195798-1 MSD	OHIO RIVER	Total/NA	Water	300.0-1993 R2.1	

Rad

Prep Batch: 638356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195798-1	OHIO RIVER	Total/NA	Water	PrecSep-21	
MB 160-638356/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-638356/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 638358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195798-1	OHIO RIVER	Total/NA	Water	PrecSep_0	
MB 160-638358/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-638358/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

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Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

Client Sample ID: OHIO RIVER

Lab Sample ID: 240-195798-1

Date Collected: 11/16/23 10:05

Matrix: Water

Date Received: 11/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			595403	S4FJ	EET CLE	11/21/23 14:00
Total Recoverable	Analysis	6020B		1	595723	RKT	EET CLE	11/22/23 11:21
Total/NA	Prep	7470A			595412	S4FJ	EET CLE	11/21/23 14:00
Total/NA	Analysis	7470A		1	595618	GK	EET CLE	11/22/23 13:33
Total/NA	Analysis	2320B-1997		1	595656	QUY8	EET CLE	11/22/23 14:25
Total/NA	Analysis	300.0-1993 R2.1		1	596610	JWW	EET CLE	12/05/23 21:13
Total/NA	Prep	PrecSep-21			638356	KAC	EET SL	11/27/23 10:49
Total/NA	Analysis	9315		1	641881	SCB	EET SL	12/22/23 14:27
Total/NA	Prep	PrecSep_0			638358	KAC	EET SL	11/27/23 10:59
Total/NA	Analysis	9320		1	641298	FLC	EET SL	12/19/23 16:30
Total/NA	Analysis	Ra226_Ra228		1	641922	EMH	EET SL	12/22/23 17:49

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
 Project/Site: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

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
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
Virginia	NELAP	460175	09-14-24
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-24
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-24
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-24
Illinois	NELAP	200023	11-30-24
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-24
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-24
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-24
Massachusetts	State	M-MO054	06-30-24
MI - RadChem Recognition	State	9005	06-30-24
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-24
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

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Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

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	07-31-24
North Dakota	State	R-207	06-30-24
Oklahoma	NELAP	9997	08-31-24
Oregon	NELAP	4157	09-01-24
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-24
Texas	NELAP	T104704193	07-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO000542021-14	07-31-24
Virginia	NELAP	10310	06-15-25
Washington	State	C592	08-30-24
West Virginia DEP	State	381	01-31-24

4101 Shuffler Street NW
 North Canton, OH 44720
 Phone (330) 3396 Phone (330) 497-0772

Chain of Custody Record



Environment Testing
 America

400

Client Information		Lab PM:		Carrier Tracking No(s):		IOCC No:	
Client Contact: Taylor Huffman		Cisneros, Roxanne		240-93018-34502		240-93018-34502	
Company: Lightstone Generation Gavin Power LLC		E-Mail: roxanne.cisneros@Eurofinset.com		State of Origin:		Page: 1 of 1	
Address: 7397 OH-7		PWSID:		Job #:		Page: 1 of 1	
City: Cheshire		Due Date Requested:		Analysis Requested		Preservation Codes:	
State, Zip: OH, 45620		TAT Requested (days):		2320B(Carbonate Alkalinity/Bi-Carbonate Alkalinity)		M - Hexane N - None O - Ash/NaO2 P - Na2OAS Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Phone: 740-925-3171(Tel)		Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		9315_Ra226, 9320_Ra228		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 Other:	
Email: taylor.huffman@lightstonegen.com		PO #: 2935505		6010B, 7470, 6020(See Metals List)		Special Instructions/Note: Appendix IV Parameters	
Project Name: Federal - CCR Wells Appendix 4		WO #:		Perform MS/MSD (Yes or No)			
Site: Ohio		Project #: 24019633		Field Filtered Sample (Yes or No)			
		SSOW#:		D N D N			
				2540C, Calcd, 300.0_28D(Chloride, Fluoride, Sulfate)			
				9315_Ra226, 9320_Ra228			
				2320B(Carbonate Alkalinity/Bi-Carbonate Alkalinity)			
				6010B, 7470, 6020(See Metals List)			
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Barberton Facility

Client Light Stone

Site Name _____

Cooler unpacked by: _____

Cooler Received on 11-18-23

Opened on 11-18-23

Nancy Payne

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 # 22 (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 Leads 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

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

- 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# HC316719
 - 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: _____



Eurofins - Canton Sample Receipt Multiple Cooler Form

Cooler Description (Circle)				IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
<input checked="" type="radio"/> IC	<input type="radio"/> Client	<input type="radio"/> Box	<input type="radio"/> Other	IR GUN #: <u>22</u>	<u>15.2</u>	<u>16.3</u>	Wet Ice <input type="radio"/> Blue Ice <input type="radio"/> Dry Ice <input type="radio"/> Water <input checked="" type="radio"/> None <input type="radio"/>
<input checked="" type="radio"/> IC	<input type="radio"/> Client	<input type="radio"/> Box	<input type="radio"/> Other	IR GUN #: <u>22</u>	<u>4.3</u>	<u>5.4</u>	Wet Ice <input checked="" type="radio"/> Blue Ice <input type="radio"/> Dry Ice <input type="radio"/> Water <input type="radio"/> None <input type="radio"/>
<input type="radio"/> IC	<input type="radio"/> Client	<input type="radio"/> Box	<input type="radio"/> Other	IR GUN #: _____			Wet Ice <input type="radio"/> Blue Ice <input type="radio"/> Dry Ice <input type="radio"/> Water <input type="radio"/> None <input type="radio"/>
<input type="radio"/> IC	<input type="radio"/> Client	<input type="radio"/> Box	<input type="radio"/> Other	IR GUN #: _____			Wet Ice <input type="radio"/> Blue Ice <input type="radio"/> Dry Ice <input type="radio"/> Water <input type="radio"/> None <input type="radio"/>
<input type="radio"/> IC	<input type="radio"/> Client	<input type="radio"/> Box	<input type="radio"/> Other	IR GUN #: _____			Wet Ice <input type="radio"/> Blue Ice <input type="radio"/> Dry Ice <input type="radio"/> Water <input type="radio"/> None <input type="radio"/>
<input type="radio"/> IC	<input type="radio"/> Client	<input type="radio"/> Box	<input type="radio"/> Other	IR GUN #: _____			Wet Ice <input type="radio"/> Blue Ice <input type="radio"/> Dry Ice <input type="radio"/> Water <input type="radio"/> None <input type="radio"/>
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<input type="radio"/> IC	<input type="radio"/> Client	<input type="radio"/> Box	<input type="radio"/> Other	IR GUN #: _____			Wet Ice <input type="radio"/> Blue Ice <input type="radio"/> Dry Ice <input type="radio"/> Water <input type="radio"/> None <input type="radio"/>
<input type="radio"/> IC	<input type="radio"/> Client	<input type="radio"/> Box	<input type="radio"/> Other	IR GUN #: _____			Wet Ice <input type="radio"/> Blue Ice <input type="radio"/> Dry Ice <input type="radio"/> Water <input type="radio"/> None <input type="radio"/>
<input type="radio"/> IC	<input type="radio"/> Client	<input type="radio"/> Box	<input type="radio"/> Other	IR GUN #: _____			Wet Ice <input type="radio"/> Blue Ice <input type="radio"/> Dry Ice <input type="radio"/> Water <input type="radio"/> None <input type="radio"/>

See Temperature Excursion Form

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservation</u>	<u>Preservation</u>
			<u>pH</u>	<u>Temp</u>	<u>Added</u>	<u>Lot Number</u>
OHIO RIVER	240-195798-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
OHIO RIVER	240-195798-D-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
OHIO RIVER	240-195798-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Carrier Tracking No(s):	COC No.:
Client Contact:		Phone:	Cisneros, Roxanne	State of Origin:	240-176984-1
Shipping/Receiving		E-Mail:	roxanne.cisneros@et.eurofins.com	Page:	Page 1 of 1
Company:		Accreditations Required (See note):			
TestAmerica Laboratories, Inc.		Job #:			
Address:		240-195798-1			
13715 Rider Trail North,		Analysis Requested			
City:		Field Filtered Sample (Yes or No)			
Earth City		Perform MS/MSD (Yes or No)			
State, Zip:		920 Radium-228 (GFP)			
MO, 63045		935 Radium-226 (GFP)			
Phone:		Field Filtered Sample (Yes or No)			
314-298-8566(Tel) 314-298-8757(Fax)		920 Radium-228 (GFP)			
Email:		935 Radium-226 (GFP)			
Project #:		Field Filtered Sample (Yes or No)			
24019633		920 Radium-228 (GFP)			
Site:		935 Radium-226 (GFP)			
Federal GWM Wells		Field Filtered Sample (Yes or No)			
Site:		920 Radium-228 (GFP)			
OHIO RIVER (240-195798-1)		935 Radium-226 (GFP)			
Sample Identification - Client ID (Lab ID)		Sample Date		Sample Time	
		11/16/23		10:05 Eastern	
Matrix		Sample Type (C=comp, G=grab)		Preservation Code:	
Water				Water	
Special Instructions/Note:		Total Number of Containers		Special Instructions/Note:	
. Recount of TAR after 21 day ingrowth if > action limit. save platchet		2		. Recount of TAR after 21 day ingrowth if > action limit. save platchet	
<p>Possible Hazard Identification</p> <p>Unconfirmed</p> <p>Deliverable Requested: I, II, III, IV, Other (specify)</p> <p>Primary Deliverable Rank: 2</p> <p>Empty Kit Relinquished by: _____ Date: _____</p> <p>Relinquished by: <i>Kenneth Howard</i> Date/Time: 11-21-23 8:20</p> <p>Relinquished by: _____ Date/Time: _____</p> <p>Relinquished by: _____ Date/Time: _____</p> <p>Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Custody Seal No.: _____</p>					
<p>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</p> <p><input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months</p> <p>Special Instructions/QC Requirements:</p> <p>Method of Shipment: _____</p> <p>Received by: _____ Date/Time: _____</p> <p>Received by: <i>M. Pinette</i> Date/Time: NOV 22 2023 08:40</p> <p>Received by: _____ Date/Time: _____</p> <p>Cooler Temperature(s) °C and Other Remarks: _____</p>					



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-195798-1

Login Number: 195798

List Number: 2

Creator: Pinette, Meadow L

List Source: Eurofins St. Louis

List Creation: 11/22/23 01:50 PM

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



ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 3/8/2023 8:07:41 PM

JOB DESCRIPTION

Federal CCR Wells - App III

JOB NUMBER

240-181022-1

Eurofins Canton

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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
3/8/2023 8:07:41 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181022-1

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181022-1

Job ID: 240-181022-1

Laboratory: Eurofins Canton

Narrative

**Job Narrative
240-181022-1**

Receipt

The samples were received on 2/27/2023 1:20 PM. 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 0.7°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 - App III

Job ID: 240-181022-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CAN
6020B	Metals (ICP/MS)	SW846	EET CAN
2320B-1997	Alkalinity, Total	SM	EET CAN
300.0	Anions, Ion Chromatography	EPA	EET CAN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CAN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CAN

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 CAN = Eurofins Canton, 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 - App III

Job ID: 240-181022-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-181022-1	BAC-21-F-20230224-01	Water	02/24/23 12:48	02/27/23 13:20
240-181022-2	BAC-22-F-20230224-01	Water	02/24/23 14:31	02/27/23 13:20
240-181022-3	EB-001-F-20230224-01	Water	02/24/23 15:00	02/27/23 13:20

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181022-1

Client Sample ID: BAC-21-F-20230224-01

Lab Sample ID: 240-181022-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	370		100	57	ug/L	1		6010D	Total Recoverable
Calcium	130000		1000	580	ug/L	1		6020B	Total Recoverable
Magnesium	15000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	2400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	28000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	66		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.068		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	130		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	530		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-22-F-20230224-01

Lab Sample ID: 240-181022-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	240		100	57	ug/L	1		6010D	Total Recoverable
Calcium	150000		1000	580	ug/L	1		6020B	Total Recoverable
Magnesium	19000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	2800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	21000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	36		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.079		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	230		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	540		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-001-F-20230224-01

Lab Sample ID: 240-181022-3

No Detections.

This Detection Summary does not include radiochemical test results.

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181022-1

Client Sample ID: BAC-21-F-20230224-01

Lab Sample ID: 240-181022-1

Date Collected: 02/24/23 12:48

Matrix: Water

Date Received: 02/27/23 13:20

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	370		100	57	ug/L		03/01/23 15:00	03/02/23 12:57	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130000		1000	580	ug/L		03/01/23 15:00	03/02/23 10:48	1
Magnesium	15000		1000	200	ug/L		03/01/23 15:00	03/02/23 10:48	1
Potassium	2400		1000	220	ug/L		03/01/23 15:00	03/02/23 10:48	1
Sodium	28000		1000	330	ug/L		03/01/23 15:00	03/02/23 10:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230		5.0	2.6	mg/L			03/06/23 14:51	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230		5.0	2.6	mg/L			03/06/23 14:51	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 14:51	1
Chloride (EPA 300.0)	66		1.0	0.13	mg/L			03/06/23 22:47	1
Fluoride (EPA 300.0)	0.068		0.050	0.024	mg/L			03/06/23 22:47	1
Sulfate (EPA 300.0)	130		1.0	0.35	mg/L			03/06/23 22:47	1
Total Dissolved Solids (SM 2540C)	530		10	7.8	mg/L			03/02/23 17:58	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181022-1

Client Sample ID: BAC-22-F-20230224-01

Lab Sample ID: 240-181022-2

Date Collected: 02/24/23 14:31

Matrix: Water

Date Received: 02/27/23 13:20

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	240		100	57	ug/L		03/01/23 15:00	03/02/23 13:01	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	150000		1000	580	ug/L		03/01/23 15:00	03/02/23 11:13	1
Magnesium	19000		1000	200	ug/L		03/01/23 15:00	03/02/23 11:13	1
Potassium	2800		1000	220	ug/L		03/01/23 15:00	03/02/23 11:13	1
Sodium	21000		1000	330	ug/L		03/01/23 15:00	03/02/23 11:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 15:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 15:06	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:06	1
Chloride (EPA 300.0)	36		1.0	0.13	mg/L			03/06/23 23:31	1
Fluoride (EPA 300.0)	0.079		0.050	0.024	mg/L			03/06/23 23:31	1
Sulfate (EPA 300.0)	230		5.0	1.7	mg/L			03/07/23 00:36	5
Total Dissolved Solids (SM 2540C)	540		10	7.8	mg/L			03/02/23 17:58	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181022-1

Client Sample ID: EB-001-F-20230224-01

Lab Sample ID: 240-181022-3

Date Collected: 02/24/23 15:00

Matrix: Water

Date Received: 02/27/23 13:20

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		03/01/23 15:00	03/02/23 13:05	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	580	ug/L		03/01/23 15:00	03/02/23 11:16	1
Magnesium	ND		1000	200	ug/L		03/01/23 15:00	03/02/23 11:16	1
Potassium	ND		1000	220	ug/L		03/01/23 15:00	03/02/23 11:16	1
Sodium	ND		1000	330	ug/L		03/01/23 15:00	03/02/23 11:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:14	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:14	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:14	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			03/07/23 00:57	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			03/07/23 00:57	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			03/07/23 00:57	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			03/02/23 17:58	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181022-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-563845/1-A
 Matrix: Water
 Analysis Batch: 564046

Client Sample ID: Method Blank
 Prep Type: Total Recoverable
 Prep Batch: 563845

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		03/01/23 15:00	03/02/23 11:35	1

Lab Sample ID: LCS 240-563845/2-A
 Matrix: Water
 Analysis Batch: 564046

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 563845

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1020		ug/L		102	80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-563845/1-A
 Matrix: Water
 Analysis Batch: 564038

Client Sample ID: Method Blank
 Prep Type: Total Recoverable
 Prep Batch: 563845

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	580	ug/L		03/01/23 15:00	03/02/23 10:32	1
Magnesium	ND		1000	200	ug/L		03/01/23 15:00	03/02/23 10:32	1
Potassium	ND		1000	220	ug/L		03/01/23 15:00	03/02/23 10:32	1
Sodium	ND		1000	330	ug/L		03/01/23 15:00	03/02/23 10:32	1

Lab Sample ID: LCS 240-563845/3-A
 Matrix: Water
 Analysis Batch: 564038

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 563845

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	24100		ug/L		97	80 - 120
Magnesium	25000	24000		ug/L		96	80 - 120
Potassium	25000	24200		ug/L		97	80 - 120
Sodium	25000	24000		ug/L		96	80 - 120

Lab Sample ID: 240-181022-1 MS
 Matrix: Water
 Analysis Batch: 564038

Client Sample ID: BAC-21-F-20230224-01
 Prep Type: Total Recoverable
 Prep Batch: 563845

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	130000		25000	153000	4	ug/L		100	80 - 120
Magnesium	15000		25000	38100		ug/L		93	80 - 120
Potassium	2400		25000	25800		ug/L		94	80 - 120
Sodium	28000		25000	51100		ug/L		93	80 - 120

Lab Sample ID: 240-181022-1 MSD
 Matrix: Water
 Analysis Batch: 564038

Client Sample ID: BAC-21-F-20230224-01
 Prep Type: Total Recoverable
 Prep Batch: 563845

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	130000		25000	154000	4	ug/L		103	80 - 120	1	20
Magnesium	15000		25000	38900		ug/L		96	80 - 120	2	20
Potassium	2400		25000	26300		ug/L		96	80 - 120	2	20
Sodium	28000		25000	52300		ug/L		98	80 - 120	2	20

Eurofins Canton

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181022-1

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-564459/30
Matrix: Water
Analysis Batch: 564459

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			03/06/23 13:08	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 13:08	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 13:08	1

Lab Sample ID: MB 240-564459/4
Matrix: Water
Analysis Batch: 564459

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			03/06/23 11:25	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 11:25	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 11:25	1

Lab Sample ID: MB 240-564459/56
Matrix: Water
Analysis Batch: 564459

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			03/06/23 14:59	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 14:59	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 14:59	1

Lab Sample ID: LCS 240-564459/29
Matrix: Water
Analysis Batch: 564459

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	138		mg/L		95	86 - 123

Lab Sample ID: LCS 240-564459/55
Matrix: Water
Analysis Batch: 564459

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	138		mg/L		95	86 - 123

Lab Sample ID: 240-181022-2 DU
Matrix: Water
Analysis Batch: 564459

Client Sample ID: BAC-22-F-20230224-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	220		219		mg/L		0.4	20
Bicarbonate Alkalinity as CaCO3	220		219		mg/L		0.4	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181022-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-564377/3
 Matrix: Water
 Analysis Batch: 564377

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	ND		1.0	0.13	mg/L			03/06/23 11:34	1
Fluoride	ND		0.050	0.024	mg/L			03/06/23 11:34	1
Sulfate	ND		1.0	0.35	mg/L			03/06/23 11:34	1

Lab Sample ID: LCS 240-564377/4
 Matrix: Water
 Analysis Batch: 564377

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.60		mg/L		104	90 - 110
Sulfate	50.0	49.4		mg/L		99	90 - 110

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

Lab Sample ID: MB 240-564087/1
 Matrix: Water
 Analysis Batch: 564087

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Dissolved Solids	ND		10	7.8	mg/L			03/02/23 17:58	1

Lab Sample ID: LCS 240-564087/2
 Matrix: Water
 Analysis Batch: 564087

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181022-1

Metals

Prep Batch: 563845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181022-1	BAC-21-F-20230224-01	Total Recoverable	Water	3005A	
240-181022-2	BAC-22-F-20230224-01	Total Recoverable	Water	3005A	
240-181022-3	EB-001-F-20230224-01	Total Recoverable	Water	3005A	
MB 240-563845/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-563845/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-563845/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-181022-1 MS	BAC-21-F-20230224-01	Total Recoverable	Water	3005A	
240-181022-1 MSD	BAC-21-F-20230224-01	Total Recoverable	Water	3005A	

Analysis Batch: 564038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181022-1	BAC-21-F-20230224-01	Total Recoverable	Water	6020B	563845
240-181022-2	BAC-22-F-20230224-01	Total Recoverable	Water	6020B	563845
240-181022-3	EB-001-F-20230224-01	Total Recoverable	Water	6020B	563845
MB 240-563845/1-A	Method Blank	Total Recoverable	Water	6020B	563845
LCS 240-563845/3-A	Lab Control Sample	Total Recoverable	Water	6020B	563845
240-181022-1 MS	BAC-21-F-20230224-01	Total Recoverable	Water	6020B	563845
240-181022-1 MSD	BAC-21-F-20230224-01	Total Recoverable	Water	6020B	563845

Analysis Batch: 564046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181022-1	BAC-21-F-20230224-01	Total Recoverable	Water	6010D	563845
240-181022-2	BAC-22-F-20230224-01	Total Recoverable	Water	6010D	563845
240-181022-3	EB-001-F-20230224-01	Total Recoverable	Water	6010D	563845
MB 240-563845/1-A	Method Blank	Total Recoverable	Water	6010D	563845
LCS 240-563845/2-A	Lab Control Sample	Total Recoverable	Water	6010D	563845

General Chemistry

Analysis Batch: 564087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181022-1	BAC-21-F-20230224-01	Total/NA	Water	SM 2540C	
240-181022-2	BAC-22-F-20230224-01	Total/NA	Water	SM 2540C	
240-181022-3	EB-001-F-20230224-01	Total/NA	Water	SM 2540C	
MB 240-564087/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-564087/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 564377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181022-1	BAC-21-F-20230224-01	Total/NA	Water	300.0	
240-181022-2	BAC-22-F-20230224-01	Total/NA	Water	300.0	
240-181022-2	BAC-22-F-20230224-01	Total/NA	Water	300.0	
240-181022-3	EB-001-F-20230224-01	Total/NA	Water	300.0	
MB 240-564377/3	Method Blank	Total/NA	Water	300.0	
LCS 240-564377/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 564459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181022-1	BAC-21-F-20230224-01	Total/NA	Water	2320B-1997	
240-181022-2	BAC-22-F-20230224-01	Total/NA	Water	2320B-1997	
240-181022-3	EB-001-F-20230224-01	Total/NA	Water	2320B-1997	

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181022-1

General Chemistry (Continued)

Analysis Batch: 564459 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-564459/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-564459/4	Method Blank	Total/NA	Water	2320B-1997	
MB 240-564459/56	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-564459/29	Lab Control Sample	Total/NA	Water	2320B-1997	
LCS 240-564459/55	Lab Control Sample	Total/NA	Water	2320B-1997	
240-181022-2 DU	BAC-22-F-20230224-01	Total/NA	Water	2320B-1997	

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Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181022-1

Client Sample ID: BAC-21-F-20230224-01

Lab Sample ID: 240-181022-1

Date Collected: 02/24/23 12:48

Matrix: Water

Date Received: 02/27/23 13:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			563845	AJC	EET CAN	03/01/23 15:00
Total Recoverable	Analysis	6010D		1	564046	RKT	EET CAN	03/02/23 12:57
Total Recoverable	Prep	3005A			563845	AJC	EET CAN	03/01/23 15:00
Total Recoverable	Analysis	6020B		1	564038	DSH	EET CAN	03/02/23 10:48
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 14:51
Total/NA	Analysis	300.0		1	564377	JWW	EET CAN	03/06/23 22:47
Total/NA	Analysis	SM 2540C		1	564087	GH	EET CAN	03/02/23 17:58

Client Sample ID: BAC-22-F-20230224-01

Lab Sample ID: 240-181022-2

Date Collected: 02/24/23 14:31

Matrix: Water

Date Received: 02/27/23 13:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			563845	AJC	EET CAN	03/01/23 15:00
Total Recoverable	Analysis	6010D		1	564046	RKT	EET CAN	03/02/23 13:01
Total Recoverable	Prep	3005A			563845	AJC	EET CAN	03/01/23 15:00
Total Recoverable	Analysis	6020B		1	564038	DSH	EET CAN	03/02/23 11:13
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 15:06
Total/NA	Analysis	300.0		1	564377	JWW	EET CAN	03/06/23 23:31
Total/NA	Analysis	300.0		5	564377	JWW	EET CAN	03/07/23 00:36
Total/NA	Analysis	SM 2540C		1	564087	GH	EET CAN	03/02/23 17:58

Client Sample ID: EB-001-F-20230224-01

Lab Sample ID: 240-181022-3

Date Collected: 02/24/23 15:00

Matrix: Water

Date Received: 02/27/23 13:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			563845	AJC	EET CAN	03/01/23 15:00
Total Recoverable	Analysis	6010D		1	564046	RKT	EET CAN	03/02/23 13:05
Total Recoverable	Prep	3005A			563845	AJC	EET CAN	03/01/23 15:00
Total Recoverable	Analysis	6020B		1	564038	DSH	EET CAN	03/02/23 11:16
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 15:14
Total/NA	Analysis	300.0		1	564377	JWW	EET CAN	03/07/23 00:57
Total/NA	Analysis	SM 2540C		1	564087	GH	EET CAN	03/02/23 17:58

Laboratory References:

EET CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181022-1

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23 *
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-27-23 *
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23 *
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-23 *
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-27-23 *
Ohio VAP	State	CL0024	02-27-23 *
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

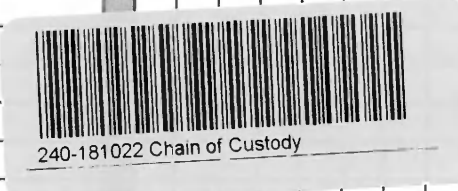
* Accreditation/Certification renewal pending - accreditation/certification considered valid.



Chain of Custody Record



Client Information		Lab PM Cisneros, Roxanne		Carrier Tracking No(s): 240-93465-34577.1								
Client Contact: Taylor Huffman		E-Mail: roxanne.cisneros@eurofins.com		State of Origin:								
Company: Lightstone Generation Gavin Power LLC		PWSID:		Job #								
Address: 7397 OH-7		Due Date Requested:		Analysis Requested								
City: Cheshire		TAT Requested (days):		Total Number of Containers								
State, Zip: OH, 45620		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:								
Phone: 740-925-3171(Tel)		PO #: 2935505		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)								
Email: taylor.huffman@lightstonegen.com		WO #:		Special Instructions/Note:								
Project Name: Federal CCR Wells - App III		Project #: 24019633		Other:								
Site:		SSOW#:										
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=Water, S=Soil, O=Other/Off)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540C, Calcd, 300.0, ZBD	6010B, 6020	2320B - Alkalinity	ID	N	D
BAC-21-F-20230224-01	2-24-23	1248	G	W								
BAC-22-F-20230224-01	2-24-23	1431	G	W								
EB-001-F-20230224-01	2-24-23	1500	G	W								
<p>Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological</p> <p>Deliverable Requested: I, II, III, IV, Other (specify)</p> <p>Empty Kit Relinquished by: _____ Date: _____</p> <p>Relinquished by: <i>Bobby Costa</i></p> <p>Relinquished by: <i>Tom Edwards</i></p> <p>Relinquished by: _____ Date/Time: _____</p> <p>Custody Seal No.: _____ <input type="checkbox"/> Yes <input type="checkbox"/> No</p>												
<p>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months</p> <p>Special Instructions/QC Requirements:</p> <p>Method of Shipment: _____</p> <p>Received by: <i>Tom Edwards</i> Date/Time: <i>2-27-23 9:54</i> Company: <i>Auto Options</i></p> <p>Received by: <i>M.A.A.</i> Date/Time: <i>2/27/23 13:20</i> Company: <i>ESC</i></p> <p>Received by: _____ Date/Time: _____ Company: _____</p> <p>Cooler Temperature(s) °C and Other Remarks:</p>												



Barberton Facility
 Client Lightstone Site Name _____ Cooler unpacked by: Nancy Ryan
 Cooler Received on 2-27-23 Opened on 2-28-23
 FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off Eurofins Courier Other _____

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

Eurofins Cooler # E-5 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
 See Multiple Cooler Form

1. Cooler temperature upon receipt
 IR GUN # IR-13 (CF -0.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN # IR-16 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN # IR-17 (CF -0.3 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity each 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# HC203864

14. Were VOAs on the COC? Yes No

15. Were air bubbles >6 mm in any VOA vials? Yes ← 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: _____

Tests that are not checked for pH by Receiving:
 VOAs
 Oil and Grease
 TOC

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Chain of Custody Record



Client Information		Lab PM Cisneros, Roxanne		Carrier Tracking No(s):		COC No: 240-93465-34577.1	
Client Contact: Taylor Huffman		E-Mail: roxanne.cisneros@Eurofinsnet.com		State of Origin:		Page: Page 1 of 1	
Company: Lightstone Generation Gavin Power LLC		PWSID:		Analysis Requested		Sub #:	
Address: 7397 OH-7		Due Date Requested:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)	
City: Cheshire		TAT Requested (days):		6010B, 6020		2540C_Calcd, 300.0, 28D	
State, Zip: OH, 45620		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		2320B - Alkalinity			
Phone: 740-925-3171(Tel)		PO #: 2935505		Matrix (W=Water, S=Sediment, O=Organics, A=Air)		Preservation Codes:	
Email: taylor.huffman@lightstonegen.com		WO #:		Sample Date		Sample Time	
Project Name: Federal CCR Wells - App. III		Project #: 24019633		Sample Type (C=comp, G=grab)		Sample Date	
Site:		SSOW#:		Sample Date		Sample Time	
Sample Identification		Sample Date		Sample Time		Sample Type	
BAC-21-F-20230224-01		2-24-23		1248		G W	
BAC-22-F-20230224-01		2-24-23		1431		G W	
EB-001-F-20230224-01		2-24-23		1500		G W	
Special Instructions/Note:		Total Number of Containers		Special Instructions/Note:		Preservation Codes:	
						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 L - EDTA Z - other (specify) Other:	
Possible Hazard Identification		Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological <input type="checkbox"/>		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Deliverable Requested: I, II, III, IV, Other (specify)		Empty Kit Relinquished by:		Date:		Special Instructions/QC Requirements:	
Relinquished by: <i>Bobby Castle</i>		Date: 2-27-23		Received by: <i>Tom Edwards</i>		Date/Time: 2-27-23 9:41	
Relinquished by: <i>Tom Edwards</i>		Date/Time: 2-27-23 1320hrs		Received by: <i>M.A.A.</i>		Date/Time: 2/27/23 13:20	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Company: <i>Auth Options</i>	

Client Lightstone Site Name _____ Cooler unpacked by: Nancy Kye
Cooler Received on 2-27-23 Opened on 2-28-23
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off Eurofins Courier Other

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


Eurofins Cooler # ES ~~Foam Box~~ Client Cooler Box Other _____
Packing material used: Bubble Wrap Foam Plastic Bag None Other _____
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt See Multiple Cooler Form
IR GUN # IR-13 (CF -0.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
IR GUN # IR-16 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
IR GUN # IR-17 (CF -0.3 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity each 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

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

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# HC203864
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: _____

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ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 3/30/2023 3:21:48 PM

JOB DESCRIPTION

Federal CCR Wells - App IV

JOB NUMBER

240-181023-1

Eurofins Canton

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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
3/30/2023 3:21:48 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Job ID: 240-181023-1

Laboratory: Eurofins Canton

Narrative

Job Narrative 240-181023-1

Receipt

The samples were received on 2/27/2023 1:20 PM. 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 0.9°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

Method 9315_Ra226: Radium-226 batch 602324: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. MW-1-F-20230224-01 (240-181023-1), BAC-21-F-20230224-01 (240-181023-2), BAC-22-F-20230224-01 (240-181023-3), EB-001-F-20230224-01 (240-181023-4), (LCS 160-602324/2-A), (MB 160-602324/1-A)

Method 9320_Ra228: Radium-228 batch 602331: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. MW-1-F-20230224-01 (240-181023-1), BAC-21-F-20230224-01 (240-181023-2), BAC-22-F-20230224-01 (240-181023-3), EB-001-F-20230224-01 (240-181023-4), (LCS 160-602331/2-A), (MB 160-602331/1-A)

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 - App IV

Job ID: 240-181023-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CAN
7470A	Mercury (CVAA)	SW846	EET CAN
2320B-1997	Alkalinity, Total	SM	EET CAN
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CAN
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 CAN
7470A	Preparation, Mercury	SW846	EET CAN
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 CAN = Eurofins Canton, 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 - App IV

Job ID: 240-181023-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-181023-1	MW-1-F-20230224-01	Water	02/24/23 12:02	02/27/23 13:20
240-181023-2	BAC-21-F-20230224-01	Water	02/24/23 12:48	02/27/23 13:20
240-181023-3	BAC-22-F-20230224-01	Water	02/24/23 14:31	02/27/23 13:20
240-181023-4	EB-001-F-20230224-01	Water	02/24/23 15:00	02/27/23 13:20

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Client Sample ID: MW-1-F-20230224-01

Lab Sample ID: 240-181023-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	120		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.20	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Cobalt	0.74	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	4.1	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	15000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	17000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.71	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.11		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-21-F-20230224-01

Lab Sample ID: 240-181023-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.8	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	160		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.94	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.5		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.0	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	16000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	2500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	30000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.26	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.058		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-22-F-20230224-01

Lab Sample ID: 240-181023-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.4	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	140		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.66	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.55	J	1.0	0.45	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Client Sample ID: BAC-22-F-20230224-01 (Continued)

Lab Sample ID: 240-181023-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	4.4	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	19000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	2900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	21000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.076		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: EB-001-F-20230224-01

Lab Sample ID: 240-181023-4

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Canton



Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Client Sample ID: MW-1-F-20230224-01

Lab Sample ID: 240-181023-1

Date Collected: 02/24/23 12:02

Matrix: Water

Date Received: 02/27/23 13:20

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		03/01/23 15:00	03/02/23 10:37	1
Arsenic	ND		5.0	0.75	ug/L		03/01/23 15:00	03/02/23 10:37	1
Barium	120		5.0	2.2	ug/L		03/01/23 15:00	03/02/23 10:37	1
Beryllium	ND		1.0	0.62	ug/L		03/01/23 15:00	03/02/23 10:37	1
Cadmium	0.20	J	1.0	0.20	ug/L		03/01/23 15:00	03/02/23 10:37	1
Chromium	ND		5.0	2.5	ug/L		03/01/23 15:00	03/02/23 10:37	1
Cobalt	0.74	J	1.0	0.19	ug/L		03/01/23 15:00	03/02/23 10:37	1
Lead	ND		1.0	0.45	ug/L		03/01/23 15:00	03/02/23 10:37	1
Lithium	4.1	J	8.0	1.7	ug/L		03/01/23 15:00	03/02/23 10:37	1
Magnesium	15000		1000	200	ug/L		03/01/23 15:00	03/02/23 10:37	1
Molybdenum	ND		5.0	1.1	ug/L		03/01/23 15:00	03/02/23 10:37	1
Potassium	1500		1000	220	ug/L		03/01/23 15:00	03/02/23 10:37	1
Selenium	ND		5.0	0.89	ug/L		03/01/23 15:00	03/02/23 10:37	1
Sodium	17000		1000	330	ug/L		03/01/23 15:00	03/02/23 10:37	1
Thallium	0.71	J	1.0	0.20	ug/L		03/01/23 15:00	03/02/23 10:37	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		03/01/23 16:00	03/02/23 09:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			03/06/23 15:19	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			03/06/23 15:19	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:19	1
Fluoride (EPA 300.0-1993 R2.1)	0.11		0.050	0.024	mg/L			03/22/23 00:39	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	0.0889		0.0639	0.0644	1.00	0.0873	pCi/L	03/03/23 11:25	03/27/23 21:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.1		30 - 110					03/03/23 11:25	03/27/23 21:09	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	0.167	U	0.273	0.274	1.00	0.469	pCi/L	03/03/23 12:12	03/15/23 11:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.1		30 - 110					03/03/23 12:12	03/15/23 11:46	1
Y Carrier	84.1		30 - 110					03/03/23 12:12	03/15/23 11:46	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Client Sample ID: MW-1-F-20230224-01

Lab Sample ID: 240-181023-1

Date Collected: 02/24/23 12:02

Matrix: Water

Date Received: 02/27/23 13:20

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	0.256	U	0.280	0.281	5.00	0.469	pCi/L		03/29/23 19:31	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Client Sample ID: BAC-21-F-20230224-01

Lab Sample ID: 240-181023-2

Date Collected: 02/24/23 12:48

Matrix: Water

Date Received: 02/27/23 13:20

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		03/01/23 15:00	03/02/23 10:40	1
Arsenic	3.8	J	5.0	0.75	ug/L		03/01/23 15:00	03/02/23 10:40	1
Barium	160		5.0	2.2	ug/L		03/01/23 15:00	03/02/23 10:40	1
Beryllium	ND		1.0	0.62	ug/L		03/01/23 15:00	03/02/23 10:40	1
Cadmium	ND		1.0	0.20	ug/L		03/01/23 15:00	03/02/23 10:40	1
Chromium	ND		5.0	2.5	ug/L		03/01/23 15:00	03/02/23 10:40	1
Cobalt	0.94	J	1.0	0.19	ug/L		03/01/23 15:00	03/02/23 10:40	1
Lead	1.5		1.0	0.45	ug/L		03/01/23 15:00	03/02/23 10:40	1
Lithium	6.0	J	8.0	1.7	ug/L		03/01/23 15:00	03/02/23 10:40	1
Magnesium	16000		1000	200	ug/L		03/01/23 15:00	03/02/23 10:40	1
Molybdenum	ND		5.0	1.1	ug/L		03/01/23 15:00	03/02/23 10:40	1
Potassium	2500		1000	220	ug/L		03/01/23 15:00	03/02/23 10:40	1
Selenium	ND		5.0	0.89	ug/L		03/01/23 15:00	03/02/23 10:40	1
Sodium	30000		1000	330	ug/L		03/01/23 15:00	03/02/23 10:40	1
Thallium	0.26	J	1.0	0.20	ug/L		03/01/23 15:00	03/02/23 10:40	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		03/01/23 16:00	03/02/23 09:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			03/06/23 15:23	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			03/06/23 15:23	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:23	1
Fluoride (EPA 300.0-1993 R2.1)	0.058		0.050	0.024	mg/L			03/22/23 01:01	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	0.397		0.160	0.164	1.00	0.179	pCi/L	03/03/23 11:25	03/28/23 13:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	67.8		30 - 110					03/03/23 11:25	03/28/23 13:13	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	0.474	U	0.598	0.600	1.00	0.993	pCi/L	03/03/23 12:12	03/15/23 11:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	67.8		30 - 110					03/03/23 12:12	03/15/23 11:46	1
Y Carrier	82.2		30 - 110					03/03/23 12:12	03/15/23 11:46	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Client Sample ID: BAC-21-F-20230224-01

Lab Sample ID: 240-181023-2

Date Collected: 02/24/23 12:48

Matrix: Water

Date Received: 02/27/23 13:20

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	0.871	U	0.619	0.622	5.00	0.993	pCi/L		03/29/23 19:31	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Client Sample ID: BAC-22-F-20230224-01

Lab Sample ID: 240-181023-3

Date Collected: 02/24/23 14:31

Matrix: Water

Date Received: 02/27/23 13:20

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		03/01/23 15:00	03/02/23 10:43	1
Arsenic	2.4	J	5.0	0.75	ug/L		03/01/23 15:00	03/02/23 10:43	1
Barium	140		5.0	2.2	ug/L		03/01/23 15:00	03/02/23 10:43	1
Beryllium	ND		1.0	0.62	ug/L		03/01/23 15:00	03/02/23 10:43	1
Cadmium	ND		1.0	0.20	ug/L		03/01/23 15:00	03/02/23 10:43	1
Chromium	ND		5.0	2.5	ug/L		03/01/23 15:00	03/02/23 10:43	1
Cobalt	0.66	J	1.0	0.19	ug/L		03/01/23 15:00	03/02/23 10:43	1
Lead	0.55	J	1.0	0.45	ug/L		03/01/23 15:00	03/02/23 10:43	1
Lithium	4.4	J	8.0	1.7	ug/L		03/01/23 15:00	03/02/23 10:43	1
Magnesium	19000		1000	200	ug/L		03/01/23 15:00	03/02/23 10:43	1
Molybdenum	ND		5.0	1.1	ug/L		03/01/23 15:00	03/02/23 10:43	1
Potassium	2900		1000	220	ug/L		03/01/23 15:00	03/02/23 10:43	1
Selenium	ND		5.0	0.89	ug/L		03/01/23 15:00	03/02/23 10:43	1
Sodium	21000		1000	330	ug/L		03/01/23 15:00	03/02/23 10:43	1
Thallium	ND		1.0	0.20	ug/L		03/01/23 15:00	03/02/23 10:43	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		03/01/23 16:00	03/02/23 09:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 15:28	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 15:28	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:28	1
Fluoride (EPA 300.0-1993 R2.1)	0.076		0.050	0.024	mg/L			03/22/23 01:22	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	0.288		0.0997	0.103	1.00	0.102	pCi/L	03/03/23 11:25	03/28/23 13:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.9		30 - 110					03/03/23 11:25	03/28/23 13:14	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	0.133	U	0.307	0.307	1.00	0.540	pCi/L	03/03/23 12:12	03/15/23 11:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.9		30 - 110					03/03/23 12:12	03/15/23 11:46	1
Y Carrier	83.0		30 - 110					03/03/23 12:12	03/15/23 11:46	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Client Sample ID: BAC-22-F-20230224-01

Lab Sample ID: 240-181023-3

Date Collected: 02/24/23 14:31

Matrix: Water

Date Received: 02/27/23 13:20

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	0.421	U	0.323	0.324	5.00	0.540	pCi/L		03/29/23 19:31	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Client Sample ID: EB-001-F-20230224-01

Lab Sample ID: 240-181023-4

Date Collected: 02/24/23 15:00

Matrix: Water

Date Received: 02/27/23 13:20

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		03/01/23 15:00	03/02/23 10:45	1
Arsenic	ND		5.0	0.75	ug/L		03/01/23 15:00	03/02/23 10:45	1
Barium	ND		5.0	2.2	ug/L		03/01/23 15:00	03/02/23 10:45	1
Beryllium	ND		1.0	0.62	ug/L		03/01/23 15:00	03/02/23 10:45	1
Cadmium	ND		1.0	0.20	ug/L		03/01/23 15:00	03/02/23 10:45	1
Chromium	ND		5.0	2.5	ug/L		03/01/23 15:00	03/02/23 10:45	1
Cobalt	ND		1.0	0.19	ug/L		03/01/23 15:00	03/02/23 10:45	1
Lead	ND		1.0	0.45	ug/L		03/01/23 15:00	03/02/23 10:45	1
Lithium	ND		8.0	1.7	ug/L		03/01/23 15:00	03/02/23 10:45	1
Magnesium	ND		1000	200	ug/L		03/01/23 15:00	03/02/23 10:45	1
Molybdenum	ND		5.0	1.1	ug/L		03/01/23 15:00	03/02/23 10:45	1
Potassium	ND		1000	220	ug/L		03/01/23 15:00	03/02/23 10:45	1
Selenium	ND		5.0	0.89	ug/L		03/01/23 15:00	03/02/23 10:45	1
Sodium	ND		1000	330	ug/L		03/01/23 15:00	03/02/23 10:45	1
Thallium	ND		1.0	0.20	ug/L		03/01/23 15:00	03/02/23 10:45	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		03/01/23 16:00	03/02/23 09:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:31	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:31	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			03/22/23 02:27	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0486	U	0.0766	0.0768	1.00	0.131	pCi/L	03/03/23 11:25	03/27/23 21:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.7		30 - 110					03/03/23 11:25	03/27/23 21:09	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.255	U	0.297	0.297	1.00	0.487	pCi/L	03/03/23 12:12	03/15/23 11:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.7		30 - 110					03/03/23 12:12	03/15/23 11:48	1
Y Carrier	83.4		30 - 110					03/03/23 12:12	03/15/23 11:48	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Client Sample ID: EB-001-F-20230224-01

Lab Sample ID: 240-181023-4

Date Collected: 02/24/23 15:00

Matrix: Water

Date Received: 02/27/23 13:20

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	0.304	U	0.307	0.307	5.00	0.487	pCi/L		03/29/23 19:31	1

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Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)
240-181023-1	MW-1-F-20230224-01	90.1
240-181023-2	BAC-21-F-20230224-01	67.8
240-181023-3	BAC-22-F-20230224-01	85.9
240-181023-4	EB-001-F-20230224-01	90.7
LCS 160-602324/2-A	Lab Control Sample	81.9
MB 160-602324/1-A	Method Blank	91.0

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-181023-1	MW-1-F-20230224-01	90.1	84.1
240-181023-2	BAC-21-F-20230224-01	67.8	82.2
240-181023-3	BAC-22-F-20230224-01	85.9	83.0
240-181023-4	EB-001-F-20230224-01	90.7	83.4
LCS 160-602331/2-A	Lab Control Sample	81.9	86.0
MB 160-602331/1-A	Method Blank	91.0	83.0

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-563845/1-A
Matrix: Water
Analysis Batch: 564038

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 563845

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/01/23 15:00	03/02/23 10:32	1
Arsenic	ND		5.0	0.75	ug/L		03/01/23 15:00	03/02/23 10:32	1
Barium	ND		5.0	2.2	ug/L		03/01/23 15:00	03/02/23 10:32	1
Beryllium	ND		1.0	0.62	ug/L		03/01/23 15:00	03/02/23 10:32	1
Cadmium	ND		1.0	0.20	ug/L		03/01/23 15:00	03/02/23 10:32	1
Chromium	ND		5.0	2.5	ug/L		03/01/23 15:00	03/02/23 10:32	1
Cobalt	ND		1.0	0.19	ug/L		03/01/23 15:00	03/02/23 10:32	1
Lead	ND		1.0	0.45	ug/L		03/01/23 15:00	03/02/23 10:32	1
Lithium	ND		8.0	1.7	ug/L		03/01/23 15:00	03/02/23 10:32	1
Magnesium	ND		1000	200	ug/L		03/01/23 15:00	03/02/23 10:32	1
Molybdenum	ND		5.0	1.1	ug/L		03/01/23 15:00	03/02/23 10:32	1
Potassium	ND		1000	220	ug/L		03/01/23 15:00	03/02/23 10:32	1
Selenium	ND		5.0	0.89	ug/L		03/01/23 15:00	03/02/23 10:32	1
Sodium	ND		1000	330	ug/L		03/01/23 15:00	03/02/23 10:32	1
Thallium	ND		1.0	0.20	ug/L		03/01/23 15:00	03/02/23 10:32	1

Lab Sample ID: LCS 240-563845/3-A
Matrix: Water
Analysis Batch: 564038

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 563845

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	98.1		ug/L		98	80 - 120
Arsenic	1000	924		ug/L		92	80 - 120
Barium	1000	930		ug/L		93	80 - 120
Beryllium	500	495		ug/L		99	80 - 120
Cadmium	500	478		ug/L		96	80 - 120
Chromium	500	474		ug/L		95	80 - 120
Cobalt	500	469		ug/L		94	80 - 120
Lead	500	477		ug/L		95	80 - 120
Lithium	500	486		ug/L		97	80 - 120
Magnesium	25000	24000		ug/L		96	80 - 120
Molybdenum	500	459		ug/L		92	80 - 120
Potassium	25000	24200		ug/L		97	80 - 120
Selenium	1000	920		ug/L		92	80 - 120
Sodium	25000	24000		ug/L		96	80 - 120
Thallium	1000	941		ug/L		94	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-563849/1-A
Matrix: Water
Analysis Batch: 564034

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563849

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/01/23 16:00	03/02/23 08:50	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-563849/2-A
 Matrix: Water
 Analysis Batch: 564034

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 563849

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.14		ug/L		103	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-564459/30
 Matrix: Water
 Analysis Batch: 564459

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			03/06/23 13:08	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 13:08	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 13:08	1

Lab Sample ID: MB 240-564459/56
 Matrix: Water
 Analysis Batch: 564459

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			03/06/23 14:59	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 14:59	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 14:59	1

Lab Sample ID: LCS 240-564459/55
 Matrix: Water
 Analysis Batch: 564459

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	138		mg/L		95	86 - 123

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-566256/3
 Matrix: Water
 Analysis Batch: 566256

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			03/21/23 14:06	1

Lab Sample ID: LCS 240-566256/4
 Matrix: Water
 Analysis Batch: 566256

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.72		mg/L		109	90 - 110

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-602324/1-A
Matrix: Water
Analysis Batch: 605095

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602324

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.02066	U	0.0536	0.0537	1.00	0.0993	pCi/L	03/03/23 11:25	03/27/23 16:04	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	91.0		30 - 110					03/03/23 11:25	03/27/23 16:04	1

Lab Sample ID: LCS 160-602324/2-A
Matrix: Water
Analysis Batch: 605095

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602324

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	11.64		1.20	1.00	0.113	pCi/L	103	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits		Prepared	Analyzed	Dil Fac		
Ba Carrier	81.9		30 - 110					03/03/23 11:25	03/27/23 16:04

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-602331/1-A
Matrix: Water
Analysis Batch: 603705

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602331

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.6207		0.332	0.337	1.00	0.457	pCi/L	03/03/23 12:12	03/15/23 11:40	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	91.0		30 - 110					03/03/23 12:12	03/15/23 11:40	1
Y Carrier	83.0		30 - 110		03/03/23 12:12	03/15/23 11:40	1			

Lab Sample ID: LCS 160-602331/2-A
Matrix: Water
Analysis Batch: 603705

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602331

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-228	8.12	8.960		1.27	1.00	0.583	pCi/L	110	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits		Prepared	Analyzed	Dil Fac		
Ba Carrier	81.9		30 - 110					03/03/23 12:12	03/15/23 11:40
Y Carrier	86.0		30 - 110		03/03/23 12:12	03/15/23 11:40	1		

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Metals

Prep Batch: 563845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181023-1	MW-1-F-20230224-01	Total Recoverable	Water	3005A	
240-181023-2	BAC-21-F-20230224-01	Total Recoverable	Water	3005A	
240-181023-3	BAC-22-F-20230224-01	Total Recoverable	Water	3005A	
240-181023-4	EB-001-F-20230224-01	Total Recoverable	Water	3005A	
MB 240-563845/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-563845/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 563849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181023-1	MW-1-F-20230224-01	Total/NA	Water	7470A	
240-181023-2	BAC-21-F-20230224-01	Total/NA	Water	7470A	
240-181023-3	BAC-22-F-20230224-01	Total/NA	Water	7470A	
240-181023-4	EB-001-F-20230224-01	Total/NA	Water	7470A	
MB 240-563849/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-563849/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 564034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181023-1	MW-1-F-20230224-01	Total/NA	Water	7470A	563849
240-181023-2	BAC-21-F-20230224-01	Total/NA	Water	7470A	563849
240-181023-3	BAC-22-F-20230224-01	Total/NA	Water	7470A	563849
240-181023-4	EB-001-F-20230224-01	Total/NA	Water	7470A	563849
MB 240-563849/1-A	Method Blank	Total/NA	Water	7470A	563849
LCS 240-563849/2-A	Lab Control Sample	Total/NA	Water	7470A	563849

Analysis Batch: 564038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181023-1	MW-1-F-20230224-01	Total Recoverable	Water	6020B	563845
240-181023-2	BAC-21-F-20230224-01	Total Recoverable	Water	6020B	563845
240-181023-3	BAC-22-F-20230224-01	Total Recoverable	Water	6020B	563845
240-181023-4	EB-001-F-20230224-01	Total Recoverable	Water	6020B	563845
MB 240-563845/1-A	Method Blank	Total Recoverable	Water	6020B	563845
LCS 240-563845/3-A	Lab Control Sample	Total Recoverable	Water	6020B	563845

General Chemistry

Analysis Batch: 564459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181023-1	MW-1-F-20230224-01	Total/NA	Water	2320B-1997	
240-181023-2	BAC-21-F-20230224-01	Total/NA	Water	2320B-1997	
240-181023-3	BAC-22-F-20230224-01	Total/NA	Water	2320B-1997	
240-181023-4	EB-001-F-20230224-01	Total/NA	Water	2320B-1997	
MB 240-564459/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-564459/56	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-564459/55	Lab Control Sample	Total/NA	Water	2320B-1997	

Analysis Batch: 566256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181023-1	MW-1-F-20230224-01	Total/NA	Water	300.0-1993 R2.1	
240-181023-2	BAC-21-F-20230224-01	Total/NA	Water	300.0-1993 R2.1	
240-181023-3	BAC-22-F-20230224-01	Total/NA	Water	300.0-1993 R2.1	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

General Chemistry (Continued)

Analysis Batch: 566256 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181023-4	EB-001-F-20230224-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-566256/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-566256/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

Rad

Prep Batch: 602324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181023-1	MW-1-F-20230224-01	Total/NA	Water	PrecSep-21	
240-181023-2	BAC-21-F-20230224-01	Total/NA	Water	PrecSep-21	
240-181023-3	BAC-22-F-20230224-01	Total/NA	Water	PrecSep-21	
240-181023-4	EB-001-F-20230224-01	Total/NA	Water	PrecSep-21	
MB 160-602324/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-602324/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 602331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181023-1	MW-1-F-20230224-01	Total/NA	Water	PrecSep_0	
240-181023-2	BAC-21-F-20230224-01	Total/NA	Water	PrecSep_0	
240-181023-3	BAC-22-F-20230224-01	Total/NA	Water	PrecSep_0	
240-181023-4	EB-001-F-20230224-01	Total/NA	Water	PrecSep_0	
MB 160-602331/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-602331/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Client Sample ID: MW-1-F-20230224-01

Lab Sample ID: 240-181023-1

Date Collected: 02/24/23 12:02

Matrix: Water

Date Received: 02/27/23 13:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			563845	AJC	EET CAN	03/01/23 15:00
Total Recoverable	Analysis	6020B		1	564038	DSH	EET CAN	03/02/23 10:37
Total/NA	Prep	7470A			563849	AJC	EET CAN	03/01/23 16:00
Total/NA	Analysis	7470A		1	564034	MRL	EET CAN	03/02/23 09:01
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 15:19
Total/NA	Analysis	300.0-1993 R2.1		1	566256	JMB	EET CAN	03/22/23 00:39
Total/NA	Prep	PrecSep-21			602324	DJP	EET SL	03/03/23 11:25
Total/NA	Analysis	9315		1	605094	FLC	EET SL	03/27/23 21:09
Total/NA	Prep	PrecSep_0			602331	DJP	EET SL	03/03/23 12:12
Total/NA	Analysis	9320		1	603705	FLC	EET SL	03/15/23 11:46
Total/NA	Analysis	Ra226_Ra228		1	605403	MLK	EET SL	03/29/23 19:31

Client Sample ID: BAC-21-F-20230224-01

Lab Sample ID: 240-181023-2

Date Collected: 02/24/23 12:48

Matrix: Water

Date Received: 02/27/23 13:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			563845	AJC	EET CAN	03/01/23 15:00
Total Recoverable	Analysis	6020B		1	564038	DSH	EET CAN	03/02/23 10:40
Total/NA	Prep	7470A			563849	AJC	EET CAN	03/01/23 16:00
Total/NA	Analysis	7470A		1	564034	MRL	EET CAN	03/02/23 09:03
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 15:23
Total/NA	Analysis	300.0-1993 R2.1		1	566256	JMB	EET CAN	03/22/23 01:01
Total/NA	Prep	PrecSep-21			602324	DJP	EET SL	03/03/23 11:25
Total/NA	Analysis	9315		1	605277	FLC	EET SL	03/28/23 13:13
Total/NA	Prep	PrecSep_0			602331	DJP	EET SL	03/03/23 12:12
Total/NA	Analysis	9320		1	603705	FLC	EET SL	03/15/23 11:46
Total/NA	Analysis	Ra226_Ra228		1	605403	MLK	EET SL	03/29/23 19:31

Client Sample ID: BAC-22-F-20230224-01

Lab Sample ID: 240-181023-3

Date Collected: 02/24/23 14:31

Matrix: Water

Date Received: 02/27/23 13:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			563845	AJC	EET CAN	03/01/23 15:00
Total Recoverable	Analysis	6020B		1	564038	DSH	EET CAN	03/02/23 10:43
Total/NA	Prep	7470A			563849	AJC	EET CAN	03/01/23 16:00
Total/NA	Analysis	7470A		1	564034	MRL	EET CAN	03/02/23 09:05
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 15:28
Total/NA	Analysis	300.0-1993 R2.1		1	566256	JMB	EET CAN	03/22/23 01:22
Total/NA	Prep	PrecSep-21			602324	DJP	EET SL	03/03/23 11:25
Total/NA	Analysis	9315		1	605277	FLC	EET SL	03/28/23 13:14
Total/NA	Prep	PrecSep_0			602331	DJP	EET SL	03/03/23 12:12
Total/NA	Analysis	9320		1	603705	FLC	EET SL	03/15/23 11:46

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Client Sample ID: BAC-22-F-20230224-01

Lab Sample ID: 240-181023-3

Date Collected: 02/24/23 14:31

Matrix: Water

Date Received: 02/27/23 13:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228		1	605403	MLK	EET SL	03/29/23 19:31

Client Sample ID: EB-001-F-20230224-01

Lab Sample ID: 240-181023-4

Date Collected: 02/24/23 15:00

Matrix: Water

Date Received: 02/27/23 13:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			563845	AJC	EET CAN	03/01/23 15:00
Total Recoverable	Analysis	6020B		1	564038	DSH	EET CAN	03/02/23 10:45
Total/NA	Prep	7470A			563849	AJC	EET CAN	03/01/23 16:00
Total/NA	Analysis	7470A		1	564034	MRL	EET CAN	03/02/23 09:07
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 15:31
Total/NA	Analysis	300.0-1993 R2.1		1	566256	JMB	EET CAN	03/22/23 02:27
Total/NA	Prep	PrecSep-21			602324	DJP	EET SL	03/03/23 11:25
Total/NA	Analysis	9315		1	605094	FLC	EET SL	03/27/23 21:09
Total/NA	Prep	PrecSep_0			602331	DJP	EET SL	03/03/23 12:12
Total/NA	Analysis	9320		1	603705	FLC	EET SL	03/15/23 11:48
Total/NA	Analysis	Ra226_Ra228		1	605403	MLK	EET SL	03/29/23 19:31

Laboratory References:

EET CAN = Eurofins Canton, 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
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23 *
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-28-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23 *
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-23 *
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	03-22-23
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	03-27-23
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-23
Connecticut	State	PH-0241	03-31-23
Florida	NELAP	E87689	06-30-23
HI - RadChem Recognition	State	n/a	06-30-23
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana (All)	NELAP	04080	06-30-23
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-23
MI - RadChem Recognition	State	9005	06-30-23
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-23
New Jersey	NELAP	MO002	06-30-23
New York	NELAP	11616	04-01-23
North Carolina (DW)	State	29700	07-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Canton

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181023-1

Laboratory: Eurofins St. Louis (Continued)

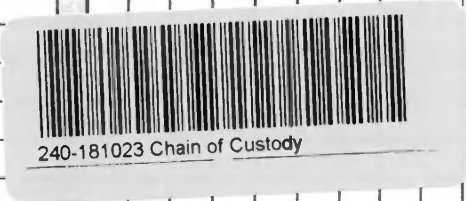
All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
North Dakota	State	R-207	06-30-23
Oklahoma	NELAP	9997	08-31-23
Oregon	NELAP	4157	09-01-23
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23
Texas	NELAP	T104704193	07-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00028	06-11-23
Utah	NELAP	MO000542021-14	07-31-23
Virginia	NELAP	10310	06-14-24
Washington	State	C592	08-30-23
West Virginia DEP	State	381	10-31-23

Chain of Custody Record

180 S. Van Buren Avenue
Barberton, OH 44203
Phone (330) 497-9396 Phone (330) 497-0772


Client Information 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: Federal CCR Wells - App IV Site:		Lab PM: Cisneros, Roxanne E-Mail: roxanne.cisneros@Eurolfins.com PWSID:		Camer Tracking No(s): 240-93466-34578-1 State of Origin:		COC No: 240-93466-34578-1 Page: Page 1 of 1 Job #:	
Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: 2935505 WO #:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Analysis Requested	
Sample Identification Sample Date Sample Time Sample Type (C=comp, G=grab) Matrix (W=water, S=solid, O=oil, A=air) Preservation Code:		Sample Date Sample Time Sample Type (C=comp, G=grab) Matrix (W=water, S=solid, O=oil, A=air) Preservation Code:		6020, 7470A 300.0, 28D - Fluoride 2320B - Alkalinity 9315, Ra226, 9320, Ra228, Ra226Ra228, GPPC		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 Other: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
MW-1-F-20230224-01 BAC-21-F-20230224-01 BAC-22-F-20230224-01 EB-001-F-20230224-01		2-24-23 1202 2-24-23 1748 2-24-23 1431 2-24-23 1500		W W W W W		D N D D N D D N D D N D D N D	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Special Instructions/Note: Total Number of Containers:		Special Instructions/Note: Total Number of Containers:		Special Instructions/Note: Total Number of Containers:	
Deliverable Requested: <input type="checkbox"/> I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months	
Empty Kit Relinquished by:		Relinquished by:		Relinquished by:		Relinquished by:	
Date/Time: 2-27-23 / 0855 Date/Time: 2-27-23 / 1320hrs Date/Time:		Date/Time: 2-27-23 / 0855 Date/Time: 2-27-23 / 1320hrs Date/Time:		Date/Time: 2-27-23 / 0855 Date/Time: 2-27-23 / 1320hrs Date/Time:		Date/Time: 2-27-23 / 0855 Date/Time: 2-27-23 / 1320hrs Date/Time:	
Relinquished by: <i>Edy Caba</i> Relinquished by: Tom Edwards Relinquished by:		Relinquished by: <i>Tom Edwards</i> Relinquished by: <i>M. A. A.</i> Relinquished by:		Relinquished by: <i>Tom Edwards</i> Relinquished by: <i>M. A. A.</i> Relinquished by:		Relinquished by: <i>Tom Edwards</i> Relinquished by: <i>M. A. A.</i> Relinquished by:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Cooler Temperature(s) °C and Other Remarks:	



Client Lightstone Site Name _____ Cooler unpacked by: Vanykyer
 Cooler Received on 2-27-23 Opened on 2-28-23
 FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off Eurofins Courier Other _____

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

Eurofins Cooler # ES Foam Box Client Cooler Box Other _____
 Packing material used: Bubble Wrap Foam Plastic Bag None Other _____
 COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt See Multiple Cooler Form
 IR GUN # IR-13 (CF -0.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN # IR-16 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN # IR-17 (CF -0.3 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity each 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 NA
 -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# HC203864
14. Were VOAs on the COC? Yes No
15. Were air bubbles >6 mm in any VOA vials? Yes No NA  ← Larger than this.
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: _____

Temperature readings:

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
MW-1-F-20230224-01	240-181023-A-1	Plastic 250ml - unpreserved				
MW-1-F-20230224-01	240-181023-B-1	Plastic 250ml - unpreserved				
MW-1-F-20230224-01	240-181023-C-1	Plastic 500ml - with Nitric Acid	<2			
MW-1-F-20230224-01	240-181023-D-1	Plastic 1 liter - Nitric Acid	<2			
MW-1-F-20230224-01	240-181023-E-1	Plastic 1 liter - Nitric Acid	<2			
BAC-21-F-20230224-01	240-181023-A-2	Plastic 250ml - unpreserved				
BAC-21-F-20230224-01	240-181023-B-2	Plastic 250ml - unpreserved				
BAC-21-F-20230224-01	240-181023-C-2	Plastic 500ml - with Nitric Acid	<2			
BAC-21-F-20230224-01	240-181023-D-2	Plastic 1 liter - Nitric Acid	<2			
BAC-21-F-20230224-01	240-181023-E-2	Plastic 1 liter - Nitric Acid	<2			
BAC-22-F-20230224-01	240-181023-A-3	Plastic 250ml - unpreserved				
BAC-22-F-20230224-01	240-181023-B-3	Plastic 250ml - unpreserved				
BAC-22-F-20230224-01	240-181023-C-3	Plastic 500ml - with Nitric Acid	<2			
BAC-22-F-20230224-01	240-181023-D-3	Plastic 1 liter - Nitric Acid	<2			
BAC-22-F-20230224-01	240-181023-E-3	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-20230224-01	240-181023-A-4	Plastic 250ml - unpreserved				
EB-001-F-20230224-01	240-181023-B-4	Plastic 250ml - unpreserved				
EB-001-F-20230224-01	240-181023-C-4	Plastic 500ml - with Nitric Acid	<2			
EB-001-F-20230224-01	240-181023-D-4	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-20230224-01	240-181023-E-4	Plastic 1 liter - Nitric Acid	<2			

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-181023-1

Login Number: 181023

List Number: 2

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

List Creation: 03/01/23 07:58 PM

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



 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 3/14/2023 4:06:40 PM

JOB DESCRIPTION

Federal CCR Wells - App III

JOB NUMBER

240-181143-1

Eurofins Canton

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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



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3/14/2023 4:06:40 PM

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Designee for
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

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.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Job ID: 240-181143-1

Laboratory: Eurofins Canton

Narrative

Job Narrative
240-181143-1

Receipt

The samples were received on 3/1/2023 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 0.2°C, 1.1°C, 2.3°C and 13.6°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.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
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- 11
- 12
- 13

Method Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CAN
6020B	Metals (ICP/MS)	SW846	EET CAN
2320B-1997	Alkalinity, Total	SM	EET CAN
300.0	Anions, Ion Chromatography	EPA	EET CAN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CAN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CAN

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 CAN = Eurofins Canton, 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 - App III

Job ID: 240-181143-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-181143-1	BAC-16-F-20230227-01	Water	02/27/23 10:05	03/01/23 08:00
240-181143-2	DUP-002-BAC-16-F-20230227-01	Water	02/27/23 10:05	03/01/23 08:00
240-181143-3	BAC-14-F-20230227-01	Water	02/27/23 11:46	03/01/23 08:00
240-181143-4	BAC-12-F-20230227-01	Water	02/27/23 12:29	03/01/23 08:00
240-181143-5	BAC-10-F-20230227-01	Water	02/27/23 13:22	03/01/23 08:00
240-181143-6	EB-001-F-20230227-01	Water	02/27/23 14:10	03/01/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Client Sample ID: BAC-16-F-20230227-01

Lab Sample ID: 240-181143-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1500		100	57	ug/L	1		6010D	Total Recoverable
Calcium	100000		1000	580	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	2300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	26		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.044	J	0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	180		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	460		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-002-BAC-16-F-20230227-01

Lab Sample ID: 240-181143-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1500		100	57	ug/L	1		6010D	Total Recoverable
Calcium	100000		1000	580	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	2500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	26		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.046	J	0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	470		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-14-F-20230227-01

Lab Sample ID: 240-181143-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2900		100	57	ug/L	1		6010D	Total Recoverable
Calcium	78000		1000	580	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	23000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	77		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	77		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	34		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.051		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	210		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	440		10	7.8	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Client Sample ID: BAC-12-F-20230227-01

Lab Sample ID: 240-181143-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2200		100	57	ug/L	1		6010D	Total Recoverable
Calcium	77000		1000	580	ug/L	1		6020B	Total Recoverable
Magnesium	17000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	3300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	28000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	93		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	93		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	56		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.068		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	180		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	440		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-10-F-20230227-01

Lab Sample ID: 240-181143-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	710		100	57	ug/L	1		6010D	Total Recoverable
Calcium	110000		1000	580	ug/L	1		6020B	Total Recoverable
Magnesium	27000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	2200		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	52000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	45		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.16		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	230		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	640		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-001-F-20230227-01

Lab Sample ID: 240-181143-6

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Client Sample ID: BAC-16-F-20230227-01

Lab Sample ID: 240-181143-1

Date Collected: 02/27/23 10:05

Matrix: Water

Date Received: 03/01/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1500		100	57	ug/L		03/02/23 17:00	03/06/23 14:43	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	100000		1000	580	ug/L		03/02/23 17:00	03/03/23 15:46	1
Magnesium	22000		1000	200	ug/L		03/02/23 17:00	03/03/23 15:46	1
Potassium	2300		1000	220	ug/L		03/02/23 17:00	03/03/23 15:46	1
Sodium	15000		1000	330	ug/L		03/02/23 17:00	03/03/23 15:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	160		5.0	2.6	mg/L			03/06/23 15:35	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	160		5.0	2.6	mg/L			03/06/23 15:35	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:35	1
Chloride (EPA 300.0)	26		1.0	0.13	mg/L			03/08/23 15:21	1
Fluoride (EPA 300.0)	0.044	J	0.050	0.024	mg/L			03/08/23 15:21	1
Sulfate (EPA 300.0)	180		1.0	0.35	mg/L			03/08/23 15:21	1
Total Dissolved Solids (SM 2540C)	460		10	7.8	mg/L			03/06/23 10:27	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Client Sample ID: DUP-002-BAC-16-F-20230227-01

Lab Sample ID: 240-181143-2

Date Collected: 02/27/23 10:05

Matrix: Water

Date Received: 03/01/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1500		100	57	ug/L		03/02/23 17:00	03/06/23 15:00	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	100000		1000	580	ug/L		03/02/23 17:00	03/03/23 16:16	1
Magnesium	22000		1000	200	ug/L		03/02/23 17:00	03/03/23 16:16	1
Potassium	2500		1000	220	ug/L		03/02/23 17:00	03/03/23 16:16	1
Sodium	15000		1000	330	ug/L		03/02/23 17:00	03/03/23 16:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	160		5.0	2.6	mg/L			03/06/23 15:39	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	160		5.0	2.6	mg/L			03/06/23 15:39	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:39	1
Chloride (EPA 300.0)	26		1.0	0.13	mg/L			03/08/23 15:43	1
Fluoride (EPA 300.0)	0.046	J	0.050	0.024	mg/L			03/08/23 15:43	1
Sulfate (EPA 300.0)	190		1.0	0.35	mg/L			03/08/23 15:43	1
Total Dissolved Solids (SM 2540C)	470		10	7.8	mg/L			03/06/23 10:27	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Client Sample ID: BAC-14-F-20230227-01

Lab Sample ID: 240-181143-3

Date Collected: 02/27/23 11:46

Matrix: Water

Date Received: 03/01/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2900		100	57	ug/L		03/02/23 17:00	03/06/23 15:13	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	78000		1000	580	ug/L		03/02/23 17:00	03/03/23 16:19	1
Magnesium	21000		1000	200	ug/L		03/02/23 17:00	03/03/23 16:19	1
Potassium	1900		1000	220	ug/L		03/02/23 17:00	03/03/23 16:19	1
Sodium	23000		1000	330	ug/L		03/02/23 17:00	03/03/23 16:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	77		5.0	2.6	mg/L			03/06/23 15:43	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	77		5.0	2.6	mg/L			03/06/23 15:43	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:43	1
Chloride (EPA 300.0)	34		1.0	0.13	mg/L			03/08/23 16:04	1
Fluoride (EPA 300.0)	0.051		0.050	0.024	mg/L			03/08/23 16:04	1
Sulfate (EPA 300.0)	210		5.0	1.7	mg/L			03/10/23 18:27	5
Total Dissolved Solids (SM 2540C)	440		10	7.8	mg/L			03/06/23 10:27	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Client Sample ID: BAC-12-F-20230227-01

Lab Sample ID: 240-181143-4

Date Collected: 02/27/23 12:29

Matrix: Water

Date Received: 03/01/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2200		100	57	ug/L		03/02/23 17:00	03/06/23 15:17	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	77000		1000	580	ug/L		03/02/23 17:00	03/03/23 16:27	1
Magnesium	17000		1000	200	ug/L		03/02/23 17:00	03/03/23 16:27	1
Potassium	3300		1000	220	ug/L		03/02/23 17:00	03/03/23 16:27	1
Sodium	28000		1000	330	ug/L		03/02/23 17:00	03/03/23 16:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	93		5.0	2.6	mg/L			03/06/23 15:49	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	93		5.0	2.6	mg/L			03/06/23 15:49	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:49	1
Chloride (EPA 300.0)	56		1.0	0.13	mg/L			03/08/23 16:26	1
Fluoride (EPA 300.0)	0.068		0.050	0.024	mg/L			03/08/23 16:26	1
Sulfate (EPA 300.0)	180		1.0	0.35	mg/L			03/08/23 16:26	1
Total Dissolved Solids (SM 2540C)	440		10	7.8	mg/L			03/06/23 10:27	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Client Sample ID: BAC-10-F-20230227-01

Lab Sample ID: 240-181143-5

Date Collected: 02/27/23 13:22

Matrix: Water

Date Received: 03/01/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	710		100	57	ug/L		03/02/23 17:00	03/06/23 15:21	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110000		1000	580	ug/L		03/02/23 17:00	03/03/23 16:30	1
Magnesium	27000		1000	200	ug/L		03/02/23 17:00	03/03/23 16:30	1
Potassium	2200		1000	220	ug/L		03/02/23 17:00	03/03/23 16:30	1
Sodium	52000		1000	330	ug/L		03/02/23 17:00	03/03/23 16:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 15:53	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 15:53	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 15:53	1
Chloride (EPA 300.0)	45		1.0	0.13	mg/L			03/08/23 16:48	1
Fluoride (EPA 300.0)	0.16		0.050	0.024	mg/L			03/08/23 16:48	1
Sulfate (EPA 300.0)	230		5.0	1.7	mg/L			03/08/23 17:09	5
Total Dissolved Solids (SM 2540C)	640		10	7.8	mg/L			03/06/23 10:27	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Client Sample ID: EB-001-F-20230227-01

Lab Sample ID: 240-181143-6

Date Collected: 02/27/23 14:10

Matrix: Water

Date Received: 03/01/23 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		03/02/23 17:00	03/06/23 15:26	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	580	ug/L		03/02/23 17:00	03/03/23 16:32	1
Magnesium	ND		1000	200	ug/L		03/02/23 17:00	03/03/23 16:32	1
Potassium	ND		1000	220	ug/L		03/02/23 17:00	03/03/23 16:32	1
Sodium	ND		1000	330	ug/L		03/02/23 17:00	03/03/23 16:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 16:01	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 16:01	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 16:01	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			03/08/23 17:31	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			03/08/23 17:31	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			03/08/23 17:31	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			03/06/23 10:27	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-564052/1-A
 Matrix: Water
 Analysis Batch: 564447

Client Sample ID: Method Blank
 Prep Type: Total Recoverable
 Prep Batch: 564052

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		03/02/23 17:00	03/06/23 14:31	1

Lab Sample ID: LCS 240-564052/2-A
 Matrix: Water
 Analysis Batch: 564447

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 564052

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1060		ug/L		106	80 - 120

Lab Sample ID: 240-181143-1 MS
 Matrix: Water
 Analysis Batch: 564447

Client Sample ID: BAC-16-F-20230227-01
 Prep Type: Total Recoverable
 Prep Batch: 564052

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1500		1000	2630		ug/L		108	75 - 125

Lab Sample ID: 240-181143-1 MSD
 Matrix: Water
 Analysis Batch: 564447

Client Sample ID: BAC-16-F-20230227-01
 Prep Type: Total Recoverable
 Prep Batch: 564052

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	1500		1000	2680		ug/L		113	75 - 125	2	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-564052/1-A
 Matrix: Water
 Analysis Batch: 564223

Client Sample ID: Method Blank
 Prep Type: Total Recoverable
 Prep Batch: 564052

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	580	ug/L		03/02/23 17:00	03/03/23 15:25	1
Magnesium	ND		1000	200	ug/L		03/02/23 17:00	03/03/23 15:25	1
Potassium	ND		1000	220	ug/L		03/02/23 17:00	03/03/23 15:25	1
Sodium	ND		1000	330	ug/L		03/02/23 17:00	03/03/23 15:25	1

Lab Sample ID: LCS 240-564052/3-A
 Matrix: Water
 Analysis Batch: 564223

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 564052

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	24100		ug/L		96	80 - 120
Magnesium	25000	23800		ug/L		95	80 - 120
Potassium	25000	23800		ug/L		95	80 - 120
Sodium	25000	23700		ug/L		95	80 - 120

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

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

Lab Sample ID: 240-181143-1 MS
Matrix: Water
Analysis Batch: 564223

Client Sample ID: BAC-16-F-20230227-01
Prep Type: Total Recoverable
Prep Batch: 564052

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD
Calcium	100000		25000	129000	4	ug/L		112	80 - 120	
Magnesium	22000		25000	46700		ug/L		98	80 - 120	
Potassium	2300		25000	27100		ug/L		99	80 - 120	
Sodium	15000		25000	39100		ug/L		96	80 - 120	

Lab Sample ID: 240-181143-1 MSD
Matrix: Water
Analysis Batch: 564223

Client Sample ID: BAC-16-F-20230227-01
Prep Type: Total Recoverable
Prep Batch: 564052

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec		RPD
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit
Calcium	100000		25000	127000	4	ug/L		104	80 - 120	2	20
Magnesium	22000		25000	46000		ug/L		95	80 - 120	1	20
Potassium	2300		25000	26800		ug/L		98	80 - 120	1	20
Sodium	15000		25000	38700		ug/L		94	80 - 120	1	20

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-564459/30
Matrix: Water
Analysis Batch: 564459

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			03/06/23 13:08	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 13:08	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 13:08	1

Lab Sample ID: MB 240-564459/56
Matrix: Water
Analysis Batch: 564459

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			03/06/23 14:59	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 14:59	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 14:59	1

Lab Sample ID: LCS 240-564459/55
Matrix: Water
Analysis Batch: 564459

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec	
		Result	Qualifier				Limits	RPD
Total Alkalinity	146	138		mg/L		95	86 - 123	

Lab Sample ID: 240-181143-5 DU
Matrix: Water
Analysis Batch: 564459

Client Sample ID: BAC-10-F-20230227-01
Prep Type: Total/NA

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Total Alkalinity	220		218		mg/L		3	20
Bicarbonate Alkalinity as CaCO3	220		218		mg/L		3	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-564711/3
 Matrix: Water
 Analysis Batch: 564711

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			03/08/23 09:56	1
Fluoride	ND		0.050	0.024	mg/L			03/08/23 09:56	1
Sulfate	ND		1.0	0.35	mg/L			03/08/23 09:56	1

Lab Sample ID: LCS 240-564711/4
 Matrix: Water
 Analysis Batch: 564711

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	2.65		mg/L		106	90 - 110
Sulfate	50.0	50.8		mg/L		102	90 - 110

Lab Sample ID: MB 240-565017/3
 Matrix: Water
 Analysis Batch: 565017

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		1.0	0.35	mg/L			03/10/23 15:01	1

Lab Sample ID: LCS 240-565017/4
 Matrix: Water
 Analysis Batch: 565017

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	50.0	50.8		mg/L		102	90 - 110

Lab Sample ID: 240-181143-3 MS
 Matrix: Water
 Analysis Batch: 565017

Client Sample ID: BAC-14-F-20230227-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	210		250	442		mg/L		91	80 - 120

Lab Sample ID: 240-181143-3 MSD
 Matrix: Water
 Analysis Batch: 565017

Client Sample ID: BAC-14-F-20230227-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	210		250	457		mg/L		98	80 - 120	3	15

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

Lab Sample ID: MB 240-564373/1
 Matrix: Water
 Analysis Batch: 564373

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			03/06/23 10:27	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

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

Lab Sample ID: LCS 240-564373/2
Matrix: Water
Analysis Batch: 564373

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	475	452		mg/L		95	80 - 120

Lab Sample ID: 240-181143-1 DU
Matrix: Water
Analysis Batch: 564373

Client Sample ID: BAC-16-F-20230227-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	460		470		mg/L		2	20



QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Metals

Prep Batch: 564052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181143-1	BAC-16-F-20230227-01	Total Recoverable	Water	3005A	
240-181143-2	DUP-002-BAC-16-F-20230227-01	Total Recoverable	Water	3005A	
240-181143-3	BAC-14-F-20230227-01	Total Recoverable	Water	3005A	
240-181143-4	BAC-12-F-20230227-01	Total Recoverable	Water	3005A	
240-181143-5	BAC-10-F-20230227-01	Total Recoverable	Water	3005A	
240-181143-6	EB-001-F-20230227-01	Total Recoverable	Water	3005A	
MB 240-564052/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-564052/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-564052/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-181143-1 MS	BAC-16-F-20230227-01	Total Recoverable	Water	3005A	
240-181143-1 MS	BAC-16-F-20230227-01	Total Recoverable	Water	3005A	
240-181143-1 MSD	BAC-16-F-20230227-01	Total Recoverable	Water	3005A	
240-181143-1 MSD	BAC-16-F-20230227-01	Total Recoverable	Water	3005A	

Analysis Batch: 564223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181143-1	BAC-16-F-20230227-01	Total Recoverable	Water	6020B	564052
240-181143-2	DUP-002-BAC-16-F-20230227-01	Total Recoverable	Water	6020B	564052
240-181143-3	BAC-14-F-20230227-01	Total Recoverable	Water	6020B	564052
240-181143-4	BAC-12-F-20230227-01	Total Recoverable	Water	6020B	564052
240-181143-5	BAC-10-F-20230227-01	Total Recoverable	Water	6020B	564052
240-181143-6	EB-001-F-20230227-01	Total Recoverable	Water	6020B	564052
MB 240-564052/1-A	Method Blank	Total Recoverable	Water	6020B	564052
LCS 240-564052/3-A	Lab Control Sample	Total Recoverable	Water	6020B	564052
240-181143-1 MS	BAC-16-F-20230227-01	Total Recoverable	Water	6020B	564052
240-181143-1 MSD	BAC-16-F-20230227-01	Total Recoverable	Water	6020B	564052

Analysis Batch: 564447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181143-1	BAC-16-F-20230227-01	Total Recoverable	Water	6010D	564052
240-181143-2	DUP-002-BAC-16-F-20230227-01	Total Recoverable	Water	6010D	564052
240-181143-3	BAC-14-F-20230227-01	Total Recoverable	Water	6010D	564052
240-181143-4	BAC-12-F-20230227-01	Total Recoverable	Water	6010D	564052
240-181143-5	BAC-10-F-20230227-01	Total Recoverable	Water	6010D	564052
240-181143-6	EB-001-F-20230227-01	Total Recoverable	Water	6010D	564052
MB 240-564052/1-A	Method Blank	Total Recoverable	Water	6010D	564052
LCS 240-564052/2-A	Lab Control Sample	Total Recoverable	Water	6010D	564052
240-181143-1 MS	BAC-16-F-20230227-01	Total Recoverable	Water	6010D	564052
240-181143-1 MSD	BAC-16-F-20230227-01	Total Recoverable	Water	6010D	564052

General Chemistry

Analysis Batch: 564373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181143-1	BAC-16-F-20230227-01	Total/NA	Water	SM 2540C	
240-181143-2	DUP-002-BAC-16-F-20230227-01	Total/NA	Water	SM 2540C	
240-181143-3	BAC-14-F-20230227-01	Total/NA	Water	SM 2540C	
240-181143-4	BAC-12-F-20230227-01	Total/NA	Water	SM 2540C	
240-181143-5	BAC-10-F-20230227-01	Total/NA	Water	SM 2540C	
240-181143-6	EB-001-F-20230227-01	Total/NA	Water	SM 2540C	
MB 240-564373/1	Method Blank	Total/NA	Water	SM 2540C	

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

General Chemistry (Continued)

Analysis Batch: 564373 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-564373/2	Lab Control Sample	Total/NA	Water	SM 2540C	
240-181143-1 DU	BAC-16-F-20230227-01	Total/NA	Water	SM 2540C	

Analysis Batch: 564459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181143-1	BAC-16-F-20230227-01	Total/NA	Water	2320B-1997	
240-181143-2	DUP-002-BAC-16-F-20230227-01	Total/NA	Water	2320B-1997	
240-181143-3	BAC-14-F-20230227-01	Total/NA	Water	2320B-1997	
240-181143-4	BAC-12-F-20230227-01	Total/NA	Water	2320B-1997	
240-181143-5	BAC-10-F-20230227-01	Total/NA	Water	2320B-1997	
240-181143-6	EB-001-F-20230227-01	Total/NA	Water	2320B-1997	
MB 240-564459/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-564459/56	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-564459/55	Lab Control Sample	Total/NA	Water	2320B-1997	
240-181143-5 DU	BAC-10-F-20230227-01	Total/NA	Water	2320B-1997	

Analysis Batch: 564711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181143-1	BAC-16-F-20230227-01	Total/NA	Water	300.0	
240-181143-2	DUP-002-BAC-16-F-20230227-01	Total/NA	Water	300.0	
240-181143-3	BAC-14-F-20230227-01	Total/NA	Water	300.0	
240-181143-4	BAC-12-F-20230227-01	Total/NA	Water	300.0	
240-181143-5	BAC-10-F-20230227-01	Total/NA	Water	300.0	
240-181143-5	BAC-10-F-20230227-01	Total/NA	Water	300.0	
240-181143-6	EB-001-F-20230227-01	Total/NA	Water	300.0	
MB 240-564711/3	Method Blank	Total/NA	Water	300.0	
LCS 240-564711/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 565017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181143-3	BAC-14-F-20230227-01	Total/NA	Water	300.0	
MB 240-565017/3	Method Blank	Total/NA	Water	300.0	
LCS 240-565017/4	Lab Control Sample	Total/NA	Water	300.0	
240-181143-3 MS	BAC-14-F-20230227-01	Total/NA	Water	300.0	
240-181143-3 MSD	BAC-14-F-20230227-01	Total/NA	Water	300.0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Client Sample ID: BAC-16-F-20230227-01

Lab Sample ID: 240-181143-1

Date Collected: 02/27/23 10:05

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564052	AJC	EET CAN	03/02/23 17:00
Total Recoverable	Analysis	6010D		1	564447	KLC	EET CAN	03/06/23 14:43
Total Recoverable	Prep	3005A			564052	AJC	EET CAN	03/02/23 17:00
Total Recoverable	Analysis	6020B		1	564223	DSH	EET CAN	03/03/23 15:46
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 15:35
Total/NA	Analysis	300.0		1	564711	JWW	EET CAN	03/08/23 15:21
Total/NA	Analysis	SM 2540C		1	564373	GH	EET CAN	03/06/23 10:27

Client Sample ID: DUP-002-BAC-16-F-20230227-01

Lab Sample ID: 240-181143-2

Date Collected: 02/27/23 10:05

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564052	AJC	EET CAN	03/02/23 17:00
Total Recoverable	Analysis	6010D		1	564447	KLC	EET CAN	03/06/23 15:00
Total Recoverable	Prep	3005A			564052	AJC	EET CAN	03/02/23 17:00
Total Recoverable	Analysis	6020B		1	564223	DSH	EET CAN	03/03/23 16:16
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 15:39
Total/NA	Analysis	300.0		1	564711	JWW	EET CAN	03/08/23 15:43
Total/NA	Analysis	SM 2540C		1	564373	GH	EET CAN	03/06/23 10:27

Client Sample ID: BAC-14-F-20230227-01

Lab Sample ID: 240-181143-3

Date Collected: 02/27/23 11:46

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564052	AJC	EET CAN	03/02/23 17:00
Total Recoverable	Analysis	6010D		1	564447	KLC	EET CAN	03/06/23 15:13
Total Recoverable	Prep	3005A			564052	AJC	EET CAN	03/02/23 17:00
Total Recoverable	Analysis	6020B		1	564223	DSH	EET CAN	03/03/23 16:19
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 15:43
Total/NA	Analysis	300.0		1	564711	JWW	EET CAN	03/08/23 16:04
Total/NA	Analysis	300.0		5	565017	JMB	EET CAN	03/10/23 18:27
Total/NA	Analysis	SM 2540C		1	564373	GH	EET CAN	03/06/23 10:27

Client Sample ID: BAC-12-F-20230227-01

Lab Sample ID: 240-181143-4

Date Collected: 02/27/23 12:29

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564052	AJC	EET CAN	03/02/23 17:00
Total Recoverable	Analysis	6010D		1	564447	KLC	EET CAN	03/06/23 15:17
Total Recoverable	Prep	3005A			564052	AJC	EET CAN	03/02/23 17:00
Total Recoverable	Analysis	6020B		1	564223	DSH	EET CAN	03/03/23 16:27

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1

Client Sample ID: BAC-12-F-20230227-01

Lab Sample ID: 240-181143-4

Date Collected: 02/27/23 12:29

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 15:49
Total/NA	Analysis	300.0		1	564711	JWW	EET CAN	03/08/23 16:26
Total/NA	Analysis	SM 2540C		1	564373	GH	EET CAN	03/06/23 10:27

Client Sample ID: BAC-10-F-20230227-01

Lab Sample ID: 240-181143-5

Date Collected: 02/27/23 13:22

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564052	AJC	EET CAN	03/02/23 17:00
Total Recoverable	Analysis	6010D		1	564447	KLC	EET CAN	03/06/23 15:21
Total Recoverable	Prep	3005A			564052	AJC	EET CAN	03/02/23 17:00
Total Recoverable	Analysis	6020B		1	564223	DSH	EET CAN	03/03/23 16:30
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 15:53
Total/NA	Analysis	300.0		1	564711	JWW	EET CAN	03/08/23 16:48
Total/NA	Analysis	300.0		5	564711	JWW	EET CAN	03/08/23 17:09
Total/NA	Analysis	SM 2540C		1	564373	GH	EET CAN	03/06/23 10:27

Client Sample ID: EB-001-F-20230227-01

Lab Sample ID: 240-181143-6

Date Collected: 02/27/23 14:10

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564052	AJC	EET CAN	03/02/23 17:00
Total Recoverable	Analysis	6010D		1	564447	KLC	EET CAN	03/06/23 15:26
Total Recoverable	Prep	3005A			564052	AJC	EET CAN	03/02/23 17:00
Total Recoverable	Analysis	6020B		1	564223	DSH	EET CAN	03/03/23 16:32
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 16:01
Total/NA	Analysis	300.0		1	564711	JWW	EET CAN	03/08/23 17:31
Total/NA	Analysis	SM 2540C		1	564373	GH	EET CAN	03/06/23 10:27

Laboratory References:

EET CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181143-1


Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23 *
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-27-23 *
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23 *
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-23 *
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-27-23 *
Ohio VAP	State	CL0024	02-27-23 *
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.



Client Information		Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No: 240-93465-34577.1							
Client Contact: Taylor Huffman		E-Mail: roxanne.cisneros@Eurofinset.com	State of Origin:	Page 1 of 1							
Company: Lightstone Generation Gavin Power LLC		Job #:									
Address: 7397 OH-7		Analysis Requested									
City: Cheshire		Due Date Requested:									
State, Zip: OH, 45620		TAT Requested (days):									
Phone: 740-925-3171(Tel)		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No									
Email: taylor.huffman@lightstonegen.com		PO #: 2935505									
Project Name: Federal CCR Wells - App III		WO #: 24019633									
Site: <i>Gavin Plant</i>		SSOW#:									
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=other)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540C Calcd, 300.0, 28D	6010B, 6020	2320B - Alkalinity	Preservation Code:	Special Instructions/Note:
BAC-16-F-20230227-01	2-27-23	1005	G	W	X	X	N	N	N	W	
DIP-07-F-BAC-16-F-20230227-01	2-27-23	1005	G	W	X	X	N	N	N	W	
BAC-14-F-20230227-01	2-27-23	1146	G	W	X	X	N	N	N	W	
BAC-12-F-20230227-01	2-27-23	1229	G	W	X	X	N	N	N	W	
BAC-10-F-20230227-01	2-27-23	1322	G	W	X	X	N	N	N	W	
EB-001-F-20230227-01	2-27-23	1410	G	W	X	X	N	N	N	W	
											
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)											
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months											
Special Instructions/QC Requirements:											
Empty Kit Relinquished by: _____ Date: _____ Time: _____ Method of Shipment: _____											
Relinquished by: _____ Date/Time: 2-28-23 945 Company: <i>LDman</i>											
Relinquished by: _____ Date/Time: 2-28-23 1700 Company: <i>ITA</i>											
Relinquished by: _____ Date/Time: 3-1-23 800 Company: <i>BK5TAC</i>											
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.: _____											
Cooler Temperature(s) °C and Other Remarks:											

Eurofins - Canton Sample Receipt Form/Narrative
Barberton Facility

Login # : _____

Client Lightstone Site Name _____
Cooler Received on 3-1-23 Opened on 3-1-23
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off Eurofins Courier Other

Cooler unpacked by:

Rachelle Haidet

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 # IR-13 (CF -0.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
IR GUN # IR-16 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
IR GUN # IR-17 (CF -0.3 °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

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

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# 3-1-23 HC203864
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: _____

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-16-F-20230227-01	240-181143-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-002-BAC-16-F-20230227-01	240-181143-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-14-F-20230227-01	240-181143-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-12-F-20230227-01	240-181143-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-10-F-20230227-01	240-181143-C-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230227-01	240-181143-C-6	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____

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ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 4/3/2023 5:17:53 PM

JOB DESCRIPTION

Federal CCR Wells - App IV

JOB NUMBER

240-181146-1

Eurofins Canton

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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
4/3/2023 5:17:53 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Job ID: 240-181146-1

Laboratory: Eurofins Canton

Narrative

Job Narrative 240-181146-1

Comments

No additional comments.

Receipt

The samples were received on 3/1/2023 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 0.2° C, 1.1° C, 2.3° C and 13.6° C.

RAD

Methods 9315: Radium-226 batch 602806: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-16-F-20230227-01 (240-181146-1), DUP-002-BAC-16-F-20230227-01 (240-181146-2), (LCS 160-602806/2-A), (MB 160-602806/1-A)

Methods 9315: Prep batch 160-603170: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-14-F-20230227-01 (240-181146-3), BAC-12-F-20230227-01 (240-181146-4), BAC-10-F-20230227-01 (240-181146-5), (LCS 160-603170/2-A), (LCSD 160-603170/3-A) and (MB 160-603170/1-A)

Methods 9315: Prep batch 160-602810: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. EB-001-F-20230227-01 (240-181146-6), (LCS 160-602810/2-A), (LCSD 160-602810/3-A) and (MB 160-602810/1-A)

Methods 9320: Radium-228 batch 602808: The detection goal was not met for the following sample(s). Samples were prepped at a reduced volume due to the presence of matrix interferences: BAC-16-F-20230227-01 (240-181146-1) and DUP-002-BAC-16-F-20230227-01 (240-181146-2). Analytical results are reported with the detection limit achieved.

Methods 9320: Radium-228 batch 602808: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-16-F-20230227-01 (240-181146-1), DUP-002-BAC-16-F-20230227-01 (240-181146-2), (LCS 160-602808/2-A), (MB 160-602808/1-A)

Methods 9320: Radium-228 batch 602812: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. EB-001-F-20230227-01 (240-181146-6), (LCS 160-602812/2-A), (LCSD 160-602812/3-A) and (MB 160-602812/1-A)

Methods 9320: Radium-228 batch 603171: The LCS recovered at (127%). 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 (62-148%) per method requirements. The LCS passes, no further action is required. (LCSD 160-603171/3-A)

Methods 9320: Radium-228 batch 603171: The detection goal was not met for the following sample(s). Samples were prepped at a reduced volume due to the presence of matrix interferences: BAC-14-F-20230227-01 (240-181146-3), BAC-12-F-20230227-01 (240-181146-4) and BAC-10-F-20230227-01 (240-181146-5). Analytical results are reported with the detection limit achieved.

Methods 9320: Radium-228 batch 603171: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-14-F-20230227-01 (240-181146-3), BAC-12-F-20230227-01 (240-181146-4), BAC-10-F-20230227-01 (240-181146-5), (LCS 160-603171/2-A), (LCSD 160-603171/3-A) and (MB 160-603171/1-A)

Method PrecSep_0: Radium-228 Prep Batch 160-602812: The following samples were prepared at a reduced aliquot due to Matrix:

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Job ID: 240-181146-1 (Continued)

Laboratory: Eurofins Canton (Continued)

BAC-12-F-20230227-01 (240-181146-4) and BAC-10-F-20230227-01 (240-181146-5). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep_0: Radium-228 Prep Batch 160-602812: Insufficient sample volume was available to perform a sample duplicate for the following samples: EB-001-F-20230227-01 (240-181146-6). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep_0: Radium 228 Prep Batch 160-603171: The following samples were prepared at a reduced aliquot due to Matrix: BAC-14-F-20230227-01 (240-181146-3), BAC-12-F-20230227-01 (240-181146-4) and BAC-10-F-20230227-01 (240-181146-5). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep-21: Radium-226 Prep Batch 160-602810: The following samples were prepared at a reduced aliquot due to Matrix: BAC-12-F-20230227-01 (240-181146-4) and BAC-10-F-20230227-01 (240-181146-5). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep-21: Radium-226 Prep Batch 160-602810: Insufficient sample volume was available to perform a sample duplicate for the following samples: EB-001-F-20230227-01 (240-181146-6). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Radium 226 Prep Batch 160-603170: The following samples were prepared at a reduced aliquot due to Matrix: BAC-14-F-20230227-01 (240-181146-3), BAC-12-F-20230227-01 (240-181146-4) and BAC-10-F-20230227-01 (240-181146-5). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

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

Metals

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

General Chemistry

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CAN
7470A	Mercury (CVAA)	SW846	EET CAN
2320B-1997	Alkalinity, Total	SM	EET CAN
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CAN
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 CAN
7470A	Preparation, Mercury	SW846	EET CAN
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 CAN = Eurofins Canton, 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 - App IV

Job ID: 240-181146-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-181146-1	BAC-16-F-20230227-01	Water	02/27/23 10:05	03/01/23 08:00
240-181146-2	DUP-002-BAC-16-F-20230227-01	Water	02/27/23 10:05	03/01/23 08:00
240-181146-3	BAC-14-F-20230227-01	Water	02/27/23 11:46	03/01/23 08:00
240-181146-4	BAC-12-F-20230227-01	Water	02/27/23 12:29	03/01/23 08:00
240-181146-5	BAC-10-F-20230227-01	Water	02/27/23 13:22	03/01/23 08:00
240-181146-6	EB-001-F-20230227-01	Water	02/27/23 14:10	03/01/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: BAC-16-F-20230227-01

Lab Sample ID: 240-181146-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.5	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	82		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	6.0		5.0	2.5	ug/L	1		6020B	Total Recoverable
Cobalt	4.8		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	3.7		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	8.8		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	23000		1000	200	ug/L	1		6020B	Total Recoverable
Molybdenum	1.3	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.071		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: DUP-002-BAC-16-F-20230227-01

Lab Sample ID: 240-181146-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.5	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	84		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	6.0		5.0	2.5	ug/L	1		6020B	Total Recoverable
Cobalt	4.6		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	3.6		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	8.1		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	200	ug/L	1		6020B	Total Recoverable
Molybdenum	1.2	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	150		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	150		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.066		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-14-F-20230227-01

Lab Sample ID: 240-181146-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	4.5	J	5.0	0.75	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: BAC-14-F-20230227-01 (Continued)

Lab Sample ID: 240-181146-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	110		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	2.5	J	5.0	2.5	ug/L	1		6020B	Total Recoverable
Cobalt	2.3		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	2.0		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	7.0	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	200	ug/L	1		6020B	Total Recoverable
Molybdenum	1.1	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	1800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	23000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	64		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	64		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.073		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-12-F-20230227-01

Lab Sample ID: 240-181146-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	15		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	200		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.21	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Chromium	7.4		5.0	2.5	ug/L	1		6020B	Total Recoverable
Cobalt	20		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	14		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	11		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	17000		1000	200	ug/L	1		6020B	Total Recoverable
Molybdenum	2.1	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	3300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	28000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	92		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	92		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.095		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-10-F-20230227-01

Lab Sample ID: 240-181146-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.0	J	5.0	0.75	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: BAC-10-F-20230227-01 (Continued)

Lab Sample ID: 240-181146-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	57		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.59	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Chromium	3.3	J	5.0	2.5	ug/L	1		6020B	Total Recoverable
Cobalt	3.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	2.4		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	3.9	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	28000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	2300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	54000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.14		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: EB-001-F-20230227-01

Lab Sample ID: 240-181146-6

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: BAC-16-F-20230227-01

Lab Sample ID: 240-181146-1

Date Collected: 02/27/23 10:05

Matrix: Water

Date Received: 03/01/23 08:00

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		03/02/23 14:00	03/03/23 17:46	1
Arsenic	3.5	J	5.0	0.75	ug/L		03/02/23 14:00	03/03/23 17:46	1
Barium	82		5.0	2.2	ug/L		03/02/23 14:00	03/03/23 17:46	1
Beryllium	ND		1.0	0.62	ug/L		03/02/23 14:00	03/03/23 17:46	1
Cadmium	ND		1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:46	1
Chromium	6.0		5.0	2.5	ug/L		03/02/23 14:00	03/03/23 17:46	1
Cobalt	4.8		1.0	0.19	ug/L		03/02/23 14:00	03/03/23 17:46	1
Lead	3.7		1.0	0.45	ug/L		03/02/23 14:00	03/03/23 17:46	1
Lithium	8.8		8.0	1.7	ug/L		03/02/23 14:00	03/03/23 17:46	1
Magnesium	23000		1000	200	ug/L		03/02/23 14:00	03/03/23 17:46	1
Molybdenum	1.3	J	5.0	1.1	ug/L		03/02/23 14:00	03/03/23 17:46	1
Potassium	2400		1000	220	ug/L		03/02/23 14:00	03/03/23 17:46	1
Selenium	ND		5.0	0.89	ug/L		03/02/23 14:00	03/03/23 17:46	1
Sodium	15000		1000	330	ug/L		03/02/23 14:00	03/03/23 17:46	1
Thallium	ND		1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:46	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		03/02/23 14:00	03/03/23 14:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	160		5.0	2.6	mg/L			03/06/23 16:05	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	160		5.0	2.6	mg/L			03/06/23 16:05	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 16:05	1
Fluoride (EPA 300.0-1993 R2.1)	0.071		0.050	0.024	mg/L			03/27/23 16:08	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.123	U	0.156	0.156	1.00	0.257	pCi/L	03/08/23 09:38	03/30/23 07:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	60.7		30 - 110					03/08/23 09:38	03/30/23 07:26	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	1.68	G	1.01	1.02	1.00	1.45	pCi/L	03/08/23 10:00	03/20/23 12:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	60.7		30 - 110					03/08/23 10:00	03/20/23 12:02	1
Y Carrier	83.7		30 - 110					03/08/23 10:00	03/20/23 12:02	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: BAC-16-F-20230227-01

Lab Sample ID: 240-181146-1

Date Collected: 02/27/23 10:05

Matrix: Water

Date Received: 03/01/23 08:00

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	1.80		1.02	1.03	5.00	1.45	pCi/L		03/30/23 15:45	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: DUP-002-BAC-16-F-20230227-01

Lab Sample ID: 240-181146-2

Date Collected: 02/27/23 10:05

Matrix: Water

Date Received: 03/01/23 08:00

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		03/02/23 14:00	03/03/23 17:48	1
Arsenic	3.5	J	5.0	0.75	ug/L		03/02/23 14:00	03/03/23 17:48	1
Barium	84		5.0	2.2	ug/L		03/02/23 14:00	03/03/23 17:48	1
Beryllium	ND		1.0	0.62	ug/L		03/02/23 14:00	03/03/23 17:48	1
Cadmium	ND		1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:48	1
Chromium	6.0		5.0	2.5	ug/L		03/02/23 14:00	03/03/23 17:48	1
Cobalt	4.6		1.0	0.19	ug/L		03/02/23 14:00	03/03/23 17:48	1
Lead	3.6		1.0	0.45	ug/L		03/02/23 14:00	03/03/23 17:48	1
Lithium	8.1		8.0	1.7	ug/L		03/02/23 14:00	03/03/23 17:48	1
Magnesium	22000		1000	200	ug/L		03/02/23 14:00	03/03/23 17:48	1
Molybdenum	1.2	J	5.0	1.1	ug/L		03/02/23 14:00	03/03/23 17:48	1
Potassium	2300		1000	220	ug/L		03/02/23 14:00	03/03/23 17:48	1
Selenium	ND		5.0	0.89	ug/L		03/02/23 14:00	03/03/23 17:48	1
Sodium	15000		1000	330	ug/L		03/02/23 14:00	03/03/23 17:48	1
Thallium	ND		1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:48	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		03/02/23 14:00	03/03/23 14:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	150		5.0	2.6	mg/L			03/06/23 16:09	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	150		5.0	2.6	mg/L			03/06/23 16:09	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 16:09	1
Fluoride (EPA 300.0-1993 R2.1)	0.066		0.050	0.024	mg/L			03/27/23 17:08	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.213	U	0.178	0.179	1.00	0.267	pCi/L	03/08/23 09:38	03/30/23 07:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.1		30 - 110					03/08/23 09:38	03/30/23 07:26	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	1.69	G	0.848	0.862	1.00	1.16	pCi/L	03/08/23 10:00	03/20/23 12:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.1		30 - 110					03/08/23 10:00	03/20/23 12:02	1
Y Carrier	85.2		30 - 110					03/08/23 10:00	03/20/23 12:02	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: DUP-002-BAC-16-F-20230227-01

Lab Sample ID: 240-181146-2

Date Collected: 02/27/23 10:05

Matrix: Water

Date Received: 03/01/23 08:00

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	1.91		0.866	0.880	5.00	1.16	pCi/L		03/30/23 15:45	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: BAC-14-F-20230227-01

Lab Sample ID: 240-181146-3

Date Collected: 02/27/23 11:46

Matrix: Water

Date Received: 03/01/23 08:00

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		03/02/23 14:00	03/03/23 17:51	1
Arsenic	4.5	J	5.0	0.75	ug/L		03/02/23 14:00	03/03/23 17:51	1
Barium	110		5.0	2.2	ug/L		03/02/23 14:00	03/03/23 17:51	1
Beryllium	ND		1.0	0.62	ug/L		03/02/23 14:00	03/03/23 17:51	1
Cadmium	ND		1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:51	1
Chromium	2.5	J	5.0	2.5	ug/L		03/02/23 14:00	03/03/23 17:51	1
Cobalt	2.3		1.0	0.19	ug/L		03/02/23 14:00	03/03/23 17:51	1
Lead	2.0		1.0	0.45	ug/L		03/02/23 14:00	03/03/23 17:51	1
Lithium	7.0	J	8.0	1.7	ug/L		03/02/23 14:00	03/03/23 17:51	1
Magnesium	21000		1000	200	ug/L		03/02/23 14:00	03/03/23 17:51	1
Molybdenum	1.1	J	5.0	1.1	ug/L		03/02/23 14:00	03/03/23 17:51	1
Potassium	1800		1000	220	ug/L		03/02/23 14:00	03/03/23 17:51	1
Selenium	ND		5.0	0.89	ug/L		03/02/23 14:00	03/03/23 17:51	1
Sodium	23000		1000	330	ug/L		03/02/23 14:00	03/03/23 17:51	1
Thallium	ND		1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:51	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		03/02/23 14:00	03/03/23 14:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	64		5.0	2.6	mg/L			03/06/23 16:13	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	64		5.0	2.6	mg/L			03/06/23 16:13	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 16:13	1
Fluoride (EPA 300.0-1993 R2.1)	0.073		0.050	0.024	mg/L			03/27/23 17:28	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.121	U	0.231	0.232	1.00	0.414	pCi/L	03/10/23 09:30	04/03/23 10:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		30 - 110					03/10/23 09:30	04/03/23 10:02	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	1.48	U G	1.34	1.34	1.00	2.11	pCi/L	03/10/23 09:56	03/24/23 12:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		30 - 110					03/10/23 09:56	03/24/23 12:16	1
Y Carrier	82.6		30 - 110					03/10/23 09:56	03/24/23 12:16	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: BAC-14-F-20230227-01

Lab Sample ID: 240-181146-3

Date Collected: 02/27/23 11:46

Matrix: Water

Date Received: 03/01/23 08:00

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	1.61	U	1.36	1.36	5.00	2.11	pCi/L		04/03/23 15:19	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: BAC-12-F-20230227-01

Lab Sample ID: 240-181146-4

Date Collected: 02/27/23 12:29

Matrix: Water

Date Received: 03/01/23 08:00

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		03/02/23 14:00	03/03/23 17:53	1
Arsenic	15		5.0	0.75	ug/L		03/02/23 14:00	03/03/23 17:53	1
Barium	200		5.0	2.2	ug/L		03/02/23 14:00	03/03/23 17:53	1
Beryllium	ND		1.0	0.62	ug/L		03/02/23 14:00	03/03/23 17:53	1
Cadmium	0.21	J	1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:53	1
Chromium	7.4		5.0	2.5	ug/L		03/02/23 14:00	03/03/23 17:53	1
Cobalt	20		1.0	0.19	ug/L		03/02/23 14:00	03/03/23 17:53	1
Lead	14		1.0	0.45	ug/L		03/02/23 14:00	03/03/23 17:53	1
Lithium	11		8.0	1.7	ug/L		03/02/23 14:00	03/03/23 17:53	1
Magnesium	17000		1000	200	ug/L		03/02/23 14:00	03/03/23 17:53	1
Molybdenum	2.1	J	5.0	1.1	ug/L		03/02/23 14:00	03/03/23 17:53	1
Potassium	3300		1000	220	ug/L		03/02/23 14:00	03/03/23 17:53	1
Selenium	ND		5.0	0.89	ug/L		03/02/23 14:00	03/03/23 17:53	1
Sodium	28000		1000	330	ug/L		03/02/23 14:00	03/03/23 17:53	1
Thallium	ND		1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:53	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		03/02/23 14:00	03/03/23 14:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	92		5.0	2.6	mg/L			03/06/23 16:17	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	92		5.0	2.6	mg/L			03/06/23 16:17	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 16:17	1
Fluoride (EPA 300.0-1993 R2.1)	0.095		0.050	0.024	mg/L			03/27/23 17:48	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	0.700		0.405	0.410	1.00	0.476	pCi/L	03/10/23 09:30	04/03/23 10:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	58.8		30 - 110					03/10/23 09:30	04/03/23 10:03	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	2.69	U G	1.95	1.97	1.00	2.93	pCi/L	03/10/23 09:56	03/24/23 12:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	58.8		30 - 110					03/10/23 09:56	03/24/23 12:17	1
Y Carrier	85.2		30 - 110					03/10/23 09:56	03/24/23 12:17	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: BAC-12-F-20230227-01

Lab Sample ID: 240-181146-4

Date Collected: 02/27/23 12:29

Matrix: Water

Date Received: 03/01/23 08:00

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	3.39		1.99	2.01	5.00	2.93	pCi/L		04/03/23 15:19	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: BAC-10-F-20230227-01

Lab Sample ID: 240-181146-5

Date Collected: 02/27/23 13:22

Matrix: Water

Date Received: 03/01/23 08:00

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		03/02/23 14:00	03/03/23 17:56	1
Arsenic	3.0	J	5.0	0.75	ug/L		03/02/23 14:00	03/03/23 17:56	1
Barium	57		5.0	2.2	ug/L		03/02/23 14:00	03/03/23 17:56	1
Beryllium	ND		1.0	0.62	ug/L		03/02/23 14:00	03/03/23 17:56	1
Cadmium	0.59	J	1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:56	1
Chromium	3.3	J	5.0	2.5	ug/L		03/02/23 14:00	03/03/23 17:56	1
Cobalt	3.1		1.0	0.19	ug/L		03/02/23 14:00	03/03/23 17:56	1
Lead	2.4		1.0	0.45	ug/L		03/02/23 14:00	03/03/23 17:56	1
Lithium	3.9	J	8.0	1.7	ug/L		03/02/23 14:00	03/03/23 17:56	1
Magnesium	28000		1000	200	ug/L		03/02/23 14:00	03/03/23 17:56	1
Molybdenum	ND		5.0	1.1	ug/L		03/02/23 14:00	03/03/23 17:56	1
Potassium	2300		1000	220	ug/L		03/02/23 14:00	03/03/23 17:56	1
Selenium	ND		5.0	0.89	ug/L		03/02/23 14:00	03/03/23 17:56	1
Sodium	54000		1000	330	ug/L		03/02/23 14:00	03/03/23 17:56	1
Thallium	ND		1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:56	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		03/02/23 14:00	03/03/23 14:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 16:21	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 16:21	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 16:21	1
Fluoride (EPA 300.0-1993 R2.1)	0.14		0.050	0.024	mg/L			03/27/23 18:08	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.155	U	0.263	0.264	1.00	0.460	pCi/L	03/10/23 09:30	04/03/23 09:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.9		30 - 110					03/10/23 09:30	04/03/23 09:55	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	1.78	U G	1.39	1.40	1.00	2.13	pCi/L	03/10/23 09:56	03/24/23 12:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.9		30 - 110					03/10/23 09:56	03/24/23 12:17	1
Y Carrier	81.5		30 - 110					03/10/23 09:56	03/24/23 12:17	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: BAC-10-F-20230227-01

Lab Sample ID: 240-181146-5

Date Collected: 02/27/23 13:22

Matrix: Water

Date Received: 03/01/23 08:00

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	1.93	U	1.41	1.42	5.00	2.13	pCi/L		04/03/23 15:19	1

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- 2
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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: EB-001-F-20230227-01

Lab Sample ID: 240-181146-6

Date Collected: 02/27/23 14:10

Matrix: Water

Date Received: 03/01/23 08:00

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		03/02/23 14:00	03/03/23 17:59	1
Arsenic	ND		5.0	0.75	ug/L		03/02/23 14:00	03/03/23 17:59	1
Barium	ND		5.0	2.2	ug/L		03/02/23 14:00	03/03/23 17:59	1
Beryllium	ND		1.0	0.62	ug/L		03/02/23 14:00	03/03/23 17:59	1
Cadmium	ND		1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:59	1
Chromium	ND		5.0	2.5	ug/L		03/02/23 14:00	03/03/23 17:59	1
Cobalt	ND		1.0	0.19	ug/L		03/02/23 14:00	03/03/23 17:59	1
Lead	ND		1.0	0.45	ug/L		03/02/23 14:00	03/03/23 17:59	1
Lithium	ND		8.0	1.7	ug/L		03/02/23 14:00	03/03/23 17:59	1
Magnesium	ND		1000	200	ug/L		03/02/23 14:00	03/03/23 17:59	1
Molybdenum	ND		5.0	1.1	ug/L		03/02/23 14:00	03/03/23 17:59	1
Potassium	ND		1000	220	ug/L		03/02/23 14:00	03/03/23 17:59	1
Selenium	ND		5.0	0.89	ug/L		03/02/23 14:00	03/03/23 17:59	1
Sodium	ND		1000	330	ug/L		03/02/23 14:00	03/03/23 17:59	1
Thallium	ND		1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:59	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		03/02/23 14:00	03/03/23 14:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 16:25	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 16:25	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 16:25	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			03/27/23 19:29	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0397	U	0.0717	0.0718	1.00	0.126	pCi/L	03/08/23 10:10	03/30/23 21:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.7		30 - 110					03/08/23 10:10	03/30/23 21:19	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	-0.124	U	0.257	0.257	1.00	0.528	pCi/L	03/08/23 10:36	03/21/23 12:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.7		30 - 110					03/08/23 10:36	03/21/23 12:52	1
Y Carrier	88.6		30 - 110					03/08/23 10:36	03/21/23 12:52	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: EB-001-F-20230227-01

Lab Sample ID: 240-181146-6

Date Collected: 02/27/23 14:10

Matrix: Water

Date Received: 03/01/23 08:00

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	-0.0841	U	0.267	0.267	5.00	0.528	pCi/L		04/03/23 15:19	1

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Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
240-181146-1	BAC-16-F-20230227-01	60.7	
240-181146-2	DUP-002-BAC-16-F-20230227-01	75.1	
240-181146-3	BAC-14-F-20230227-01	91.2	
240-181146-4	BAC-12-F-20230227-01	58.8	
240-181146-5	BAC-10-F-20230227-01	85.9	
240-181146-6	EB-001-F-20230227-01	79.7	
LCS 160-602806/2-A	Lab Control Sample	93.8	
LCS 160-602810/2-A	Lab Control Sample	89.3	
LCS 160-603170/2-A	Lab Control Sample	95.2	
LCSD 160-602810/3-A	Lab Control Sample Dup	88.7	
LCSD 160-603170/3-A	Lab Control Sample Dup	88.7	
MB 160-602806/1-A	Method Blank	89.5	
MB 160-602810/1-A	Method Blank	88.1	
MB 160-603170/1-A	Method Blank	90.1	

Tracer/Carrier Legend
 Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-181146-1	BAC-16-F-20230227-01	60.7	83.7
240-181146-2	DUP-002-BAC-16-F-20230227-01	75.1	85.2
240-181146-3	BAC-14-F-20230227-01	91.2	82.6
240-181146-4	BAC-12-F-20230227-01	58.8	85.2
240-181146-5	BAC-10-F-20230227-01	85.9	81.5
240-181146-6	EB-001-F-20230227-01	79.7	88.6
LCS 160-602808/2-A	Lab Control Sample	93.8	81.1
LCS 160-602812/2-A	Lab Control Sample	89.3	83.4
LCS 160-603171/2-A	Lab Control Sample	95.2	81.1
LCSD 160-602812/3-A	Lab Control Sample Dup	88.7	83.7
LCSD 160-603171/3-A	Lab Control Sample Dup	88.7	80.7
MB 160-602808/1-A	Method Blank	89.5	81.9
MB 160-602812/1-A	Method Blank	88.1	84.9
MB 160-603171/1-A	Method Blank	90.1	80.7

Tracer/Carrier Legend
 Ba = Ba Carrier
 Y = Y Carrier

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-564030/1-A
Matrix: Water
Analysis Batch: 564223

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 564030

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/02/23 14:00	03/03/23 17:09	1
Arsenic	ND		5.0	0.75	ug/L		03/02/23 14:00	03/03/23 17:09	1
Barium	ND		5.0	2.2	ug/L		03/02/23 14:00	03/03/23 17:09	1
Beryllium	ND		1.0	0.62	ug/L		03/02/23 14:00	03/03/23 17:09	1
Cadmium	ND		1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:09	1
Chromium	ND		5.0	2.5	ug/L		03/02/23 14:00	03/03/23 17:09	1
Cobalt	ND		1.0	0.19	ug/L		03/02/23 14:00	03/03/23 17:09	1
Lead	ND		1.0	0.45	ug/L		03/02/23 14:00	03/03/23 17:09	1
Lithium	ND		8.0	1.7	ug/L		03/02/23 14:00	03/03/23 17:09	1
Magnesium	ND		1000	200	ug/L		03/02/23 14:00	03/03/23 17:09	1
Molybdenum	ND		5.0	1.1	ug/L		03/02/23 14:00	03/03/23 17:09	1
Potassium	ND		1000	220	ug/L		03/02/23 14:00	03/03/23 17:09	1
Selenium	ND		5.0	0.89	ug/L		03/02/23 14:00	03/03/23 17:09	1
Sodium	ND		1000	330	ug/L		03/02/23 14:00	03/03/23 17:09	1
Thallium	ND		1.0	0.20	ug/L		03/02/23 14:00	03/03/23 17:09	1

Lab Sample ID: LCS 240-564030/2-A
Matrix: Water
Analysis Batch: 564223

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 564030

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	104		ug/L		104	80 - 120
Arsenic	1000	926		ug/L		93	80 - 120
Barium	1000	917		ug/L		92	80 - 120
Beryllium	500	475		ug/L		95	80 - 120
Cadmium	500	460		ug/L		92	80 - 120
Chromium	500	474		ug/L		95	80 - 120
Cobalt	500	465		ug/L		93	80 - 120
Lead	500	484		ug/L		97	80 - 120
Lithium	500	489		ug/L		98	80 - 120
Magnesium	25000	23800		ug/L		95	80 - 120
Molybdenum	500	461		ug/L		92	80 - 120
Potassium	25000	24100		ug/L		96	80 - 120
Selenium	1000	931		ug/L		93	80 - 120
Sodium	25000	23700		ug/L		95	80 - 120
Thallium	1000	958		ug/L		96	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-564032/1-A
Matrix: Water
Analysis Batch: 564191

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 564032

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/02/23 14:00	03/03/23 14:11	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-564032/2-A
 Matrix: Water
 Analysis Batch: 564191

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 564032

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.06		ug/L		101	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-564459/30
 Matrix: Water
 Analysis Batch: 564459

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			03/06/23 13:08	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 13:08	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 13:08	1

Lab Sample ID: MB 240-564459/56
 Matrix: Water
 Analysis Batch: 564459

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			03/06/23 14:59	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 14:59	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 14:59	1

Lab Sample ID: LCS 240-564459/55
 Matrix: Water
 Analysis Batch: 564459

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	138		mg/L		95	86 - 123

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-566919/3
 Matrix: Water
 Analysis Batch: 566919

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			03/27/23 14:30	1

Lab Sample ID: LCS 240-566919/4
 Matrix: Water
 Analysis Batch: 566919

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.56		mg/L		103	90 - 110

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-181146-1 MS
 Matrix: Water
 Analysis Batch: 566919

Client Sample ID: BAC-16-F-20230227-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.071		2.50	2.82		mg/L		110	80 - 120

Lab Sample ID: 240-181146-1 MSD
 Matrix: Water
 Analysis Batch: 566919

Client Sample ID: BAC-16-F-20230227-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.071		2.50	2.85		mg/L		111	80 - 120	1	15

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-602806/1-A
 Matrix: Water
 Analysis Batch: 605623

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 602806

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.03881	U	0.0511	0.0513	1.00	0.0853	pCi/L	03/08/23 09:38	03/30/23 07:20	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.5		30 - 110					03/08/23 09:38	03/30/23 07:20	1

Lab Sample ID: LCS 160-602806/2-A
 Matrix: Water
 Analysis Batch: 605623

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 602806

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	11.3	11.79		1.21	1.00	0.0733	pCi/L	104	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	93.8		30 - 110						

Lab Sample ID: MB 160-602810/1-A
 Matrix: Water
 Analysis Batch: 605624

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 602810

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.02387	U	0.0631	0.0632	1.00	0.136	pCi/L	03/08/23 10:10	03/30/23 21:14	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.1		30 - 110					03/08/23 10:10	03/30/23 21:14	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: LCS 160-602810/2-A
Matrix: Water
Analysis Batch: 605624

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602810

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	
Radium-226	11.3	13.03		1.33	1.00	0.101	pCi/L	115	75 - 125	
Carrier	%Yield	LCS Qualifier	Limits							
Ba Carrier	89.3		30 - 110							

Lab Sample ID: LCSD 160-602810/3-A
Matrix: Water
Analysis Batch: 605622

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 602810

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-226	11.3	12.77		1.29	1.00	0.107	pCi/L	113	75 - 125	0.1	1
Carrier	%Yield	LCSD Qualifier	Limits								
Ba Carrier	88.7		30 - 110								

Lab Sample ID: MB 160-603170/1-A
Matrix: Water
Analysis Batch: 605833

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 603170

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.01976	U	0.0606	0.0606	1.00	0.113	pCi/L	03/10/23 09:30	04/03/23 10:00	1
Carrier	%Yield	MB Qualifier	Limits							
Ba Carrier	90.1		30 - 110							
								Prepared	Analyzed	Dil Fac
								03/10/23 09:30	04/03/23 10:00	1

Lab Sample ID: LCS 160-603170/2-A
Matrix: Water
Analysis Batch: 605833

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 603170

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	11.3	11.43		1.17	1.00	0.0835	pCi/L	101	75 - 125
Carrier	%Yield	LCS Qualifier	Limits						
Ba Carrier	95.2		30 - 110						

Lab Sample ID: LCSD 160-603170/3-A
Matrix: Water
Analysis Batch: 605833

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 603170

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-226	11.3	11.45		1.18	1.00	0.0895	pCi/L	101	75 - 125	0.01	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: LCSD 160-603170/3-A
Matrix: Water
Analysis Batch: 605833

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 603170

Carrier	LCSD		Limits
	%Yield	Qualifier	
Ba Carrier	88.7		30 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-602808/1-A
Matrix: Water
Analysis Batch: 604349

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602808

Analyte	MB		Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-228	0.1947	U	0.271	0.272	1.00	0.457	pCi/L	03/08/23 10:00	03/20/23 11:54	1
Carrier	MB		Limits			Prepared	Analyzed	Dil Fac		
	%Yield	Qualifier								
Ba Carrier	89.5		30 - 110			03/08/23 10:00	03/20/23 11:54	1		
Y Carrier	81.9		30 - 110			03/08/23 10:00	03/20/23 11:54	1		

Lab Sample ID: LCS 160-602808/2-A
Matrix: Water
Analysis Batch: 604349

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602808

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Carrier	LCS		Limits			Prepared	Analyzed	Dil Fac	
	%Yield	Qualifier							
Ba Carrier	93.8		30 - 110						
Y Carrier	81.1		30 - 110						

Lab Sample ID: MB 160-602812/1-A
Matrix: Water
Analysis Batch: 604464

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602812

Analyte	MB		Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-228	0.4307	U	0.338	0.340	1.00	0.520	pCi/L	03/08/23 10:36	03/21/23 12:52	1
Carrier	MB		Limits			Prepared	Analyzed	Dil Fac		
	%Yield	Qualifier								
Ba Carrier	88.1		30 - 110			03/08/23 10:36	03/21/23 12:52	1		
Y Carrier	84.9		30 - 110			03/08/23 10:36	03/21/23 12:52	1		

Lab Sample ID: LCS 160-602812/2-A
Matrix: Water
Analysis Batch: 604464

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602812

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

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

Lab Sample ID: LCS 160-602812/2-A
Matrix: Water
Analysis Batch: 604464

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602812

	LCS	LCS	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	89.3		30 - 110
Y Carrier	83.4		30 - 110

Lab Sample ID: LCSD 160-602812/3-A
Matrix: Water
Analysis Batch: 604464

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 602812

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec		RER	Limit
									Limits	RER		
Radium-228	8.10	9.896		1.34	1.00	0.564	pCi/L	122	75 - 125	0.04		1

	LCSD	LCSD	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	88.7		30 - 110
Y Carrier	83.7		30 - 110

Lab Sample ID: MB 160-603171/1-A
Matrix: Water
Analysis Batch: 604973

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 603171

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared		Analyzed		Dil Fac
								Prepared	Analyzed	Prepared	Analyzed	
Radium-228	0.6538		0.361	0.366	1.00	0.504	pCi/L	03/10/23 09:56	03/24/23 12:15	03/24/23 12:15		1

	MB	MB	Limits	Prepared	Analyzed	Dil Fac
Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	90.1		30 - 110	03/10/23 09:56	03/24/23 12:15	1
Y Carrier	80.7		30 - 110	03/10/23 09:56	03/24/23 12:15	1

Lab Sample ID: LCS 160-603171/2-A
Matrix: Water
Analysis Batch: 604973

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 603171

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec	
									Limits	RER
Radium-228	8.09	9.575		1.29	1.00	0.463	pCi/L	118	75 - 125	

	LCS	LCS	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	95.2		30 - 110
Y Carrier	81.1		30 - 110

Lab Sample ID: LCSD 160-603171/3-A
Matrix: Water
Analysis Batch: 604973

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 603171

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec		RER	Limit
									Limits	RER		
Radium-228	8.09	10.24		1.40	1.00	0.592	pCi/L	127	75 - 125	0.25		1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

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

Lab Sample ID: LCSD 160-603171/3-A
Matrix: Water
Analysis Batch: 604973

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 603171

Carrier	LCSD		Limits
	%Yield	Qualifier	
Ba Carrier	88.7		30 - 110
Y Carrier	80.7		30 - 110

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Metals

Prep Batch: 564030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-1	BAC-16-F-20230227-01	Total Recoverable	Water	3005A	
240-181146-2	DUP-002-BAC-16-F-20230227-01	Total Recoverable	Water	3005A	
240-181146-3	BAC-14-F-20230227-01	Total Recoverable	Water	3005A	
240-181146-4	BAC-12-F-20230227-01	Total Recoverable	Water	3005A	
240-181146-5	BAC-10-F-20230227-01	Total Recoverable	Water	3005A	
240-181146-6	EB-001-F-20230227-01	Total Recoverable	Water	3005A	
MB 240-564030/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-564030/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 564032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-1	BAC-16-F-20230227-01	Total/NA	Water	7470A	
240-181146-2	DUP-002-BAC-16-F-20230227-01	Total/NA	Water	7470A	
240-181146-3	BAC-14-F-20230227-01	Total/NA	Water	7470A	
240-181146-4	BAC-12-F-20230227-01	Total/NA	Water	7470A	
240-181146-5	BAC-10-F-20230227-01	Total/NA	Water	7470A	
240-181146-6	EB-001-F-20230227-01	Total/NA	Water	7470A	
MB 240-564032/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-564032/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 564191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-1	BAC-16-F-20230227-01	Total/NA	Water	7470A	564032
240-181146-2	DUP-002-BAC-16-F-20230227-01	Total/NA	Water	7470A	564032
240-181146-3	BAC-14-F-20230227-01	Total/NA	Water	7470A	564032
240-181146-4	BAC-12-F-20230227-01	Total/NA	Water	7470A	564032
240-181146-5	BAC-10-F-20230227-01	Total/NA	Water	7470A	564032
240-181146-6	EB-001-F-20230227-01	Total/NA	Water	7470A	564032
MB 240-564032/1-A	Method Blank	Total/NA	Water	7470A	564032
LCS 240-564032/2-A	Lab Control Sample	Total/NA	Water	7470A	564032

Analysis Batch: 564223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-1	BAC-16-F-20230227-01	Total Recoverable	Water	6020B	564030
240-181146-2	DUP-002-BAC-16-F-20230227-01	Total Recoverable	Water	6020B	564030
240-181146-3	BAC-14-F-20230227-01	Total Recoverable	Water	6020B	564030
240-181146-4	BAC-12-F-20230227-01	Total Recoverable	Water	6020B	564030
240-181146-5	BAC-10-F-20230227-01	Total Recoverable	Water	6020B	564030
240-181146-6	EB-001-F-20230227-01	Total Recoverable	Water	6020B	564030
MB 240-564030/1-A	Method Blank	Total Recoverable	Water	6020B	564030
LCS 240-564030/2-A	Lab Control Sample	Total Recoverable	Water	6020B	564030

General Chemistry

Analysis Batch: 564459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-1	BAC-16-F-20230227-01	Total/NA	Water	2320B-1997	
240-181146-2	DUP-002-BAC-16-F-20230227-01	Total/NA	Water	2320B-1997	
240-181146-3	BAC-14-F-20230227-01	Total/NA	Water	2320B-1997	
240-181146-4	BAC-12-F-20230227-01	Total/NA	Water	2320B-1997	
240-181146-5	BAC-10-F-20230227-01	Total/NA	Water	2320B-1997	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

General Chemistry (Continued)

Analysis Batch: 564459 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-6	EB-001-F-20230227-01	Total/NA	Water	2320B-1997	
MB 240-564459/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-564459/56	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-564459/55	Lab Control Sample	Total/NA	Water	2320B-1997	

Analysis Batch: 566919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-1	BAC-16-F-20230227-01	Total/NA	Water	300.0-1993 R2.1	
240-181146-2	DUP-002-BAC-16-F-20230227-01	Total/NA	Water	300.0-1993 R2.1	
240-181146-3	BAC-14-F-20230227-01	Total/NA	Water	300.0-1993 R2.1	
240-181146-4	BAC-12-F-20230227-01	Total/NA	Water	300.0-1993 R2.1	
240-181146-5	BAC-10-F-20230227-01	Total/NA	Water	300.0-1993 R2.1	
240-181146-6	EB-001-F-20230227-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-566919/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-566919/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-181146-1 MS	BAC-16-F-20230227-01	Total/NA	Water	300.0-1993 R2.1	
240-181146-1 MSD	BAC-16-F-20230227-01	Total/NA	Water	300.0-1993 R2.1	

Rad

Prep Batch: 602806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-1	BAC-16-F-20230227-01	Total/NA	Water	PrecSep-21	
240-181146-2	DUP-002-BAC-16-F-20230227-01	Total/NA	Water	PrecSep-21	
MB 160-602806/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-602806/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 602808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-1	BAC-16-F-20230227-01	Total/NA	Water	PrecSep_0	
240-181146-2	DUP-002-BAC-16-F-20230227-01	Total/NA	Water	PrecSep_0	
MB 160-602808/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-602808/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Prep Batch: 602810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-6	EB-001-F-20230227-01	Total/NA	Water	PrecSep-21	
MB 160-602810/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-602810/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-602810/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 602812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-6	EB-001-F-20230227-01	Total/NA	Water	PrecSep_0	
MB 160-602812/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-602812/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-602812/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Prep Batch: 603170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-3	BAC-14-F-20230227-01	Total/NA	Water	PrecSep-21	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Rad (Continued)

Prep Batch: 603170 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-4	BAC-12-F-20230227-01	Total/NA	Water	PrecSep-21	
240-181146-5	BAC-10-F-20230227-01	Total/NA	Water	PrecSep-21	
MB 160-603170/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-603170/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-603170/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 603171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181146-3	BAC-14-F-20230227-01	Total/NA	Water	PrecSep_0	
240-181146-4	BAC-12-F-20230227-01	Total/NA	Water	PrecSep_0	
240-181146-5	BAC-10-F-20230227-01	Total/NA	Water	PrecSep_0	
MB 160-603171/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-603171/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-603171/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: BAC-16-F-20230227-01

Lab Sample ID: 240-181146-1

Date Collected: 02/27/23 10:05

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564030	AJC	EET CAN	03/02/23 14:00
Total Recoverable	Analysis	6020B		1	564223	DSH	EET CAN	03/03/23 17:46
Total/NA	Prep	7470A			564032	AJC	EET CAN	03/02/23 14:00
Total/NA	Analysis	7470A		1	564191	MRL	EET CAN	03/03/23 14:36
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 16:05
Total/NA	Analysis	300.0-1993 R2.1		1	566919	JWW	EET CAN	03/27/23 16:08
Total/NA	Prep	PrecSep-21			602806	DJP	EET SL	03/08/23 09:38
Total/NA	Analysis	9315		1	605624	FLC	EET SL	03/30/23 07:26
Total/NA	Prep	PrecSep_0			602808	DJP	EET SL	03/08/23 10:00
Total/NA	Analysis	9320		1	604352	FLC	EET SL	03/20/23 12:02
Total/NA	Analysis	Ra226_Ra228		1	605725	EMH	EET SL	03/30/23 15:45

Client Sample ID: DUP-002-BAC-16-F-20230227-01

Lab Sample ID: 240-181146-2

Date Collected: 02/27/23 10:05

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564030	AJC	EET CAN	03/02/23 14:00
Total Recoverable	Analysis	6020B		1	564223	DSH	EET CAN	03/03/23 17:48
Total/NA	Prep	7470A			564032	AJC	EET CAN	03/02/23 14:00
Total/NA	Analysis	7470A		1	564191	MRL	EET CAN	03/03/23 14:43
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 16:09
Total/NA	Analysis	300.0-1993 R2.1		1	566919	JWW	EET CAN	03/27/23 17:08
Total/NA	Prep	PrecSep-21			602806	DJP	EET SL	03/08/23 09:38
Total/NA	Analysis	9315		1	605624	FLC	EET SL	03/30/23 07:26
Total/NA	Prep	PrecSep_0			602808	DJP	EET SL	03/08/23 10:00
Total/NA	Analysis	9320		1	604352	FLC	EET SL	03/20/23 12:02
Total/NA	Analysis	Ra226_Ra228		1	605725	EMH	EET SL	03/30/23 15:45

Client Sample ID: BAC-14-F-20230227-01

Lab Sample ID: 240-181146-3

Date Collected: 02/27/23 11:46

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564030	AJC	EET CAN	03/02/23 14:00
Total Recoverable	Analysis	6020B		1	564223	DSH	EET CAN	03/03/23 17:51
Total/NA	Prep	7470A			564032	AJC	EET CAN	03/02/23 14:00
Total/NA	Analysis	7470A		1	564191	MRL	EET CAN	03/03/23 14:45
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 16:13
Total/NA	Analysis	300.0-1993 R2.1		1	566919	JWW	EET CAN	03/27/23 17:28
Total/NA	Prep	PrecSep-21			603170	DJP	EET SL	03/10/23 09:30
Total/NA	Analysis	9315		1	605833	EMH	EET SL	04/03/23 10:02
Total/NA	Prep	PrecSep_0			603171	DJP	EET SL	03/10/23 09:56
Total/NA	Analysis	9320		1	604973	FLC	EET SL	03/24/23 12:16

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: BAC-14-F-20230227-01

Lab Sample ID: 240-181146-3

Date Collected: 02/27/23 11:46

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228		1	605947	CAH	EET SL	04/03/23 15:19

Client Sample ID: BAC-12-F-20230227-01

Lab Sample ID: 240-181146-4

Date Collected: 02/27/23 12:29

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564030	AJC	EET CAN	03/02/23 14:00
Total Recoverable	Analysis	6020B		1	564223	DSH	EET CAN	03/03/23 17:53
Total/NA	Prep	7470A			564032	AJC	EET CAN	03/02/23 14:00
Total/NA	Analysis	7470A		1	564191	MRL	EET CAN	03/03/23 14:47
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 16:17
Total/NA	Analysis	300.0-1993 R2.1		1	566919	JWW	EET CAN	03/27/23 17:48
Total/NA	Prep	PrecSep-21			603170	DJP	EET SL	03/10/23 09:30
Total/NA	Analysis	9315		1	605833	EMH	EET SL	04/03/23 10:03
Total/NA	Prep	PrecSep_0			603171	DJP	EET SL	03/10/23 09:56
Total/NA	Analysis	9320		1	604973	FLC	EET SL	03/24/23 12:17
Total/NA	Analysis	Ra226_Ra228		1	605947	CAH	EET SL	04/03/23 15:19

Client Sample ID: BAC-10-F-20230227-01

Lab Sample ID: 240-181146-5

Date Collected: 02/27/23 13:22

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564030	AJC	EET CAN	03/02/23 14:00
Total Recoverable	Analysis	6020B		1	564223	DSH	EET CAN	03/03/23 17:56
Total/NA	Prep	7470A			564032	AJC	EET CAN	03/02/23 14:00
Total/NA	Analysis	7470A		1	564191	MRL	EET CAN	03/03/23 14:49
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 16:21
Total/NA	Analysis	300.0-1993 R2.1		1	566919	JWW	EET CAN	03/27/23 18:08
Total/NA	Prep	PrecSep-21			603170	DJP	EET SL	03/10/23 09:30
Total/NA	Analysis	9315		1	605835	EMH	EET SL	04/03/23 09:55
Total/NA	Prep	PrecSep_0			603171	DJP	EET SL	03/10/23 09:56
Total/NA	Analysis	9320		1	604973	FLC	EET SL	03/24/23 12:17
Total/NA	Analysis	Ra226_Ra228		1	605947	CAH	EET SL	04/03/23 15:19

Client Sample ID: EB-001-F-20230227-01

Lab Sample ID: 240-181146-6

Date Collected: 02/27/23 14:10

Matrix: Water

Date Received: 03/01/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564030	AJC	EET CAN	03/02/23 14:00
Total Recoverable	Analysis	6020B		1	564223	DSH	EET CAN	03/03/23 17:59
Total/NA	Prep	7470A			564032	AJC	EET CAN	03/02/23 14:00
Total/NA	Analysis	7470A		1	564191	MRL	EET CAN	03/03/23 14:51

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Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Client Sample ID: EB-001-F-20230227-01

Lab Sample ID: 240-181146-6

Date Collected: 02/27/23 14:10

Matrix: Water

Date Received: 03/01/23 08:00

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 16:25
Total/NA	Analysis	300.0-1993 R2.1		1	566919	JWW	EET CAN	03/27/23 19:29
Total/NA	Prep	PrecSep-21			602810	DJP	EET SL	03/08/23 10:10
Total/NA	Analysis	9315		1	605622	FLC	EET SL	03/30/23 21:19
Total/NA	Prep	PrecSep_0			602812	DJP	EET SL	03/08/23 10:36
Total/NA	Analysis	9320		1	604464	FLC	EET SL	03/21/23 12:52
Total/NA	Analysis	Ra226_Ra228		1	605947	CAH	EET SL	04/03/23 15:19

Laboratory References:

EET CAN = Eurofins Canton, 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
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23 *
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-28-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23 *
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-23 *
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	03-29-23
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	03-27-23
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-23
Florida	NELAP	E87689	06-30-23
HI - RadChem Recognition	State	n/a	06-30-23
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana (All)	NELAP	04080	06-30-23
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-23
MI - RadChem Recognition	State	9005	06-30-23
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-23
New Jersey	NELAP	MO002	06-30-23
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-23
North Dakota	State	R-207	06-30-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Canton

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181146-1

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
Oklahoma	NELAP	9997	08-31-23
Oregon	NELAP	4157	09-01-23
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23
Texas	NELAP	T104704193	07-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00028	06-11-23
Utah	NELAP	MO000542021-14	07-31-23
Virginia	NELAP	10310	06-14-24
Washington	State	C592	08-30-23
West Virginia DEP	State	381	10-31-23

Client Information Client Contact: Taylor Huffman Phone: 746-373-4308 E-Mail: roxanne.cisneros@Eurofinsel.com Lab PM: Cisneros, Roxanne Camer Tracking No(s): State of Origin: COC No: 240-93466-34578.1 Page: Page 1 of 1 Job #:		Analysis Requested Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: 2935505 WO #: Project #: 24019633 SSOW#:		Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> 6020, 7470A 300.0, 28D - Fluoride 2320B - Alkalinity 9315, R4226, 9320, R4228, R4226R4228, GPPC		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 Other: M - Hexane N - None O - AsNaO2 P - Na2OMS Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)			
Sample Identification Sample: Abby Caste PWSID: Site: Gavin Pknt		Sample Date Sample Time Sample Type (C=comp, G=grab) Matrix (Water, Precipitate, Other) Preservation Code:		Special Instructions/Note: Total Number of Containers:		Special Instructions/Note: 240-181146 Chain of Custody			
BAC-16-F-20230227-01 DUP002-BAC-16-F-20230227-01 BAC-14-F-20230227-01 BAC-12-F-20230227-01 BAC-10-F-20230227-01 EB-001-F-20230227-01		2-27-23 1005 2-27-23 1005 2-27-23 1146 2-27-23 1229 2-27-23 1322 2-27-23 1410		W W W W W W		N N N N N N		D D D D D D	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Deliverable Requested: I, II, III, IV, Other (specify)		Empty Kit Relinquished by:		Sample Disposal: <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Special Instructions/QC Requirements:	
Relinquished by: [Signature] Date/Time: 2-28-23 945 Company: E7A		Relinquished by: [Signature] Date/Time: 2-28-23 1700 Company: E7A		Relinquished by: [Signature] Date/Time: 2-28-23 1200 Company: E7A		Relinquished by: [Signature] Date/Time: 3-1-23 800 Company: BBTC		Relinquished by: [Signature] Date/Time: 3-1-23 800 Company: BBTC	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Method of Shipment:		Date/Time:	



Barberton Facility

Client Lightsone Site Name _____

Cooler unpacked by:

Cooler Received on 3-1-23

Opened on 3-1-23

Rachelle Haidet

FedEx: 1st Grd Exp UPS FAS Clipper 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 # IR-13 (CF -0.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 - IR GUN # IR-16 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 - IR GUN # IR-17 (CF -0.3 °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

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

- 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# HC203864
- 14. Were VOAs on the COC? Yes No
- 15. Were air bubbles >6 mm in any VOA vials? Yes 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: _____

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container		Preservative	
			pH	Temp	Added (mls)	Lot #
BAC-16-F-20230227-01	240-181146-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-16-F-20230227-01	240-181146-D-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-16-F-20230227-01	240-181146-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-002-BAC-16-F-20230227-01	240-181146-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-002-BAC-16-F-20230227-01	240-181146-D-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-002-BAC-16-F-20230227-01	240-181146-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-14-F-20230227-01	240-181146-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-14-F-20230227-01	240-181146-D-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-14-F-20230227-01	240-181146-E-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-12-F-20230227-01	240-181146-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-12-F-20230227-01	240-181146-D-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-12-F-20230227-01	240-181146-E-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-10-F-20230227-01	240-181146-C-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-10-F-20230227-01	240-181146-D-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-10-F-20230227-01	240-181146-E-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230227-01	240-181146-C-6	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230227-01	240-181146-D-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230227-01	240-181146-E-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

Chain of Custody Record



Client Information (Sub Contract Lab)		Lab PM: Cisneros, Roxanne		COC No: 240-164518.1								
Client Contact: Shipping/Receiving		E-Mail: roxanne.cisneros@et.eurofins.com		Page: Page 1 of 1								
Company: TestAmerica Laboratories, Inc.		State of Origin: Ohio		Job #: 240-181146-1								
Address: 13715 Rider Trail North,		Due Date Requested: 4/1/2023		Preservation Codes:								
City: Earth City		TAT Requested (days):		A - HCL M - Hexane N - None O - As ₂ O ₃ P - Na ₂ O ₄ S Q - Na ₂ SO ₃ R - Na ₂ SO ₃ S - H ₂ SO ₄ T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)								
State, Zip: MO, 63045		PO #:		Other:								
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		WO #:										
Email:		Project #:										
Project Name: Federal CCR Wells - App IV		SSOW#:										
Site:												
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	MATRIX (Water, Seawater, Other, B1=Urine, A=Al)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PreSep_21 Radium-226 (GFC)	9320_Ra228/PreSep_0 Radium-228 (GFC)	Ra226Ra228_GFC/Combined Radium-226 and Radium-228	Total Number of Containers	Special Instructions/Note:
BAC-16-F-20230227-01 (240-181146-1)		2/27/23	10:05 Eastern	Water	Water			X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
DUP-002-BAC-16-F-20230227-01 (240-181146-2)		2/27/23	10:05 Eastern	Water	Water			X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-14-F-20230227-01 (240-181146-3)		2/27/23	11:46 Eastern	Water	Water			X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-12-F-20230227-01 (240-181146-4)		2/27/23	12:29 Eastern	Water	Water			X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-10-F-20230227-01 (240-181146-5)		2/27/23	13:22 Eastern	Water	Water			X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
EB-001-F-20230227-01 (240-181146-6)		2/27/23	14:10 Eastern	Water	Water			X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
Possible Hazard Identification												
Unconfirmed												
Deliverable Requested: I, II, III, IV, Other (specify)												
Primary Deliverable Rank: 2												
Date: 3/23/2023 12:00												
Time: 12:00												
Relinquished by: [Signature]												
Relinquished by: FEDEX												
Relinquished by: [Signature]												
Relinquished by: [Signature]												
Custody Seal No.: [Signature]												
Custody Seals Intact: Δ Yes Δ No												
Cooler Temperature(s) °C and Other Remarks:												
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)												
Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For <input type="checkbox"/> Months												
Special Instructions/QC Requirements:												
Method of Shipment:												
Date/Time: 3/23/2023 10:05												
Company: FEDEX												
Date/Time: 3/23/2023 10:05												
Company: [Signature]												
Date/Time: [Signature]												
Company: [Signature]												

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/test/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.



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-181146-1

Login Number: 181146

List Number: 2

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

List Creation: 03/03/23 01:07 PM

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





ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 4/5/2023 11:53:53 AM

JOB DESCRIPTION

Federal CCR Wells - App IV

JOB NUMBER

240-181275-1

Eurofins Canton

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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
4/5/2023 11:53:53 AM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

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.

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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Job ID: 240-181275-1

Laboratory: Eurofins Canton

Narrative

Job Narrative 240-181275-1

Comments

No additional comments.

Receipt

The samples were received on 3/3/2023 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 5 coolers at receipt time were 1.7° C, 2.3° C, 2.5° C, 2.7° C and 14.5° C.

RAD

Methods 9315: Radium-226 batch 602828: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-01-F-20230301-01 (240-181275-1), MW-6-F-20230301-01 (240-181275-2), BAC-23-F-20230301-01 (240-181275-3), BAC-08-F-20230301-01 (240-181275-4), EB-001-F-20230301-01 (240-181275-5), (LCS 160-602828/2-A), (LCSD 160-602828/3-A) and (MB 160-602828/1-A)

Methods 9320: Radium-228 batch 602829: The LCS recovered at (139%). 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 (62-148%) per method requirements. The LCS passes, no further action is required. (LCSD 160-602829/3-A)

Methods 9320: Radium-228 batch 602829: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-01-F-20230301-01 (240-181275-1), MW-6-F-20230301-01 (240-181275-2), BAC-23-F-20230301-01 (240-181275-3), BAC-08-F-20230301-01 (240-181275-4), EB-001-F-20230301-01 (240-181275-5), (LCS 160-602829/2-A), (LCSD 160-602829/3-A) and (MB 160-602829/1-A)

Method PrecSep_0: Radium-228 Prep Batch 602829: The following sample was prepared at a reduced aliquot due to Matrix: BAC-01-F-20230301-01 (240-181275-1). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep_0: Radium-228 Prep Batch 602829: Insufficient sample volume was available to perform a sample duplicate for the following samples: MW-6-F-20230301-01 (240-181275-2), BAC-23-F-20230301-01 (240-181275-3), BAC-08-F-20230301-01 (240-181275-4) and EB-001-F-20230301-01 (240-181275-5). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Radium-226 Prep Batch 160-602828: The following sample was prepared at a reduced aliquot due to Matrix: BAC-01-F-20230301-01 (240-181275-1). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep-21: Radium-226 Prep Batch 160-602828: Insufficient sample volume was available to perform a sample duplicate for the following samples: MW-6-F-20230301-01 (240-181275-2), BAC-23-F-20230301-01 (240-181275-3), BAC-08-F-20230301-01 (240-181275-4) and EB-001-F-20230301-01 (240-181275-5). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

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

Metals

Method 6020B: The continuing calibration verification (CCV) associated with batch 240-564732 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: BAC-01-F-20230301-01 (240-181275-1), MW-6-F-20230301-01 (240-181275-2), BAC-23-F-20230301-01 (240-181275-3), BAC-08-F-20230301-01 (240-181275-4) and EB-001-F-20230301-01 (240-181275-5).

Method 6020B: The continuing calibration verification (CCV) associated with batch 240-564732 recovered above the upper control limit for

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Job ID: 240-181275-1 (Continued)

Laboratory: Eurofins Canton (Continued)

Lithium. 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: BAC-01-F-20230301-01 (240-181275-1), MW-6-F-20230301-01 (240-181275-2), BAC-08-F-20230301-01 (240-181275-4) and EB-001-F-20230301-01 (240-181275-5).

Methods 6020B: The continuing calibration verification (CCV) associated with batch 240-564732 recovered above the upper control limit for Chromium. 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: BAC-23-F-20230301-01 (240-181275-3), BAC-08-F-20230301-01 (240-181275-4) and EB-001-F-20230301-01 (240-181275-5).

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

General Chemistry

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



Method Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CAN
7470A	Mercury (CVAA)	SW846	EET CAN
2320B-1997	Alkalinity, Total	SM	EET CAN
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CAN
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 CAN
7470A	Preparation, Mercury	SW846	EET CAN
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 CAN = Eurofins Canton, 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 - App IV

Job ID: 240-181275-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-181275-1	BAC-01-F-20230301-01	Water	03/01/23 12:35	03/03/23 08:00
240-181275-2	MW-6-F-20230301-01	Water	03/01/23 13:21	03/03/23 08:00
240-181275-3	BAC-23-F-20230301-01	Water	03/01/23 14:02	03/03/23 08:00
240-181275-4	BAC-08-F-20230301-01	Water	03/01/23 14:53	03/03/23 08:00
240-181275-5	EB-001-F-20230301-01	Water	03/01/23 15:15	03/03/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: BAC-01-F-20230301-01

Lab Sample ID: 240-181275-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.6	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	90		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	2.3		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	5.2	J ^+	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	13000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	12000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.87	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.13		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: MW-6-F-20230301-01

Lab Sample ID: 240-181275-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	140		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.53	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	6.1	J ^+	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	14000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.28	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.094		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-23-F-20230301-01

Lab Sample ID: 240-181275-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.8	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	140		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	2.6	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	16000		1000	200	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: BAC-23-F-20230301-01 (Continued)

Lab Sample ID: 240-181275-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	2000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	19000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.14		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-08-F-20230301-01

Lab Sample ID: 240-181275-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	4.1	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	160		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.5		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	4.5	J ^+	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	12000		1000	200	ug/L	1		6020B	Total Recoverable
Molybdenum	2.0	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	13000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.15		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: EB-001-F-20230301-01

Lab Sample ID: 240-181275-5

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: BAC-01-F-20230301-01

Lab Sample ID: 240-181275-1

Date Collected: 03/01/23 12:35

Matrix: Water

Date Received: 03/03/23 08:00

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		03/05/23 14:00	03/08/23 17:10	1
Arsenic	3.6	J	5.0	0.75	ug/L		03/05/23 14:00	03/08/23 17:10	1
Barium	90		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 17:10	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 17:10	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:10	1
Chromium	ND		5.0	2.5	ug/L		03/05/23 14:00	03/08/23 17:10	1
Cobalt	2.1		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 17:10	1
Lead	2.3		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 17:10	1
Lithium	5.2	J ^+	8.0	1.7	ug/L		03/05/23 14:00	03/08/23 17:10	1
Magnesium	13000		1000	200	ug/L		03/05/23 14:00	03/08/23 17:10	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 17:10	1
Potassium	1700		1000	220	ug/L		03/05/23 14:00	03/08/23 17:10	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 17:10	1
Sodium	12000		1000	330	ug/L		03/05/23 14:00	03/08/23 17:10	1
Thallium	0.87	J	1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:10	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		03/06/23 10:00	03/07/23 20:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	200		5.0	2.6	mg/L			03/06/23 17:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	200		5.0	2.6	mg/L			03/06/23 17:31	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 17:31	1
Fluoride (EPA 300.0-1993 R2.1)	0.13		0.050	0.024	mg/L			03/27/23 20:09	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.123	U	0.0919	0.0925	1.00	0.130	pCi/L	03/08/23 11:39	04/04/23 19:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.7		30 - 110					03/08/23 11:39	04/04/23 19:57	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.853	U	0.587	0.592	1.00	0.896	pCi/L	03/08/23 12:03	03/22/23 12:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.7		30 - 110					03/08/23 12:03	03/22/23 12:40	1
Y Carrier	82.6		30 - 110					03/08/23 12:03	03/22/23 12:40	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: BAC-01-F-20230301-01

Lab Sample ID: 240-181275-1

Date Collected: 03/01/23 12:35

Matrix: Water

Date Received: 03/03/23 08:00

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	0.976		0.594	0.599	5.00	0.896	pCi/L		04/05/23 12:45	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: MW-6-F-20230301-01

Lab Sample ID: 240-181275-2

Date Collected: 03/01/23 13:21

Matrix: Water

Date Received: 03/03/23 08:00

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		03/05/23 14:00	03/08/23 17:14	1
Arsenic	ND		5.0	0.75	ug/L		03/05/23 14:00	03/08/23 17:14	1
Barium	140		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 17:14	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 17:14	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:14	1
Chromium	ND		5.0	2.5	ug/L		03/05/23 14:00	03/08/23 17:14	1
Cobalt	0.53	J	1.0	0.19	ug/L		03/05/23 14:00	03/08/23 17:14	1
Lead	ND		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 17:14	1
Lithium	6.1	J ^+	8.0	1.7	ug/L		03/05/23 14:00	03/08/23 17:14	1
Magnesium	14000		1000	200	ug/L		03/05/23 14:00	03/08/23 17:14	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 17:14	1
Potassium	1800		1000	220	ug/L		03/05/23 14:00	03/08/23 17:14	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 17:14	1
Sodium	15000		1000	330	ug/L		03/05/23 14:00	03/08/23 17:14	1
Thallium	0.28	J	1.0	0.20	ug/L		03/05/23 14:00	03/08/23 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		03/06/23 10:00	03/07/23 20:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 17:40	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 17:40	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 17:40	1
Fluoride (EPA 300.0-1993 R2.1)	0.094		0.050	0.024	mg/L			03/27/23 20:29	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0353	U	0.0561	0.0562	1.00	0.0974	pCi/L	03/08/23 11:39	04/04/23 19:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.7		30 - 110					03/08/23 11:39	04/04/23 19:57	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.156	U	0.353	0.353	1.00	0.617	pCi/L	03/08/23 12:03	03/22/23 12:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.7		30 - 110					03/08/23 12:03	03/22/23 12:40	1
Y Carrier	78.1		30 - 110					03/08/23 12:03	03/22/23 12:40	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: MW-6-F-20230301-01

Lab Sample ID: 240-181275-2

Date Collected: 03/01/23 13:21

Matrix: Water

Date Received: 03/03/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.191	U	0.357	0.357	5.00	0.617	pCi/L		04/05/23 12:45	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: BAC-23-F-20230301-01

Lab Sample ID: 240-181275-3

Date Collected: 03/01/23 14:02

Matrix: Water

Date Received: 03/03/23 08:00

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		03/05/23 14:00	03/08/23 18:43	1
Arsenic	1.8	J	5.0	0.75	ug/L		03/05/23 14:00	03/08/23 18:43	1
Barium	140		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 18:43	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 18:43	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 18:43	1
Chromium	ND	^+	5.0	2.5	ug/L		03/05/23 14:00	03/08/23 18:43	1
Cobalt	1.1		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 18:43	1
Lead	ND		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 18:43	1
Lithium	2.6	J	8.0	1.7	ug/L		03/05/23 14:00	03/08/23 18:43	1
Magnesium	16000		1000	200	ug/L		03/05/23 14:00	03/08/23 18:43	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 18:43	1
Potassium	2000		1000	220	ug/L		03/05/23 14:00	03/08/23 18:43	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 18:43	1
Sodium	19000		1000	330	ug/L		03/05/23 14:00	03/08/23 18:43	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 18:43	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		03/06/23 10:00	03/07/23 20:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 17:44	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 17:44	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 17:44	1
Fluoride (EPA 300.0-1993 R2.1)	0.14		0.050	0.024	mg/L			03/27/23 20:50	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.141		0.0722	0.0733	1.00	0.0765	pCi/L	03/08/23 11:39	04/04/23 19:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.2		30 - 110					03/08/23 11:39	04/04/23 19:57	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.455	U	0.372	0.374	1.00	0.578	pCi/L	03/08/23 12:03	03/22/23 12:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.2		30 - 110					03/08/23 12:03	03/22/23 12:40	1
Y Carrier	85.6		30 - 110					03/08/23 12:03	03/22/23 12:40	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: BAC-23-F-20230301-01

Lab Sample ID: 240-181275-3

Date Collected: 03/01/23 14:02

Matrix: Water

Date Received: 03/03/23 08:00

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	0.596		0.379	0.381	5.00	0.578	pCi/L		04/05/23 12:45	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: BAC-08-F-20230301-01

Lab Sample ID: 240-181275-4

Date Collected: 03/01/23 14:53

Matrix: Water

Date Received: 03/03/23 08:00

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		03/05/23 14:00	03/08/23 17:28	1
Arsenic	4.1	J	5.0	0.75	ug/L		03/05/23 14:00	03/08/23 17:28	1
Barium	160		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 17:28	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 17:28	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:28	1
Chromium	ND	^+	5.0	2.5	ug/L		03/05/23 14:00	03/08/23 17:28	1
Cobalt	2.5		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 17:28	1
Lead	ND		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 17:28	1
Lithium	4.5	J ^+	8.0	1.7	ug/L		03/05/23 14:00	03/08/23 17:28	1
Magnesium	12000		1000	200	ug/L		03/05/23 14:00	03/08/23 17:28	1
Molybdenum	2.0	J	5.0	1.1	ug/L		03/05/23 14:00	03/08/23 17:28	1
Potassium	1400		1000	220	ug/L		03/05/23 14:00	03/08/23 17:28	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 17:28	1
Sodium	13000		1000	330	ug/L		03/05/23 14:00	03/08/23 17:28	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:28	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		03/06/23 10:00	03/07/23 20:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	190		5.0	2.6	mg/L			03/06/23 17:48	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	190		5.0	2.6	mg/L			03/06/23 17:48	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 17:48	1
Fluoride (EPA 300.0-1993 R2.1)	0.15		0.050	0.024	mg/L			03/27/23 21:10	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.161		0.0786	0.0800	1.00	0.0905	pCi/L	03/08/23 11:39	04/04/23 19:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.1		30 - 110					03/08/23 11:39	04/04/23 19:58	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	-0.0363	U	0.274	0.274	1.00	0.528	pCi/L	03/08/23 12:03	03/22/23 12:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.1		30 - 110					03/08/23 12:03	03/22/23 12:41	1
Y Carrier	83.4		30 - 110					03/08/23 12:03	03/22/23 12:41	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: BAC-08-F-20230301-01

Lab Sample ID: 240-181275-4

Date Collected: 03/01/23 14:53

Matrix: Water

Date Received: 03/03/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.125	U	0.285	0.285	5.00	0.528	pCi/L		04/05/23 12:45	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: EB-001-F-20230301-01

Lab Sample ID: 240-181275-5

Date Collected: 03/01/23 15:15

Matrix: Water

Date Received: 03/03/23 08:00

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		03/05/23 14:00	03/08/23 17:32	1
Arsenic	ND		5.0	0.75	ug/L		03/05/23 14:00	03/08/23 17:32	1
Barium	ND		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 17:32	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 17:32	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:32	1
Chromium	ND	^+	5.0	2.5	ug/L		03/05/23 14:00	03/08/23 17:32	1
Cobalt	ND		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 17:32	1
Lead	ND		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 17:32	1
Lithium	ND	^+	8.0	1.7	ug/L		03/05/23 14:00	03/08/23 17:32	1
Magnesium	ND		1000	200	ug/L		03/05/23 14:00	03/08/23 17:32	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 17:32	1
Potassium	ND		1000	220	ug/L		03/05/23 14:00	03/08/23 17:32	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 17:32	1
Sodium	ND		1000	330	ug/L		03/05/23 14:00	03/08/23 17:32	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:32	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		03/06/23 10:00	03/07/23 20:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 17:54	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 17:54	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 17:54	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			03/27/23 22:10	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0145	U	0.0411	0.0411	1.00	0.0792	pCi/L	03/08/23 11:39	04/04/23 19:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.8		30 - 110					03/08/23 11:39	04/04/23 19:58	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.249	U	0.304	0.305	1.00	0.503	pCi/L	03/08/23 12:03	03/22/23 12:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.8		30 - 110					03/08/23 12:03	03/22/23 12:41	1
Y Carrier	89.0		30 - 110					03/08/23 12:03	03/22/23 12:41	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: EB-001-F-20230301-01

Lab Sample ID: 240-181275-5

Date Collected: 03/01/23 15:15

Matrix: Water

Date Received: 03/03/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.264	U	0.307	0.308	5.00	0.503	pCi/L		04/05/23 12:45	1

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Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
240-181275-1	BAC-01-F-20230301-01	84.7	
240-181275-2	MW-6-F-20230301-01	88.7	
240-181275-3	BAC-23-F-20230301-01	82.2	
240-181275-4	BAC-08-F-20230301-01	88.1	
240-181275-5	EB-001-F-20230301-01	91.8	
LCS 160-602828/2-A	Lab Control Sample	85.3	
LCSD 160-602828/3-A	Lab Control Sample Dup	80.8	
MB 160-602828/1-A	Method Blank	85.9	
Tracer/Carrier Legend			
Ba = Ba Carrier			

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-181275-1	BAC-01-F-20230301-01	84.7	82.6
240-181275-2	MW-6-F-20230301-01	88.7	78.1
240-181275-3	BAC-23-F-20230301-01	82.2	85.6
240-181275-4	BAC-08-F-20230301-01	88.1	83.4
240-181275-5	EB-001-F-20230301-01	91.8	89.0
LCS 160-602829/2-A	Lab Control Sample	85.3	85.2
LCSD 160-602829/3-A	Lab Control Sample Dup	80.8	81.1
MB 160-602829/1-A	Method Blank	85.9	84.1
Tracer/Carrier Legend			
Ba = Ba Carrier			
Y = Y Carrier			

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-564268/1-A
Matrix: Water
Analysis Batch: 564732

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 564268

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	ND		2.0	0.57	ug/L		03/05/23 14:00	03/08/23 16:39	1
Arsenic	ND		5.0	0.75	ug/L		03/05/23 14:00	03/08/23 16:39	1
Barium	ND		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 16:39	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 16:39	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 16:39	1
Chromium	ND		5.0	2.5	ug/L		03/05/23 14:00	03/08/23 16:39	1
Cobalt	ND		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 16:39	1
Lead	ND		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 16:39	1
Lithium	ND	^+	8.0	1.7	ug/L		03/05/23 14:00	03/08/23 16:39	1
Magnesium	ND		1000	200	ug/L		03/05/23 14:00	03/08/23 16:39	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 16:39	1
Potassium	ND		1000	220	ug/L		03/05/23 14:00	03/08/23 16:39	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 16:39	1
Sodium	ND		1000	330	ug/L		03/05/23 14:00	03/08/23 16:39	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 16:39	1

Lab Sample ID: LCS 240-564268/2-A
Matrix: Water
Analysis Batch: 564732

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 564268

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Antimony	100	101		ug/L		101	80 - 120
Arsenic	1000	908		ug/L		91	80 - 120
Barium	1000	962		ug/L		96	80 - 120
Beryllium	500	485	^+	ug/L		97	80 - 120
Cadmium	500	480		ug/L		96	80 - 120
Chromium	500	514		ug/L		103	80 - 120
Cobalt	500	462		ug/L		92	80 - 120
Lead	500	501		ug/L		100	80 - 120
Lithium	500	476	^+	ug/L		95	80 - 120
Magnesium	25000	24900		ug/L		99	80 - 120
Molybdenum	500	467		ug/L		93	80 - 120
Potassium	25000	24000		ug/L		96	80 - 120
Selenium	1000	915		ug/L		91	80 - 120
Sodium	25000	24900		ug/L		100	80 - 120
Thallium	1000	968		ug/L		97	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-564269/1-A
Matrix: Water
Analysis Batch: 564598

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 564269

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.20	0.13	ug/L		03/06/23 10:00	03/07/23 19:58	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-564269/2-A
 Matrix: Water
 Analysis Batch: 564598

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 564269

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.19		ug/L		104	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-564459/56
 Matrix: Water
 Analysis Batch: 564459

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			03/06/23 14:59	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 14:59	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 14:59	1

Lab Sample ID: MB 240-564459/83
 Matrix: Water
 Analysis Batch: 564459

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			03/06/23 16:43	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 16:43	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 16:43	1

Lab Sample ID: LCS 240-564459/82
 Matrix: Water
 Analysis Batch: 564459

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	145		mg/L		99	86 - 123

Lab Sample ID: 240-181275-1 DU
 Matrix: Water
 Analysis Batch: 564459

Client Sample ID: BAC-01-F-20230301-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Alkalinity	200		202		mg/L		0.7	20
Bicarbonate Alkalinity as CaCO3	200		202		mg/L		0.7	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-566919/3
 Matrix: Water
 Analysis Batch: 566919

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			03/27/23 14:30	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 240-566919/4
Matrix: Water
Analysis Batch: 566919

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.56		mg/L		103	90 - 110

Lab Sample ID: 240-181275-4 MS
Matrix: Water
Analysis Batch: 566919

Client Sample ID: BAC-08-F-20230301-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.15		2.50	2.90		mg/L		110	80 - 120

Lab Sample ID: 240-181275-4 MSD
Matrix: Water
Analysis Batch: 566919

Client Sample ID: BAC-08-F-20230301-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.15		2.50	2.96		mg/L		112	80 - 120	2	15

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-602828/1-A
Matrix: Water
Analysis Batch: 605835

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602828

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.03913	U	0.0688	0.0689	1.00	0.121	pCi/L	03/08/23 11:39	04/03/23 21:42	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.9		30 - 110					03/08/23 11:39	04/03/23 21:42	1

Lab Sample ID: LCS 160-602828/2-A
Matrix: Water
Analysis Batch: 605835

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602828

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	11.3	11.96		1.23	1.00	0.0945	pCi/L	106	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	85.3		30 - 110						

Lab Sample ID: LCSD 160-602828/3-A
Matrix: Water
Analysis Batch: 605835

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 602828

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-226	11.3	12.07		1.24	1.00	0.0956	pCi/L	106	75 - 125	0.04	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: LCSD 160-602828/3-A
 Matrix: Water
 Analysis Batch: 605835

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 602828

Carrier	LCS D %Yield	LCS D Qualifier	Limits
Ba Carrier	80.8		30 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-602829/1-A
 Matrix: Water
 Analysis Batch: 604715

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 602829

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.4492	U	0.362	0.365	1.00	0.562	pCi/L	03/08/23 12:03	03/22/23 12:35	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	85.9		30 - 110	03/08/23 12:03	03/22/23 12:35	1
Y Carrier	84.1		30 - 110	03/08/23 12:03	03/22/23 12:35	1

Lab Sample ID: LCS 160-602829/2-A
 Matrix: Water
 Analysis Batch: 604715

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 602829

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-228	8.10	9.897		1.37	1.00	0.649	pCi/L	122	75 - 125

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	85.3		30 - 110
Y Carrier	85.2		30 - 110

Lab Sample ID: LCSD 160-602829/3-A
 Matrix: Water
 Analysis Batch: 604715

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 602829

Analyte	Spike Added	LCSD Result	LCSD Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER
				Uncert. (2σ+/-)							Limit
Radium-228	8.10	11.22		1.52	1.00	0.594	pCi/L	139	75 - 125	0.46	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	80.8		30 - 110
Y Carrier	81.1		30 - 110

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Metals

Prep Batch: 564268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181275-1	BAC-01-F-20230301-01	Total Recoverable	Water	3005A	
240-181275-2	MW-6-F-20230301-01	Total Recoverable	Water	3005A	
240-181275-3	BAC-23-F-20230301-01	Total Recoverable	Water	3005A	
240-181275-4	BAC-08-F-20230301-01	Total Recoverable	Water	3005A	
240-181275-5	EB-001-F-20230301-01	Total Recoverable	Water	3005A	
MB 240-564268/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-564268/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 564269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181275-1	BAC-01-F-20230301-01	Total/NA	Water	7470A	
240-181275-2	MW-6-F-20230301-01	Total/NA	Water	7470A	
240-181275-3	BAC-23-F-20230301-01	Total/NA	Water	7470A	
240-181275-4	BAC-08-F-20230301-01	Total/NA	Water	7470A	
240-181275-5	EB-001-F-20230301-01	Total/NA	Water	7470A	
MB 240-564269/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-564269/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 564598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181275-1	BAC-01-F-20230301-01	Total/NA	Water	7470A	564269
240-181275-2	MW-6-F-20230301-01	Total/NA	Water	7470A	564269
240-181275-3	BAC-23-F-20230301-01	Total/NA	Water	7470A	564269
240-181275-4	BAC-08-F-20230301-01	Total/NA	Water	7470A	564269
240-181275-5	EB-001-F-20230301-01	Total/NA	Water	7470A	564269
MB 240-564269/1-A	Method Blank	Total/NA	Water	7470A	564269
LCS 240-564269/2-A	Lab Control Sample	Total/NA	Water	7470A	564269

Analysis Batch: 564732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181275-1	BAC-01-F-20230301-01	Total Recoverable	Water	6020B	564268
240-181275-2	MW-6-F-20230301-01	Total Recoverable	Water	6020B	564268
240-181275-3	BAC-23-F-20230301-01	Total Recoverable	Water	6020B	564268
240-181275-4	BAC-08-F-20230301-01	Total Recoverable	Water	6020B	564268
240-181275-5	EB-001-F-20230301-01	Total Recoverable	Water	6020B	564268
MB 240-564268/1-A	Method Blank	Total Recoverable	Water	6020B	564268
LCS 240-564268/2-A	Lab Control Sample	Total Recoverable	Water	6020B	564268

General Chemistry

Analysis Batch: 564459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181275-1	BAC-01-F-20230301-01	Total/NA	Water	2320B-1997	
240-181275-2	MW-6-F-20230301-01	Total/NA	Water	2320B-1997	
240-181275-3	BAC-23-F-20230301-01	Total/NA	Water	2320B-1997	
240-181275-4	BAC-08-F-20230301-01	Total/NA	Water	2320B-1997	
240-181275-5	EB-001-F-20230301-01	Total/NA	Water	2320B-1997	
MB 240-564459/56	Method Blank	Total/NA	Water	2320B-1997	
MB 240-564459/83	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-564459/82	Lab Control Sample	Total/NA	Water	2320B-1997	
240-181275-1 DU	BAC-01-F-20230301-01	Total/NA	Water	2320B-1997	

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

General Chemistry

Analysis Batch: 566919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181275-1	BAC-01-F-20230301-01	Total/NA	Water	300.0-1993 R2.1	
240-181275-2	MW-6-F-20230301-01	Total/NA	Water	300.0-1993 R2.1	
240-181275-3	BAC-23-F-20230301-01	Total/NA	Water	300.0-1993 R2.1	
240-181275-4	BAC-08-F-20230301-01	Total/NA	Water	300.0-1993 R2.1	
240-181275-5	EB-001-F-20230301-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-566919/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-566919/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-181275-4 MS	BAC-08-F-20230301-01	Total/NA	Water	300.0-1993 R2.1	
240-181275-4 MSD	BAC-08-F-20230301-01	Total/NA	Water	300.0-1993 R2.1	

Rad

Prep Batch: 602828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181275-1	BAC-01-F-20230301-01	Total/NA	Water	PrecSep-21	
240-181275-2	MW-6-F-20230301-01	Total/NA	Water	PrecSep-21	
240-181275-3	BAC-23-F-20230301-01	Total/NA	Water	PrecSep-21	
240-181275-4	BAC-08-F-20230301-01	Total/NA	Water	PrecSep-21	
240-181275-5	EB-001-F-20230301-01	Total/NA	Water	PrecSep-21	
MB 160-602828/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-602828/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-602828/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 602829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181275-1	BAC-01-F-20230301-01	Total/NA	Water	PrecSep_0	
240-181275-2	MW-6-F-20230301-01	Total/NA	Water	PrecSep_0	
240-181275-3	BAC-23-F-20230301-01	Total/NA	Water	PrecSep_0	
240-181275-4	BAC-08-F-20230301-01	Total/NA	Water	PrecSep_0	
240-181275-5	EB-001-F-20230301-01	Total/NA	Water	PrecSep_0	
MB 160-602829/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-602829/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-602829/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: BAC-01-F-20230301-01

Lab Sample ID: 240-181275-1

Date Collected: 03/01/23 12:35

Matrix: Water

Date Received: 03/03/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 17:10
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:10
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 17:31
Total/NA	Analysis	300.0-1993 R2.1		1	566919	JWW	EET CAN	03/27/23 20:09
Total/NA	Prep	PrecSep-21			602828	DJP	EET SL	03/08/23 11:39
Total/NA	Analysis	9315		1	606125	FLC	EET SL	04/04/23 19:57
Total/NA	Prep	PrecSep_0			602829	DJP	EET SL	03/08/23 12:03
Total/NA	Analysis	9320		1	604718	FLC	EET SL	03/22/23 12:40
Total/NA	Analysis	Ra226_Ra228		1	606185	SCB	EET SL	04/05/23 12:45

Client Sample ID: MW-6-F-20230301-01

Lab Sample ID: 240-181275-2

Date Collected: 03/01/23 13:21

Matrix: Water

Date Received: 03/03/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 17:14
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:12
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 17:40
Total/NA	Analysis	300.0-1993 R2.1		1	566919	JWW	EET CAN	03/27/23 20:29
Total/NA	Prep	PrecSep-21			602828	DJP	EET SL	03/08/23 11:39
Total/NA	Analysis	9315		1	606125	FLC	EET SL	04/04/23 19:57
Total/NA	Prep	PrecSep_0			602829	DJP	EET SL	03/08/23 12:03
Total/NA	Analysis	9320		1	604718	FLC	EET SL	03/22/23 12:40
Total/NA	Analysis	Ra226_Ra228		1	606185	SCB	EET SL	04/05/23 12:45

Client Sample ID: BAC-23-F-20230301-01

Lab Sample ID: 240-181275-3

Date Collected: 03/01/23 14:02

Matrix: Water

Date Received: 03/03/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 18:43
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:54
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 17:44
Total/NA	Analysis	300.0-1993 R2.1		1	566919	JWW	EET CAN	03/27/23 20:50
Total/NA	Prep	PrecSep-21			602828	DJP	EET SL	03/08/23 11:39
Total/NA	Analysis	9315		1	606125	FLC	EET SL	04/04/23 19:57
Total/NA	Prep	PrecSep_0			602829	DJP	EET SL	03/08/23 12:03
Total/NA	Analysis	9320		1	604718	FLC	EET SL	03/22/23 12:40

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Client Sample ID: BAC-23-F-20230301-01

Lab Sample ID: 240-181275-3

Date Collected: 03/01/23 14:02

Matrix: Water

Date Received: 03/03/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228		1	606185	SCB	EET SL	04/05/23 12:45

Client Sample ID: BAC-08-F-20230301-01

Lab Sample ID: 240-181275-4

Date Collected: 03/01/23 14:53

Matrix: Water

Date Received: 03/03/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 17:28
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:14
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 17:48
Total/NA	Analysis	300.0-1993 R2.1		1	566919	JWW	EET CAN	03/27/23 21:10
Total/NA	Prep	PrecSep-21			602828	DJP	EET SL	03/08/23 11:39
Total/NA	Analysis	9315		1	606125	FLC	EET SL	04/04/23 19:58
Total/NA	Prep	PrecSep_0			602829	DJP	EET SL	03/08/23 12:03
Total/NA	Analysis	9320		1	604718	FLC	EET SL	03/22/23 12:41
Total/NA	Analysis	Ra226_Ra228		1	606185	SCB	EET SL	04/05/23 12:45

Client Sample ID: EB-001-F-20230301-01

Lab Sample ID: 240-181275-5

Date Collected: 03/01/23 15:15

Matrix: Water

Date Received: 03/03/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 17:32
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:21
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 17:54
Total/NA	Analysis	300.0-1993 R2.1		1	566919	JWW	EET CAN	03/27/23 22:10
Total/NA	Prep	PrecSep-21			602828	DJP	EET SL	03/08/23 11:39
Total/NA	Analysis	9315		1	606125	FLC	EET SL	04/04/23 19:58
Total/NA	Prep	PrecSep_0			602829	DJP	EET SL	03/08/23 12:03
Total/NA	Analysis	9320		1	604718	FLC	EET SL	03/22/23 12:41
Total/NA	Analysis	Ra226_Ra228		1	606185	SCB	EET SL	04/05/23 12:45

Laboratory References:

EET CAN = Eurofins Canton, 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
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23 *
Connecticut	State	PH-0590	06-29-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-28-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23 *
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-23 *
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	03-29-23
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	03-27-23
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-23
Florida	NELAP	E87689	06-30-23
HI - RadChem Recognition	State	n/a	06-30-23
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana (All)	NELAP	04080	06-30-23
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-23
MI - RadChem Recognition	State	9005	06-30-23
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-23
New Jersey	NELAP	MO002	06-30-23
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-23
North Dakota	State	R-207	06-30-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181275-1


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
Oklahoma	NELAP	9997	08-31-23
Oregon	NELAP	4157	09-01-23
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23
Texas	NELAP	T104704193	07-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00028	06-11-23
Utah	NELAP	MO000542021-14	07-31-23
Virginia	NELAP	10310	06-14-23
Washington	State	C592	08-30-23
West Virginia DEP	State	381	10-31-23

Client Information		Lab PM: Cisneros, Roxanne		Carrier Tracking No(s): 240-93466-34576.1	
Client Contact: Taylor Huffman		E-Mail: roxanne.cisneros@Eurofinsnet.com		State of Origin:	
Company: Lightstone Generation Gavin Power LLC		PWSID:		Job #:	
Address: 7397 OH-7		City: Cheshire		Preservation Codes:	
State, Zip: OH, 45620		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		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)	
Phone: 740-925-3171(Tel)		PO #: 2935505		Other:	
Email: taylor.huffman@lightstonegen.com		WO #:		Total Number of Containers: <input checked="" type="checkbox"/>	
Project Name: Federal CCR Wells - App IV		Project #: 24019633		Special Instructions/Note:	
Site:		SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Soil, Sludge, Other)	Field Filtered Sample (Yes or No)	Perform MS/MS (Yes or No)	Preservation Code:		Special Instructions/Note:
							D	N	
BAG-01-F-20230301-01	3-1-23	1235	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	6020, 7470A	300.0_28D - Fluoride	
MW-6-F-20230301-01	3-1-23	1321	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		2220B - Alkalinity	
BAG-23-F-20230301-01	3-1-23	1402	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
BAG-08-F-20230301-01	3-1-23	1453	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
EB-01-F-20230301-01	3-1-23	1515	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			



240-181275 Chain of Custody

<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Empty Kit Relinquished by: <i>Bobby Cate</i>		Method of Shipment:	
Relinquished by: <i>Gemma Rivera</i>		Date/Time: 3-2-23 / 0930	
Relinquished by: <i>Gemma Rivera</i>		Date/Time: 3-2-23 / 1700	
Relinquished by: <i>Gemma Rivera</i>		Date/Time: 3-2-23 / 1100	
Relinquished by: <i>Gemma Rivera</i>		Date/Time: 3-3-23 / 800	
Relinquished by: <i>Gemma Rivera</i>		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks:	



Eurofins - Canton Sample Receipt Form/Narrative

Login # : _____

Barberton Facility

Client Lightstone

Site Name _____

Cooler unpacked by:

Cooler Received on 3-3-23

Opened on 3-3-23

Rachelle Haidet

FedEx: 1st Grd Exp UPS FAS Clipper 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 Elastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt See Multiple Cooler Form

IR GUN # IR-13 (CF -0.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

IR GUN # IR-16 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

IR GUN # IR-17 (CF -0.3 °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# HC293086

14. Were VOAs on the COC? Yes No

15. Were air bubbles >6 mm in any VOA vials? Yes No NA  ← Larger than this.

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: _____

Temperature readings:

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-01-F-20230301-01	240-181275-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-01-F-20230301-01	240-181275-D-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-01-F-20230301-01	240-181275-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
MW-6-F-20230301-01	240-181275-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
MW-6-F-20230301-01	240-181275-D-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
MW-6-F-20230301-01	240-181275-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-23-F-20230301-01	240-181275-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-23-F-20230301-01	240-181275-D-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-23-F-20230301-01	240-181275-E-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-08-F-20230301-01	240-181275-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-08-F-20230301-01	240-181275-D-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-08-F-20230301-01	240-181275-E-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230301-01	240-181275-C-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230301-01	240-181275-D-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230301-01	240-181275-E-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

Eurofins Canton
 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) Company: TestAmerica Laboratories, Inc. Address: 13715 Rider Trail North, City: Earth City State, Zip: MO, 63045 Phone: 314-298-8566(Tel) 314-298-8757(Fax) Email: Project Name: Federal CCR Wells - App IV Site:				Lab PM: Cisneros, Roxanne E-Mail: roxanne.cisneros@et.eurofins.com State of Origin: Ohio Accreditations Required (See note):								
Due Date Requested: 4/3/2023 TAT Requested (days): PO #: WO #: Project #: 24019633 SSOW#:				Camer Tracking No(s): COC No: 240-164595.1 Page: Page 1 of 1 Job #: 240-181275-1								
Sample Identification - Client ID (Lab ID)				Analysis Requested								
Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Sewage, Oil, Sludge, etc)	Preservation Code	Filter Used (Yes or No)	Analysis Method (Yes or No)	Analysis Method	Analysis Method	Analysis Method	Total Number of Containers	Special Instructions/Note:
BAC-01-F-20230301-01 (240-181275-1)	3/1/23	12:35 Eastern	Water	Water				9315_Ra226/PreSep_21 Radium-226 (GFC)	9320_Ra226/PreSep_0 Radium-226 (GFC)	Ra226Ra228_GFC/Combined Radium-226 and Radium-228	2	Recount of TAR after 21 day ingrowth if > action limit, save planchet
MW-6-F-20230301-01 (240-181275-2)	3/1/23	13:21 Eastern	Water	Water							2	Recount of TAR after 21 day ingrowth if > action limit, save planchet
BAC-23-F-20230301-01 (240-181275-3)	3/1/23	14:02 Eastern	Water	Water							2	Recount of TAR after 21 day ingrowth if > action limit, save planchet
BAC-08-F-20230301-01 (240-181275-4)	3/1/23	14:53 Eastern	Water	Water							2	Recount of TAR after 21 day ingrowth if > action limit, save planchet
EB-001-F-20230301-01 (240-181275-5)	3/1/23	15:15 Eastern	Water	Water							2	Recount of TAR after 21 day ingrowth if > action limit, save planchet
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/test/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 Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2 Empty Kit Relinquished by: Date: Time: Relinquished by: <i>FEDEY</i> Date: 3/22/23 Time: 17:10 Relinquished by: <i>Barbara Shanaboy-Hagyard</i> Date: 3/6/23 Time: 09:00 Relinquished by: <i>Barbara Shanaboy-Hagyard</i> Date: 3/6/23 Time: 09:00 Company: <i>ETA</i>												
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:												
Cooler Temperature(s) °C and Other Remarks:												



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-181275-1

Login Number: 181275

List Number: 2

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

List Creation: 03/06/23 01:59 PM

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



 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 3/14/2023 8:47:48 PM

JOB DESCRIPTION

Federal CCR Wells - App III

JOB NUMBER

240-181277-1

Eurofins Canton

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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
3/14/2023 8:47:48 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

Job ID: 240-181277-1

Laboratory: Eurofins Canton

Narrative

Job Narrative
240-181277-1

Receipt

The samples were received on 3/3/2023 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.

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Method Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CAN
6020B	Metals (ICP/MS)	SW846	EET CAN
2320B-1997	Alkalinity, Total	SM	EET CAN
300.0	Anions, Ion Chromatography	EPA	EET CAN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CAN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CAN

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 CAN = Eurofins Canton, 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 - App III

Job ID: 240-181277-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-181277-1	BAC-23-F-20230301-01	Water	03/01/23 14:02	03/03/23 08:00
240-181277-2	BAC-08-F-20230301-01	Water	03/01/23 14:53	03/03/23 08:00
240-181277-3	EB-001-F-20230301-01	Water	03/01/23 15:15	03/03/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

Client Sample ID: BAC-23-F-20230301-01

Lab Sample ID: 240-181277-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	280		100	57	ug/L	1		6010D	Total Recoverable
Calcium	130000		1000	580	ug/L	1		6020B	Total Recoverable
Magnesium	16000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	2000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	20000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	46		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	150		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	500		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-08-F-20230301-01

Lab Sample ID: 240-181277-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	120		100	57	ug/L	1		6010D	Total Recoverable
Calcium	91000		1000	580	ug/L	1		6020B	Total Recoverable
Magnesium	13000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	13000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	21		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	83		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	350		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-001-F-20230301-01

Lab Sample ID: 240-181277-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

Client Sample ID: BAC-23-F-20230301-01

Lab Sample ID: 240-181277-1

Date Collected: 03/01/23 14:02

Matrix: Water

Date Received: 03/03/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	280		100	57	ug/L		03/06/23 14:00	03/07/23 22:09	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130000		1000	580	ug/L		03/06/23 14:00	03/07/23 19:50	1
Magnesium	16000		1000	200	ug/L		03/06/23 14:00	03/07/23 19:50	1
Potassium	2000		1000	220	ug/L		03/06/23 14:00	03/07/23 19:50	1
Sodium	20000		1000	330	ug/L		03/06/23 14:00	03/07/23 19:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 17:58	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			03/06/23 17:58	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 17:58	1
Chloride (EPA 300.0)	46		1.0	0.13	mg/L			03/13/23 20:07	1
Fluoride (EPA 300.0)	0.11		0.050	0.024	mg/L			03/13/23 20:07	1
Sulfate (EPA 300.0)	150		1.0	0.35	mg/L			03/13/23 20:07	1
Total Dissolved Solids (SM 2540C)	500		10	7.8	mg/L			03/08/23 10:14	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

Client Sample ID: BAC-08-F-20230301-01

Lab Sample ID: 240-181277-2

Date Collected: 03/01/23 14:53

Matrix: Water

Date Received: 03/03/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	120		100	57	ug/L		03/06/23 14:00	03/07/23 22:25	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	91000		1000	580	ug/L		03/06/23 14:00	03/07/23 19:52	1
Magnesium	13000		1000	200	ug/L		03/06/23 14:00	03/07/23 19:52	1
Potassium	1400		1000	220	ug/L		03/06/23 14:00	03/07/23 19:52	1
Sodium	13000		1000	330	ug/L		03/06/23 14:00	03/07/23 19:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	200		5.0	2.6	mg/L			03/06/23 18:03	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	200		5.0	2.6	mg/L			03/06/23 18:03	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 18:03	1
Chloride (EPA 300.0)	21		1.0	0.13	mg/L			03/13/23 20:47	1
Fluoride (EPA 300.0)	0.12		0.050	0.024	mg/L			03/13/23 20:47	1
Sulfate (EPA 300.0)	83		1.0	0.35	mg/L			03/13/23 20:47	1
Total Dissolved Solids (SM 2540C)	350		10	7.8	mg/L			03/08/23 10:14	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

Client Sample ID: EB-001-F-20230301-01

Lab Sample ID: 240-181277-3

Date Collected: 03/01/23 15:15

Matrix: Water

Date Received: 03/03/23 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		03/06/23 14:00	03/07/23 22:29	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	580	ug/L		03/06/23 14:00	03/07/23 20:05	1
Magnesium	ND		1000	200	ug/L		03/06/23 14:00	03/07/23 20:05	1
Potassium	ND		1000	220	ug/L		03/06/23 14:00	03/07/23 20:05	1
Sodium	ND		1000	330	ug/L		03/06/23 14:00	03/07/23 20:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 18:07	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 18:07	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 18:07	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			03/13/23 21:07	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			03/13/23 21:07	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			03/13/23 21:07	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			03/08/23 10:14	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-564412/1-A
Matrix: Water
Analysis Batch: 564578

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 564412

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		03/06/23 14:00	03/07/23 22:01	1

Lab Sample ID: LCS 240-564412/2-A
Matrix: Water
Analysis Batch: 564578

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 564412

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1050		ug/L		105	80 - 120

Lab Sample ID: 240-181277-1 MS
Matrix: Water
Analysis Batch: 564578

Client Sample ID: BAC-23-F-20230301-01
Prep Type: Total Recoverable
Prep Batch: 564412

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	280		1000	1370		ug/L		109	75 - 125

Lab Sample ID: 240-181277-1 MSD
Matrix: Water
Analysis Batch: 564578

Client Sample ID: BAC-23-F-20230301-01
Prep Type: Total Recoverable
Prep Batch: 564412

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	280		1000	1380		ug/L		110	75 - 125	1	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-564412/1-A
Matrix: Water
Analysis Batch: 564592

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 564412

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	580	ug/L		03/06/23 14:00	03/07/23 19:45	1
Magnesium	ND		1000	200	ug/L		03/06/23 14:00	03/07/23 19:45	1
Potassium	ND		1000	220	ug/L		03/06/23 14:00	03/07/23 19:45	1
Sodium	ND		1000	330	ug/L		03/06/23 14:00	03/07/23 19:45	1

Lab Sample ID: LCS 240-564412/3-A
Matrix: Water
Analysis Batch: 564592

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 564412

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	24200		ug/L		97	80 - 120
Magnesium	25000	25000		ug/L		100	80 - 120
Potassium	25000	24600		ug/L		98	80 - 120
Sodium	25000	24800		ug/L		99	80 - 120

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

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

Lab Sample ID: 240-181277-2 MS
 Matrix: Water
 Analysis Batch: 564592

Client Sample ID: BAC-08-F-20230301-01
 Prep Type: Total Recoverable
 Prep Batch: 564412

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier				Limits	
Calcium	91000		25000	117000		ug/L		101	80 - 120	
Magnesium	13000		25000	38500		ug/L		102	80 - 120	
Potassium	1400		25000	26700		ug/L		101	80 - 120	
Sodium	13000		25000	39200		ug/L		103	80 - 120	

Lab Sample ID: 240-181277-2 MSD
 Matrix: Water
 Analysis Batch: 564592

Client Sample ID: BAC-08-F-20230301-01
 Prep Type: Total Recoverable
 Prep Batch: 564412

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec		RPD
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit
Calcium	91000		25000	116000		ug/L		98	80 - 120		0
Magnesium	13000		25000	37500		ug/L		98	80 - 120		3
Potassium	1400		25000	25800		ug/L		98	80 - 120		3
Sodium	13000		25000	38000		ug/L		99	80 - 120		3

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-564459/56
 Matrix: Water
 Analysis Batch: 564459

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			03/06/23 14:59	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 14:59	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 14:59	1

Lab Sample ID: MB 240-564459/83
 Matrix: Water
 Analysis Batch: 564459

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			03/06/23 16:43	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 16:43	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 16:43	1

Lab Sample ID: LCS 240-564459/82
 Matrix: Water
 Analysis Batch: 564459

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec	
		Result	Qualifier				Limits	
Total Alkalinity	146	145		mg/L		99	86 - 123	

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-565216/3
 Matrix: Water
 Analysis Batch: 565216

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	ND		1.0	0.13	mg/L			03/13/23 12:16	1

Eurofins Canton

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 240-565216/3
 Matrix: Water
 Analysis Batch: 565216

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Fluoride	ND		0.050	0.024	mg/L			03/13/23 12:16	1
Sulfate	ND		1.0	0.35	mg/L			03/13/23 12:16	1

Lab Sample ID: LCS 240-565216/4
 Matrix: Water
 Analysis Batch: 565216

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.54		mg/L		102	90 - 110
Sulfate	50.0	51.8		mg/L		104	90 - 110

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

Lab Sample ID: MB 240-564631/1
 Matrix: Water
 Analysis Batch: 564631

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Dissolved Solids	ND		10	7.8	mg/L			03/08/23 10:14	1

Lab Sample ID: LCS 240-564631/2
 Matrix: Water
 Analysis Batch: 564631

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

Metals

Prep Batch: 564412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181277-1	BAC-23-F-20230301-01	Total Recoverable	Water	3005A	
240-181277-2	BAC-08-F-20230301-01	Total Recoverable	Water	3005A	
240-181277-3	EB-001-F-20230301-01	Total Recoverable	Water	3005A	
MB 240-564412/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-564412/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-564412/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-181277-1 MS	BAC-23-F-20230301-01	Total Recoverable	Water	3005A	
240-181277-1 MSD	BAC-23-F-20230301-01	Total Recoverable	Water	3005A	
240-181277-2 MS	BAC-08-F-20230301-01	Total Recoverable	Water	3005A	
240-181277-2 MSD	BAC-08-F-20230301-01	Total Recoverable	Water	3005A	

Analysis Batch: 564578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181277-1	BAC-23-F-20230301-01	Total Recoverable	Water	6010D	564412
240-181277-2	BAC-08-F-20230301-01	Total Recoverable	Water	6010D	564412
240-181277-3	EB-001-F-20230301-01	Total Recoverable	Water	6010D	564412
MB 240-564412/1-A	Method Blank	Total Recoverable	Water	6010D	564412
LCS 240-564412/2-A	Lab Control Sample	Total Recoverable	Water	6010D	564412
240-181277-1 MS	BAC-23-F-20230301-01	Total Recoverable	Water	6010D	564412
240-181277-1 MSD	BAC-23-F-20230301-01	Total Recoverable	Water	6010D	564412

Analysis Batch: 564592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181277-1	BAC-23-F-20230301-01	Total Recoverable	Water	6020B	564412
240-181277-2	BAC-08-F-20230301-01	Total Recoverable	Water	6020B	564412
240-181277-3	EB-001-F-20230301-01	Total Recoverable	Water	6020B	564412
MB 240-564412/1-A	Method Blank	Total Recoverable	Water	6020B	564412
LCS 240-564412/3-A	Lab Control Sample	Total Recoverable	Water	6020B	564412
240-181277-2 MS	BAC-08-F-20230301-01	Total Recoverable	Water	6020B	564412
240-181277-2 MSD	BAC-08-F-20230301-01	Total Recoverable	Water	6020B	564412

General Chemistry

Analysis Batch: 564459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181277-1	BAC-23-F-20230301-01	Total/NA	Water	2320B-1997	
240-181277-2	BAC-08-F-20230301-01	Total/NA	Water	2320B-1997	
240-181277-3	EB-001-F-20230301-01	Total/NA	Water	2320B-1997	
MB 240-564459/56	Method Blank	Total/NA	Water	2320B-1997	
MB 240-564459/83	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-564459/82	Lab Control Sample	Total/NA	Water	2320B-1997	

Analysis Batch: 564631

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181277-1	BAC-23-F-20230301-01	Total/NA	Water	SM 2540C	
240-181277-2	BAC-08-F-20230301-01	Total/NA	Water	SM 2540C	
240-181277-3	EB-001-F-20230301-01	Total/NA	Water	SM 2540C	
MB 240-564631/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-564631/2	Lab Control Sample	Total/NA	Water	SM 2540C	

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

General Chemistry

Analysis Batch: 565216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181277-1	BAC-23-F-20230301-01	Total/NA	Water	300.0	
240-181277-2	BAC-08-F-20230301-01	Total/NA	Water	300.0	
240-181277-3	EB-001-F-20230301-01	Total/NA	Water	300.0	
MB 240-565216/3	Method Blank	Total/NA	Water	300.0	
LCS 240-565216/4	Lab Control Sample	Total/NA	Water	300.0	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

Client Sample ID: BAC-23-F-20230301-01

Lab Sample ID: 240-181277-1

Date Collected: 03/01/23 14:02

Matrix: Water

Date Received: 03/03/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6010D		1	564578	KLC	EET CAN	03/07/23 22:09
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6020B		1	564592	AJC	EET CAN	03/07/23 19:50
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 17:58
Total/NA	Analysis	300.0		1	565216	JWW	EET CAN	03/13/23 20:07
Total/NA	Analysis	SM 2540C		1	564631	GH	EET CAN	03/08/23 10:14

Client Sample ID: BAC-08-F-20230301-01

Lab Sample ID: 240-181277-2

Date Collected: 03/01/23 14:53

Matrix: Water

Date Received: 03/03/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6010D		1	564578	KLC	EET CAN	03/07/23 22:25
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6020B		1	564592	AJC	EET CAN	03/07/23 19:52
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 18:03
Total/NA	Analysis	300.0		1	565216	JWW	EET CAN	03/13/23 20:47
Total/NA	Analysis	SM 2540C		1	564631	GH	EET CAN	03/08/23 10:14

Client Sample ID: EB-001-F-20230301-01

Lab Sample ID: 240-181277-3

Date Collected: 03/01/23 15:15

Matrix: Water

Date Received: 03/03/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6010D		1	564578	KLC	EET CAN	03/07/23 22:29
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6020B		1	564592	AJC	EET CAN	03/07/23 20:05
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 18:07
Total/NA	Analysis	300.0		1	565216	JWW	EET CAN	03/13/23 21:07
Total/NA	Analysis	SM 2540C		1	564631	GH	EET CAN	03/08/23 10:14

Laboratory References:

EET CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181277-1

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23 *
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-27-23 *
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23 *
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-23 *
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-27-23 *
Ohio VAP	State	CL0024	02-27-23 *
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23


* Accreditation/Certification renewal pending - accreditation/certification considered valid.



Client Information		Lab PW	Carrier Tracking No(s)	COC No:
Client Contact: Bobby Castle		Cisneros, Roxanne		240-93465-34577.1
Company: Taylor Huffman		E-Mail: roxanne.cisneros@Eurofinset.com	State of Origin:	Page: Page 1 of 1
Address: Lightstone Generation Gavin Power LLC		PWSID:	Job #:	
City: Cheshire				
State, Zip: OH, 45620				
Phone: 740-925-3171(Tel)				
Email: taylor.huffman@lightstonegen.com				
Project Name: Federal CCR Wells - App III				
Site:				

Due Date Requested:		Analysis Requested	
TAT Requested (days):	Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No	Total Number of Containers: <input checked="" type="checkbox"/>	
PO #: 2935505	WO #:	Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
Project #: 24019633	SSOW#:	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)	

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=Water, S=Soil, O=Other)	Field Filtered Sample (Yes or No)	MS/MSD (Yes or No)	6010B, 6020	2540C, Calcd, 300.0, 28D	2220B - Alkalinity	Special Instructions/Note:
BAC-23 - F-20230301 - 01	3-1-23	1402	G	W						
BAC-08 - F-20230301 - 01	3-1-23	1453	G	W						
EB-001 - F-20230301 - 01	3-1-23	1515	G	W						



240-181277 Chain of Custody

Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Return To Client	<input type="checkbox"/> Archive For _____ Months
<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input type="checkbox"/> Disposal By Lab	
Deliverable Requested: I, II, III, IV, Other (specify)			
Empty Kit Relinquished by:		Special Instructions/QC Requirements:	
Relinquished by: Bobby Castle		Date: 3-2-23 / 09:30	
Relinquished by: Gavin Rivero		Date: 3-2-23 / 17:00	
Relinquished by:		Date:	

Relinquished by:		Received by:	
Bobby Castle		Gavin Rivero	
Date: 3-2-23 / 17:00		Date: 3-2-23 / 11:00	
Company: Euro		Company: Euro	
Custody Seal No.: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks:	

Eurofins - Canton Sample Receipt Form/Narrative
Barberton Facility

Login # : _____

Client Lightstone Site Name _____
 Cooler Received on 3-3-23 Opened on 3-3-23
 FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off Eurofins Courier Other _____

Cooler unpacked by:
Rachelle Haidet


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

Eurofins Cooler # EC Foam Box _____ Client Cooler _____ Box _____ Other _____
 Packing material used: Bubble Wrap Foam Elastic Bag None _____ Other _____
 COOLANT: Wet Ice Blue Ice _____ Dry Ice _____ Water _____ None _____

1. Cooler temperature upon receipt See Multiple Cooler Form
 IR GUN # IR-13 (CF -0.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN # IR-16 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN # IR-17 (CF -0.3 °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
 -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 NA
 -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# HC293086
 14. Were VOAs on the COC? Yes No
 15. Were air bubbles >6 mm in any VOA vials? Yes No NA  ← Larger than this.
 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: _____

Tests that are not checked for pH by Receiving:
 VOAs
 Oil and Grease
 TOC

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-23-F-20230301-01	240-181277-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-08-F-20230301-01	240-181277-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230301-01	240-181277-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____



ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 4/5/2023 2:09:36 PM

JOB DESCRIPTION

Federal CCR Wells - App IV

JOB NUMBER

240-181314-1

Eurofins Canton

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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
4/5/2023 2:09:36 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

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.

Rad

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
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.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Job ID: 240-181314-1

Laboratory: Eurofins Canton

Narrative

Job Narrative 240-181314-1

Comments

No additional comments.

Receipt

The samples were received on 3/3/2023 2:35 PM. 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 0.4° C, 1.0° C and 2.3° C.

RAD

Methods 9315: Radium-226 prep batch 160-602832: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. DUP-003-BAC-07-F-20230302-01 (240-181314-2), BAC-18-F-20230302-01 (240-181314-4), BAC-06-F-20230302-01 (240-181314-5), BAC-04-F-20230302-01 (240-181314-7), EB-001-F-20230302-01 (240-181314-8), (LCS 160-602832/2-A), (LCSD 160-602832/25-A) and (MB 160-602832/1-A)

Methods 9315: Radium-226 batch 602828: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-07-F-20230302-01 (240-181314-1), (LCS 160-602828/2-A), (LCSD 160-602828/3-A) and (MB 160-602828/1-A)

Methods 9315: Radium-226 batch 603346: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-02-F-20230302-01 (240-181314-3), BAC-05-F-20230302-01 (240-181314-6), BAC-05-F-20230302-01 (240-181314-6[MS]), BAC-05-F-20230302-01 (240-181314-6[MSD]), (LCS 160-603346/2-A), (LCSD 160-603346/3-A) and (MB 160-603346/1-A)

Methods 9320: Radium-228 batch 602829: The LCS recovered at (139%). 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 (62-148%) per method requirements. The LCS passes, no further action is required. (LCSD 160-602829/3-A)

Methods 9320: Radium-228 batch 602829: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-07-F-20230302-01 (240-181314-1), (LCS 160-602829/2-A), (LCSD 160-602829/3-A) and (MB 160-602829/1-A)

Methods 9320: Radium-228 batch 602838: The LCS/LCSD recovered at (143% / 130%). 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/LCSD are not from this agency and are therefore held to our in-house statistical limits of (62-148%) per method requirements. The LCS/LCSD pass, no further action is required. (LCS 160-602838/2-A) and (LCSD 160-602838/25-A)

Method 9320: Radium-228 batch 602838: The detection goal was not met for the following sample(s). Samples were prepped at a reduced volume due to the presence of matrix interferences: BAC-18-F-20230302-01 (240-181314-4) and BAC-04-F-20230302-01 (240-181314-7). Analytical results are reported with the detection limit achieved.

Methods 9320: Radium-228 batch 602838: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. DUP-003-BAC-07-F-20230302-01 (240-181314-2), BAC-18-F-20230302-01 (240-181314-4), BAC-06-F-20230302-01 (240-181314-5), BAC-04-F-20230302-01 (240-181314-7), EB-001-F-20230302-01 (240-181314-8), (LCS 160-602838/2-A), (LCSD 160-602838/25-A) and (MB 160-602838/1-A)

Methods 9320: Radium-228 batch 603347: The LCS recovered at (132%). 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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Job ID: 240-181314-1 (Continued)

Laboratory: Eurofins Canton (Continued)

from this agency and are therefore held to our in-house statistical limits of (62-148%) per method requirements. The LCS passes, no further action is required. (LCS 160-603347/2-A)

Methods 9320: Radium-228 batch 603347: The matrix spike (MS) recovery was outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. BAC-05-F-20230302-01 (240-181314-6[MS])

Methods 9320: Radium-228 batch 603347: The detection goal was not met for the following sample(s). Samples were prepped at a reduced volume due to the presence of matrix interferences: BAC-02-F-20230302-01 (240-181314-3) and BAC-05-F-20230302-01 (240-181314-6). Analytical results are reported with the detection limit achieved.

Methods 9320: Radium-228 batch 603347: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-02-F-20230302-01 (240-181314-3), BAC-05-F-20230302-01 (240-181314-6), BAC-05-F-20230302-01 (240-181314-6[MS]), BAC-05-F-20230302-01 (240-181314-6[MSD]), (LCS 160-603347/2-A), (LCSD 160-603347/3-A) and (MB 160-603347/1-A)

Method PrecSep_0: Radium-228 Prep Batch 602829: Insufficient sample volume was available to perform a sample duplicate for the following samples: BAC-07-F-20230302-01 (240-181314-1). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep_0: The following samples did not form an efficient amount of pellet after the first precipitation during the into ingrowth process.

Method PrecSep-21: Radium-226 Prep Batch 160-602828: Insufficient sample volume was available to perform a sample duplicate for the following samples: BAC-07-F-20230302-01 (240-181314-1). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

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

Metals

Method 6020B: The continuing calibration verification (CCV) associated with batch 240-564732 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: BAC-07-F-20230302-01 (240-181314-1), DUP-003-BAC-07-F-20230302-01 (240-181314-2), BAC-02-F-20230302-01 (240-181314-3), BAC-18-F-20230302-01 (240-181314-4), BAC-06-F-20230302-01 (240-181314-5), BAC-05-F-20230302-01 (240-181314-6), BAC-04-F-20230302-01 (240-181314-7) and EB-001-F-20230302-01 (240-181314-8).

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

General Chemistry

Method SM 2320B: Sample duplicate was not analyzed due to instrument failure. BAC-18-F-20230302-01 (240-181314-4)

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 - App IV

Job ID: 240-181314-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CAN
7470A	Mercury (CVAA)	SW846	EET CAN
2320B-1997	Alkalinity, Total	SM	EET CAN
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CAN
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 CAN
7470A	Preparation, Mercury	SW846	EET CAN
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 CAN = Eurofins Canton, 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 - App IV

Job ID: 240-181314-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-181314-1	BAC-07-F-20230302-01	Water	03/02/23 11:26	03/03/23 14:35
240-181314-2	DUP-003-BAC-07-F-20230302-01	Water	03/02/23 11:26	03/03/23 14:35
240-181314-3	BAC-02-F-20230302-01	Water	03/02/23 12:37	03/03/23 14:35
240-181314-4	BAC-18-F-20230302-01	Water	03/02/23 13:33	03/03/23 14:35
240-181314-5	BAC-06-F-20230302-01	Water	03/02/23 14:16	03/03/23 14:35
240-181314-6	BAC-05-F-20230302-01	Water	03/02/23 15:30	03/03/23 14:35
240-181314-7	BAC-04-F-20230302-01	Water	03/02/23 16:26	03/03/23 14:35
240-181314-8	EB-001-F-20230302-01	Water	03/02/23 16:45	03/03/23 14:35

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-07-F-20230302-01

Lab Sample ID: 240-181314-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	48		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.5		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	6.2	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	130		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	130		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.080		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: DUP-003-BAC-07-F-20230302-01

Lab Sample ID: 240-181314-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	47		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.5		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	6.2	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	130		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	130		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.081		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-02-F-20230302-01

Lab Sample ID: 240-181314-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	8.0		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	170		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.79	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Chromium	13		5.0	2.5	ug/L	1		6020B	Total Recoverable
Cobalt	6.3		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	9.5		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	8.2		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	40000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	3700		1000	220	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-02-F-20230302-01 (Continued)

Lab Sample ID: 240-181314-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	70000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	260		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	260		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.17		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-18-F-20230302-01

Lab Sample ID: 240-181314-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.5	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	39		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	3.4		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.4		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.6	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	14000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	100		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	100		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.063		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-06-F-20230302-01

Lab Sample ID: 240-181314-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	90		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	3.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	5.3	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	25000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.098		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-05-F-20230302-01

Lab Sample ID: 240-181314-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.0	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	45		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.48	J	1.0	0.20	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-05-F-20230302-01 (Continued)

Lab Sample ID: 240-181314-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	8.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.5		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	10		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	23000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	28000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.69	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	57		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	57		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.11		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-04-F-20230302-01

Lab Sample ID: 240-181314-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.3	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	42		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.2		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.98	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	5.9	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	19000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	26000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	100		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	100		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.083		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: EB-001-F-20230302-01

Lab Sample ID: 240-181314-8

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-07-F-20230302-01

Lab Sample ID: 240-181314-1

Date Collected: 03/02/23 11:26

Matrix: Water

Date Received: 03/03/23 14:35

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		03/05/23 14:00	03/08/23 17:37	1
Arsenic	ND		5.0	0.75	ug/L		03/05/23 14:00	03/08/23 17:37	1
Barium	48		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 17:37	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 17:37	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:37	1
Chromium	ND		5.0	2.5	ug/L		03/05/23 14:00	03/09/23 14:39	1
Cobalt	1.5		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 17:37	1
Lead	ND		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 17:37	1
Lithium	6.2 J		8.0	1.7	ug/L		03/05/23 14:00	03/09/23 14:39	1
Magnesium	21000		1000	200	ug/L		03/05/23 14:00	03/08/23 17:37	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 17:37	1
Potassium	1400		1000	220	ug/L		03/05/23 14:00	03/08/23 17:37	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 17:37	1
Sodium	16000		1000	330	ug/L		03/05/23 14:00	03/08/23 17:37	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:37	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		03/06/23 10:00	03/07/23 20:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	130		5.0	2.6	mg/L			03/14/23 14:41	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	130		5.0	2.6	mg/L			03/14/23 14:41	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/14/23 14:41	1
Fluoride (EPA 300.0-1993 R2.1)	0.080		0.050	0.024	mg/L			03/28/23 08:15	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	0.0841	U	0.0619	0.0624	1.00	0.0857	pCi/L	03/08/23 11:39	04/04/23 19:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.1		30 - 110					03/08/23 11:39	04/04/23 19:58	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	0.414	U	0.328	0.330	1.00	0.506	pCi/L	03/08/23 12:03	03/22/23 12:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.1		30 - 110					03/08/23 12:03	03/22/23 12:41	1
Y Carrier	87.5		30 - 110					03/08/23 12:03	03/22/23 12:41	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-07-F-20230302-01

Lab Sample ID: 240-181314-1

Date Collected: 03/02/23 11:26

Matrix: Water

Date Received: 03/03/23 14:35

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2 σ +/-)	Total Uncert. (2 σ +/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.498	U	0.334	0.336	5.00	0.506	pCi/L		04/05/23 12:45	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: DUP-003-BAC-07-F-20230302-01

Lab Sample ID: 240-181314-2

Date Collected: 03/02/23 11:26

Matrix: Water

Date Received: 03/03/23 14:35

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		03/05/23 14:00	03/08/23 17:41	1
Arsenic	ND		5.0	0.75	ug/L		03/05/23 14:00	03/08/23 17:41	1
Barium	47		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 17:41	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 17:41	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:41	1
Chromium	ND		5.0	2.5	ug/L		03/05/23 14:00	03/09/23 14:47	1
Cobalt	1.5		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 17:41	1
Lead	ND		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 17:41	1
Lithium	6.2 J		8.0	1.7	ug/L		03/05/23 14:00	03/09/23 14:47	1
Magnesium	21000		1000	200	ug/L		03/05/23 14:00	03/08/23 17:41	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 17:41	1
Potassium	1400		1000	220	ug/L		03/05/23 14:00	03/08/23 17:41	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 17:41	1
Sodium	16000		1000	330	ug/L		03/05/23 14:00	03/08/23 17:41	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:41	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		03/06/23 10:00	03/07/23 20:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	130		5.0	2.6	mg/L			03/06/23 19:53	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	130		5.0	2.6	mg/L			03/06/23 19:53	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 19:53	1
Fluoride (EPA 300.0-1993 R2.1)	0.081		0.050	0.024	mg/L			03/28/23 08:35	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	0.124		0.0688	0.0697	1.00	0.0824	pCi/L	03/08/23 12:16	04/03/23 15:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.4		30 - 110					03/08/23 12:16	04/03/23 15:04	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	0.992		0.373	0.384	1.00	0.450	pCi/L	03/08/23 13:13	03/23/23 11:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.4		30 - 110					03/08/23 13:13	03/23/23 11:56	1
Y Carrier	82.2		30 - 110					03/08/23 13:13	03/23/23 11:56	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: DUP-003-BAC-07-F-20230302-01

Lab Sample ID: 240-181314-2

Date Collected: 03/02/23 11:26

Matrix: Water

Date Received: 03/03/23 14:35

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	1.12		0.379	0.390	5.00	0.450	pCi/L		04/03/23 17:14	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-02-F-20230302-01

Lab Sample ID: 240-181314-3

Date Collected: 03/02/23 12:37

Matrix: Water

Date Received: 03/03/23 14:35

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		03/05/23 14:00	03/08/23 17:46	1
Arsenic	8.0		5.0	0.75	ug/L		03/05/23 14:00	03/08/23 17:46	1
Barium	170		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 17:46	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 17:46	1
Cadmium	0.79	J	1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:46	1
Chromium	13		5.0	2.5	ug/L		03/05/23 14:00	03/09/23 14:50	1
Cobalt	6.3		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 17:46	1
Lead	9.5		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 17:46	1
Lithium	8.2		8.0	1.7	ug/L		03/05/23 14:00	03/09/23 14:50	1
Magnesium	40000		1000	200	ug/L		03/05/23 14:00	03/08/23 17:46	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 17:46	1
Potassium	3700		1000	220	ug/L		03/05/23 14:00	03/08/23 17:46	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 17:46	1
Sodium	70000		1000	330	ug/L		03/05/23 14:00	03/08/23 17:46	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:46	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		03/06/23 10:00	03/07/23 20:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	260		5.0	2.6	mg/L			03/06/23 19:57	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	260		5.0	2.6	mg/L			03/06/23 19:57	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 19:57	1
Fluoride (EPA 300.0-1993 R2.1)	0.17		0.050	0.024	mg/L			03/28/23 08:55	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.613	U	0.476	0.479	1.00	0.697	pCi/L	03/13/23 09:56	04/04/23 15:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	58.2		30 - 110					03/13/23 09:56	04/04/23 15:13	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	3.51	G	2.21	2.23	1.00	3.21	pCi/L	03/13/23 10:14	03/27/23 12:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	58.2		30 - 110					03/13/23 10:14	03/27/23 12:12	1
Y Carrier	83.0		30 - 110					03/13/23 10:14	03/27/23 12:12	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-02-F-20230302-01

Lab Sample ID: 240-181314-3

Date Collected: 03/02/23 12:37

Matrix: Water

Date Received: 03/03/23 14:35

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	4.12		2.26	2.28	5.00	3.21	pCi/L		04/05/23 13:07	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-18-F-20230302-01

Lab Sample ID: 240-181314-4

Date Collected: 03/02/23 13:33

Matrix: Water

Date Received: 03/03/23 14:35

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		03/05/23 14:00	03/08/23 17:50	1
Arsenic	1.5	J	5.0	0.75	ug/L		03/05/23 14:00	03/08/23 17:50	1
Barium	39		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 17:50	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 17:50	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:50	1
Chromium	ND		5.0	2.5	ug/L		03/05/23 14:00	03/09/23 14:53	1
Cobalt	3.4		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 17:50	1
Lead	1.4		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 17:50	1
Lithium	6.6	J	8.0	1.7	ug/L		03/05/23 14:00	03/09/23 14:53	1
Magnesium	20000		1000	200	ug/L		03/05/23 14:00	03/08/23 17:50	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 17:50	1
Potassium	1400		1000	220	ug/L		03/05/23 14:00	03/08/23 17:50	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 17:50	1
Sodium	14000		1000	330	ug/L		03/05/23 14:00	03/08/23 17:50	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:50	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		03/06/23 10:00	03/07/23 20:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	100		5.0	2.6	mg/L			03/16/23 16:07	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	100		5.0	2.6	mg/L			03/16/23 16:07	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/16/23 16:07	1
Fluoride (EPA 300.0-1993 R2.1)	0.063		0.050	0.024	mg/L			03/28/23 10:56	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0983	U	0.0995	0.0999	1.00	0.154	pCi/L	03/08/23 12:16	04/03/23 15:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	63.8		30 - 110					03/08/23 12:16	04/03/23 15:04	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.693	U G	0.658	0.661	1.00	1.05	pCi/L	03/08/23 13:13	03/23/23 11:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	63.8		30 - 110					03/08/23 13:13	03/23/23 11:57	1
Y Carrier	82.6		30 - 110					03/08/23 13:13	03/23/23 11:57	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-18-F-20230302-01

Lab Sample ID: 240-181314-4

Date Collected: 03/02/23 13:33

Matrix: Water

Date Received: 03/03/23 14:35

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	0.791	U	0.665	0.669	5.00	1.05	pCi/L		04/03/23 17:14	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-06-F-20230302-01

Lab Sample ID: 240-181314-5

Date Collected: 03/02/23 14:16

Matrix: Water

Date Received: 03/03/23 14:35

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		03/05/23 14:00	03/08/23 17:54	1
Arsenic	ND		5.0	0.75	ug/L		03/05/23 14:00	03/08/23 17:54	1
Barium	90		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 17:54	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 17:54	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:54	1
Chromium	ND		5.0	2.5	ug/L		03/05/23 14:00	03/09/23 14:55	1
Cobalt	3.1		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 17:54	1
Lead	ND		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 17:54	1
Lithium	5.3 J		8.0	1.7	ug/L		03/05/23 14:00	03/09/23 14:55	1
Magnesium	25000		1000	200	ug/L		03/05/23 14:00	03/08/23 17:54	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 17:54	1
Potassium	1400		1000	220	ug/L		03/05/23 14:00	03/08/23 17:54	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 17:54	1
Sodium	15000		1000	330	ug/L		03/05/23 14:00	03/08/23 17:54	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:54	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		03/06/23 10:00	03/07/23 20:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	190		5.0	2.6	mg/L			03/06/23 20:16	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	190		5.0	2.6	mg/L			03/06/23 20:16	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 20:16	1
Fluoride (EPA 300.0-1993 R2.1)	0.098		0.050	0.024	mg/L			03/28/23 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	0.142		0.0832	0.0842	1.00	0.104	pCi/L	03/08/23 12:16	04/03/23 15:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	74.0		30 - 110					03/08/23 12:16	04/03/23 15:04	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	0.875		0.432	0.439	1.00	0.587	pCi/L	03/08/23 13:13	03/23/23 11:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	74.0		30 - 110					03/08/23 13:13	03/23/23 11:57	1
Y Carrier	84.9		30 - 110					03/08/23 13:13	03/23/23 11:57	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-06-F-20230302-01

Lab Sample ID: 240-181314-5

Date Collected: 03/02/23 14:16

Matrix: Water

Date Received: 03/03/23 14:35

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2 σ +/-)	Total Uncert. (2 σ +/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.02		0.440	0.447	5.00	0.587	pCi/L		04/03/23 17:14	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-05-F-20230302-01

Lab Sample ID: 240-181314-6

Date Collected: 03/02/23 15:30

Matrix: Water

Date Received: 03/03/23 14:35

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		03/05/23 14:00	03/08/23 16:48	1
Arsenic	1.0	J	5.0	0.75	ug/L		03/05/23 14:00	03/08/23 16:48	1
Barium	45		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 16:48	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 16:48	1
Cadmium	0.48	J	1.0	0.20	ug/L		03/05/23 14:00	03/08/23 16:48	1
Chromium	ND		5.0	2.5	ug/L		03/05/23 14:00	03/09/23 14:22	1
Cobalt	8.1		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 16:48	1
Lead	1.5		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 16:48	1
Lithium	10		8.0	1.7	ug/L		03/05/23 14:00	03/09/23 14:22	1
Magnesium	23000		1000	200	ug/L		03/05/23 14:00	03/08/23 16:48	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 16:48	1
Potassium	1700		1000	220	ug/L		03/05/23 14:00	03/08/23 16:48	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 16:48	1
Sodium	28000		1000	330	ug/L		03/05/23 14:00	03/08/23 16:48	1
Thallium	0.69	J	1.0	0.20	ug/L		03/05/23 14:00	03/08/23 16:48	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		03/06/23 10:00	03/07/23 20:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	57		5.0	2.6	mg/L			03/06/23 20:20	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	57		5.0	2.6	mg/L			03/06/23 20:20	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 20:20	1
Fluoride (EPA 300.0-1993 R2.1)	0.11		0.050	0.024	mg/L			03/28/23 09:15	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.234	U	0.336	0.337	1.00	0.571	pCi/L	03/13/23 09:56	04/04/23 15:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.2		30 - 110					03/13/23 09:56	04/04/23 15:13	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	-1.10	U G	0.974	0.979	1.00	2.32	pCi/L	03/13/23 10:14	03/27/23 12:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.2		30 - 110					03/13/23 10:14	03/27/23 12:12	1
Y Carrier	81.9		30 - 110					03/13/23 10:14	03/27/23 12:12	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-05-F-20230302-01

Lab Sample ID: 240-181314-6

Date Collected: 03/02/23 15:30

Matrix: Water

Date Received: 03/03/23 14:35

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	-0.862	U	1.03	1.04	5.00	2.32	pCi/L		04/05/23 13:07	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-04-F-20230302-01

Lab Sample ID: 240-181314-7

Date Collected: 03/02/23 16:26

Matrix: Water

Date Received: 03/03/23 14:35

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		03/05/23 14:00	03/08/23 17:59	1
Arsenic	1.3	J	5.0	0.75	ug/L		03/05/23 14:00	03/08/23 17:59	1
Barium	42		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 17:59	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 17:59	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:59	1
Chromium	ND		5.0	2.5	ug/L		03/05/23 14:00	03/09/23 14:58	1
Cobalt	2.2		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 17:59	1
Lead	0.98	J	1.0	0.45	ug/L		03/05/23 14:00	03/08/23 17:59	1
Lithium	5.9	J	8.0	1.7	ug/L		03/05/23 14:00	03/09/23 14:58	1
Magnesium	19000		1000	200	ug/L		03/05/23 14:00	03/08/23 17:59	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 17:59	1
Potassium	1900		1000	220	ug/L		03/05/23 14:00	03/08/23 17:59	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 17:59	1
Sodium	26000		1000	330	ug/L		03/05/23 14:00	03/08/23 17:59	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 17:59	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		03/06/23 10:00	03/07/23 20:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	100		5.0	2.6	mg/L			03/06/23 20:28	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	100		5.0	2.6	mg/L			03/06/23 20:28	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 20:28	1
Fluoride (EPA 300.0-1993 R2.1)	0.083		0.050	0.024	mg/L			03/28/23 11:36	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.144	U	0.122	0.122	1.00	0.180	pCi/L	03/08/23 12:16	04/03/23 15:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	60.7		30 - 110					03/08/23 12:16	04/03/23 15:04	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.497	U G	0.613	0.615	1.00	1.02	pCi/L	03/08/23 13:13	03/23/23 11:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	60.7		30 - 110					03/08/23 13:13	03/23/23 11:57	1
Y Carrier	81.9		30 - 110					03/08/23 13:13	03/23/23 11:57	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-04-F-20230302-01

Lab Sample ID: 240-181314-7

Date Collected: 03/02/23 16:26

Matrix: Water

Date Received: 03/03/23 14:35

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	0.641	U	0.625	0.627	5.00	1.02	pCi/L		04/03/23 17:14	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: EB-001-F-20230302-01

Lab Sample ID: 240-181314-8

Date Collected: 03/02/23 16:45

Matrix: Water

Date Received: 03/03/23 14:35

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		03/05/23 14:00	03/08/23 18:03	1
Arsenic	ND		5.0	0.75	ug/L		03/05/23 14:00	03/08/23 18:03	1
Barium	ND		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 18:03	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 18:03	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 18:03	1
Chromium	ND		5.0	2.5	ug/L		03/05/23 14:00	03/09/23 15:01	1
Cobalt	ND		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 18:03	1
Lead	ND		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 18:03	1
Lithium	ND		8.0	1.7	ug/L		03/05/23 14:00	03/09/23 15:01	1
Magnesium	ND		1000	200	ug/L		03/05/23 14:00	03/08/23 18:03	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 18:03	1
Potassium	ND		1000	220	ug/L		03/05/23 14:00	03/08/23 18:03	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 18:03	1
Sodium	ND		1000	330	ug/L		03/05/23 14:00	03/08/23 18:03	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 18:03	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		03/06/23 10:00	03/07/23 20:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 20:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 20:31	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 20:31	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			03/28/23 11:56	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.00823	U	0.0496	0.0496	1.00	0.0983	pCi/L	03/08/23 12:16	04/03/23 15:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.5		30 - 110					03/08/23 12:16	04/03/23 15:04	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.723		0.354	0.360	1.00	0.474	pCi/L	03/08/23 13:13	03/23/23 11:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.5		30 - 110					03/08/23 13:13	03/23/23 11:59	1
Y Carrier	80.4		30 - 110					03/08/23 13:13	03/23/23 11:59	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: EB-001-F-20230302-01

Lab Sample ID: 240-181314-8

Date Collected: 03/02/23 16:45

Matrix: Water

Date Received: 03/03/23 14:35

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	0.731		0.357	0.363	5.00	0.474	pCi/L		04/03/23 17:14	1

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Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (30-110)	Y
240-181314-1	BAC-07-F-20230302-01	92.1	
240-181314-2	DUP-003-BAC-07-F-20230302-01	92.4	
240-181314-3	BAC-02-F-20230302-01	58.2	
240-181314-4	BAC-18-F-20230302-01	63.8	
240-181314-5	BAC-06-F-20230302-01	74.0	
240-181314-6	BAC-05-F-20230302-01	73.2	
240-181314-6 MS	BAC-05-F-20230302-01	76.3	
240-181314-6 MSD	BAC-05-F-20230302-01	83.9	
240-181314-7	BAC-04-F-20230302-01	60.7	
240-181314-8	EB-001-F-20230302-01	91.5	
LCS 160-602828/2-A	Lab Control Sample	85.3	
LCS 160-602832/2-A	Lab Control Sample	92.4	
LCS 160-603346/2-A	Lab Control Sample	89.3	
LCSD 160-602828/3-A	Lab Control Sample Dup	80.8	
LCSD 160-602832/25-A	Lab Control Sample Dup	93.8	
LCSD 160-603346/3-A	Lab Control Sample Dup	85.6	
MB 160-602828/1-A	Method Blank	85.9	
MB 160-602832/1-A	Method Blank	97.2	
MB 160-603346/1-A	Method Blank	89.5	

Tracer/Carrier Legend
 Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (30-110)	Y (30-110)
240-181314-1	BAC-07-F-20230302-01	92.1	87.5
240-181314-2	DUP-003-BAC-07-F-20230302-01	92.4	82.2
240-181314-3	BAC-02-F-20230302-01	58.2	83.0
240-181314-4	BAC-18-F-20230302-01	63.8	82.6
240-181314-5	BAC-06-F-20230302-01	74.0	84.9
240-181314-6	BAC-05-F-20230302-01	73.2	81.9
240-181314-6 MS	BAC-05-F-20230302-01	76.3	79.6
240-181314-6 MSD	BAC-05-F-20230302-01	83.9	80.7
240-181314-7	BAC-04-F-20230302-01	60.7	81.9
240-181314-8	EB-001-F-20230302-01	91.5	80.4
LCS 160-602829/2-A	Lab Control Sample	85.3	85.2
LCS 160-602838/2-A	Lab Control Sample	92.4	82.6
LCS 160-603347/2-A	Lab Control Sample	89.3	79.3
LCSD 160-602829/3-A	Lab Control Sample Dup	80.8	81.1
LCSD 160-602838/25-A	Lab Control Sample Dup	93.8	80.7
LCSD 160-603347/3-A	Lab Control Sample Dup	85.6	79.3
MB 160-602829/1-A	Method Blank	85.9	84.1
MB 160-602838/1-A	Method Blank	97.2	83.0
MB 160-603347/1-A	Method Blank	89.5	79.6

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-564268/1-A
Matrix: Water
Analysis Batch: 564732

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 564268

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/05/23 14:00	03/08/23 16:39	1
Arsenic	ND		5.0	0.75	ug/L		03/05/23 14:00	03/08/23 16:39	1
Barium	ND		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 16:39	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 16:39	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 16:39	1
Cobalt	ND		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 16:39	1
Lead	ND		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 16:39	1
Magnesium	ND		1000	200	ug/L		03/05/23 14:00	03/08/23 16:39	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 16:39	1
Potassium	ND		1000	220	ug/L		03/05/23 14:00	03/08/23 16:39	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 16:39	1
Sodium	ND		1000	330	ug/L		03/05/23 14:00	03/08/23 16:39	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 16:39	1

Lab Sample ID: MB 240-564268/1-A
Matrix: Water
Analysis Batch: 564901

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 564268

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		5.0	2.5	ug/L		03/05/23 14:00	03/09/23 14:16	1
Lithium	ND		8.0	1.7	ug/L		03/05/23 14:00	03/09/23 14:16	1

Lab Sample ID: LCS 240-564268/2-A
Matrix: Water
Analysis Batch: 564732

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 564268

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	101		ug/L		101	80 - 120
Arsenic	1000	908		ug/L		91	80 - 120
Barium	1000	962		ug/L		96	80 - 120
Beryllium	500	485	^+	ug/L		97	80 - 120
Cadmium	500	480		ug/L		96	80 - 120
Cobalt	500	462		ug/L		92	80 - 120
Lead	500	501		ug/L		100	80 - 120
Magnesium	25000	24900		ug/L		99	80 - 120
Molybdenum	500	467		ug/L		93	80 - 120
Potassium	25000	24000		ug/L		96	80 - 120
Selenium	1000	915		ug/L		91	80 - 120
Sodium	25000	24900		ug/L		100	80 - 120
Thallium	1000	968		ug/L		97	80 - 120

Lab Sample ID: LCS 240-564268/2-A
Matrix: Water
Analysis Batch: 564901

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 564268

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium	500	486		ug/L		97	80 - 120
Lithium	500	479		ug/L		96	80 - 120

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

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

Lab Sample ID: 240-181314-6 MS
Matrix: Water
Analysis Batch: 564732

Client Sample ID: BAC-05-F-20230302-01
Prep Type: Total Recoverable
Prep Batch: 564268

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier				Limits	Limits
Antimony	ND		100	104		ug/L		104	80 - 120	
Arsenic	1.0	J	1000	904		ug/L		90	80 - 120	
Barium	45		1000	1030		ug/L		98	80 - 120	
Beryllium	ND	^+	500	486	^+	ug/L		97	80 - 120	
Cadmium	0.48	J	500	469		ug/L		94	80 - 120	
Cobalt	8.1		500	469		ug/L		92	80 - 120	
Lead	1.5		500	489		ug/L		98	80 - 120	
Magnesium	23000		25000	46200		ug/L		92	80 - 120	
Molybdenum	ND		500	471		ug/L		94	80 - 120	
Potassium	1700		25000	25200		ug/L		94	80 - 120	
Selenium	ND		1000	888		ug/L		89	80 - 120	
Sodium	28000		25000	51000		ug/L		91	80 - 120	
Thallium	0.69	J	1000	947		ug/L		95	80 - 120	

Lab Sample ID: 240-181314-6 MS
Matrix: Water
Analysis Batch: 564901

Client Sample ID: BAC-05-F-20230302-01
Prep Type: Total Recoverable
Prep Batch: 564268

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier				Limits	Limits
Chromium	ND		500	476		ug/L		95	80 - 120	
Lithium	10		500	475		ug/L		93	80 - 120	

Lab Sample ID: 240-181314-6 MSD
Matrix: Water
Analysis Batch: 564732

Client Sample ID: BAC-05-F-20230302-01
Prep Type: Total Recoverable
Prep Batch: 564268

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec		RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit	
Antimony	ND		100	106		ug/L		106	80 - 120	3	20	
Arsenic	1.0	J	1000	884		ug/L		88	80 - 120	2	20	
Barium	45		1000	1040		ug/L		100	80 - 120	1	20	
Beryllium	ND	^+	500	494	^+	ug/L		99	80 - 120	2	20	
Cadmium	0.48	J	500	461		ug/L		92	80 - 120	2	20	
Cobalt	8.1		500	460		ug/L		90	80 - 120	2	20	
Lead	1.5		500	503		ug/L		100	80 - 120	3	20	
Magnesium	23000		25000	46500		ug/L		93	80 - 120	1	20	
Molybdenum	ND		500	460		ug/L		92	80 - 120	2	20	
Potassium	1700		25000	25300		ug/L		94	80 - 120	0	20	
Selenium	ND		1000	868		ug/L		87	80 - 120	2	20	
Sodium	28000		25000	50800		ug/L		90	80 - 120	0	20	
Thallium	0.69	J	1000	967		ug/L		97	80 - 120	2	20	

Lab Sample ID: 240-181314-6 MSD
Matrix: Water
Analysis Batch: 564901

Client Sample ID: BAC-05-F-20230302-01
Prep Type: Total Recoverable
Prep Batch: 564268

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec		RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit	
Chromium	ND		500	485		ug/L		97	80 - 120	2	20	
Lithium	10		500	493		ug/L		97	80 - 120	4	20	

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-564269/1-A
Matrix: Water
Analysis Batch: 564598

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 564269

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/06/23 10:00	03/07/23 19:58	1

Lab Sample ID: LCS 240-564269/2-A
Matrix: Water
Analysis Batch: 564598

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 564269

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.19		ug/L		104	80 - 120

Lab Sample ID: 240-181314-6 MS
Matrix: Water
Analysis Batch: 564598

Client Sample ID: BAC-05-F-20230302-01
Prep Type: Total/NA
Prep Batch: 564269

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		1.00	1.01		ug/L		101	80 - 120

Lab Sample ID: 240-181314-6 MSD
Matrix: Water
Analysis Batch: 564598

Client Sample ID: BAC-05-F-20230302-01
Prep Type: Total/NA
Prep Batch: 564269

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Mercury	ND		1.00	0.935		ug/L		93	80 - 120	7	20

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-564459/109
Matrix: Water
Analysis Batch: 564459

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			03/06/23 18:23	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 18:23	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 18:23	1

Lab Sample ID: MB 240-564459/136
Matrix: Water
Analysis Batch: 564459

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			03/06/23 20:12	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 20:12	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 20:12	1

Lab Sample ID: MB 240-564459/83
Matrix: Water
Analysis Batch: 564459

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			03/06/23 16:43	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 16:43	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Method: 2320B-1997 - Alkalinity, Total (Continued)

Lab Sample ID: MB 240-564459/83
Matrix: Water
Analysis Batch: 564459

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 16:43	1

Lab Sample ID: LCS 240-564459/108
Matrix: Water
Analysis Batch: 564459

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	141		mg/L		97	86 - 123

Lab Sample ID: LCS 240-564459/135
Matrix: Water
Analysis Batch: 564459

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	139		mg/L		95	86 - 123

Lab Sample ID: 240-181314-6 DU
Matrix: Water
Analysis Batch: 564459

Client Sample ID: BAC-05-F-20230302-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	57		67.0		mg/L		17	20
Bicarbonate Alkalinity as CaCO3	57		67.0		mg/L		17	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Lab Sample ID: MB 240-565385/28
Matrix: Water
Analysis Batch: 565385

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			03/14/23 15:35	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/14/23 15:35	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/14/23 15:35	1

Lab Sample ID: LCS 240-565385/27
Matrix: Water
Analysis Batch: 565385

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	139		mg/L		95	86 - 123

Lab Sample ID: 240-181314-7 DU
Matrix: Water
Analysis Batch: 565385

Client Sample ID: BAC-04-F-20230302-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	96		96.8		mg/L		1	20
Bicarbonate Alkalinity as CaCO3	96		96.8		mg/L		1	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Method: 2320B-1997 - Alkalinity, Total (Continued)

Lab Sample ID: MB 240-566226/4
Matrix: Water
Analysis Batch: 566226

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			03/16/23 16:03	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/16/23 16:03	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/16/23 16:03	1

Lab Sample ID: LCS 240-566226/3
Matrix: Water
Analysis Batch: 566226

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	142		mg/L		97	86 - 123

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-566932/3
Matrix: Water
Analysis Batch: 566932

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			03/28/23 02:32	1

Lab Sample ID: LCS 240-566932/4
Matrix: Water
Analysis Batch: 566932

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.58		mg/L		103	90 - 110

Lab Sample ID: 240-181314-6 MS
Matrix: Water
Analysis Batch: 566932

Client Sample ID: BAC-05-F-20230302-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.11		2.50	2.84		mg/L		109	80 - 120

Lab Sample ID: 240-181314-6 MSD
Matrix: Water
Analysis Batch: 566932

Client Sample ID: BAC-05-F-20230302-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.11		2.50	2.87		mg/L		111	80 - 120	1	15

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-602828/1-A
Matrix: Water
Analysis Batch: 605835

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602828

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.03913	U	0.0688	0.0689	1.00	0.121	pCi/L	03/08/23 11:39	04/03/23 21:42	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: MB 160-602828/1-A
Matrix: Water
Analysis Batch: 605835

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602828

Carrier	<i>MB</i> %Yield	<i>MB</i> Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	85.9		30 - 110	03/08/23 11:39	04/03/23 21:42	1

Lab Sample ID: LCS 160-602828/2-A
Matrix: Water
Analysis Batch: 605835

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602828

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	11.3	11.96		1.23	1.00	0.0945	pCi/L	106	75 - 125

Carrier	<i>LCS</i> %Yield	<i>LCS</i> Qualifier	Limits
Ba Carrier	85.3		30 - 110

Lab Sample ID: LCSD 160-602828/3-A
Matrix: Water
Analysis Batch: 605835

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 602828

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-226	11.3	12.07		1.24	1.00	0.0956	pCi/L	106	75 - 125	0.04	1

Carrier	<i>LCSD</i> %Yield	<i>LCSD</i> Qualifier	Limits
Ba Carrier	80.8		30 - 110

Lab Sample ID: MB 160-602832/1-A
Matrix: Water
Analysis Batch: 605833

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602832

Analyte	<i>MB</i> Result	<i>MB</i> Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.006515	U	0.0337	0.0337	1.00	0.0790	pCi/L	03/08/23 12:16	04/03/23 15:02	1

Carrier	<i>MB</i> %Yield	<i>MB</i> Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	97.2		30 - 110	03/08/23 12:16	04/03/23 15:02	1

Lab Sample ID: LCS 160-602832/2-A
Matrix: Water
Analysis Batch: 605833

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602832

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	11.3	11.49		1.18	1.00	0.124	pCi/L	101	75 - 125

Carrier	<i>LCS</i> %Yield	<i>LCS</i> Qualifier	Limits
Ba Carrier	92.4		30 - 110

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: LCSD 160-602832/25-A
Matrix: Water
Analysis Batch: 605835

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 602832

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec		RER	Limit
									Limits	RER		
Radium-226	11.3	11.17		1.15	1.00	0.0864	pCi/L	99	75 - 125	0.14		1
Carrier	%Yield	LCSD Qualifier	Limits									
Ba Carrier	93.8		30 - 110									

Lab Sample ID: MB 160-603346/1-A
Matrix: Water
Analysis Batch: 606123

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 603346

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac		
											Radium-226	0.09600
Carrier	%Yield	MB Qualifier	Limits									
Ba Carrier	89.5		30 - 110									
								Prepared	Analyzed	Dil Fac		
								03/13/23 09:56	04/04/23 13:18	1		

Lab Sample ID: LCS 160-603346/2-A
Matrix: Water
Analysis Batch: 606123

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 603346

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec		
									Limits	RER	
Radium-226	11.3	12.08		1.26	1.00	0.154	pCi/L	107	75 - 125		
Carrier	%Yield	LCS Qualifier	Limits								
Ba Carrier	89.3		30 - 110								

Lab Sample ID: LCSD 160-603346/3-A
Matrix: Water
Analysis Batch: 606124

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 603346

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec		RER	Limit
									Limits	RER		
Radium-226	11.3	11.44		1.19	1.00	0.122	pCi/L	101	75 - 125	0.26		1
Carrier	%Yield	LCSD Qualifier	Limits									
Ba Carrier	85.6		30 - 110									

Lab Sample ID: 240-181314-6 MS
Matrix: Water
Analysis Batch: 606125

Client Sample ID: BAC-05-F-20230302-01
Prep Type: Total/NA
Prep Batch: 603346

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec	
											Limits	RER
Radium-226	0.234	U	44.7	43.00		4.57	1.00	0.412	pCi/L	96	60 - 140	

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: 240-181314-6 MS
Matrix: Water
Analysis Batch: 606125

Client Sample ID: BAC-05-F-20230302-01
Prep Type: Total/NA
Prep Batch: 603346

		MS	MS		
Carrier	%Yield	Qualifier	Limits		
Ba Carrier	76.3		30 - 110		

Lab Sample ID: 240-181314-6 MSD
Matrix: Water
Analysis Batch: 606125

Client Sample ID: BAC-05-F-20230302-01
Prep Type: Total/NA
Prep Batch: 603346

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec		RER
											Limits	RER	Limit
Radium-226	0.234	U	43.8	44.78		4.67	1.00	0.562	pCi/L	102	60 - 140	0.19	1

		MSD	MSD		
Carrier	%Yield	Qualifier	Limits		
Ba Carrier	83.9		30 - 110		

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-602829/1-A
Matrix: Water
Analysis Batch: 604715

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602829

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared		Analyzed		Dil Fac
								03/08/23 12:03	03/22/23 12:03	03/22/23 12:35	03/22/23 12:35	1
Radium-228	0.4492	U	0.362	0.365	1.00	0.562	pCi/L	03/08/23 12:03	03/22/23 12:03	03/22/23 12:35	03/22/23 12:35	1

		MB	MB			Prepared		Analyzed		Dil Fac
Carrier	%Yield	Qualifier	Limits			03/08/23 12:03	03/22/23 12:03	03/22/23 12:35	03/22/23 12:35	1
Ba Carrier	85.9		30 - 110			03/08/23 12:03	03/22/23 12:03	03/22/23 12:35	03/22/23 12:35	1
Y Carrier	84.1		30 - 110			03/08/23 12:03	03/22/23 12:03	03/22/23 12:35	03/22/23 12:35	1

Lab Sample ID: LCS 160-602829/2-A
Matrix: Water
Analysis Batch: 604715

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602829

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec	
									Limits	RER
Radium-228	8.10	9.897		1.37	1.00	0.649	pCi/L	122	75 - 125	

		LCS	LCS		
Carrier	%Yield	Qualifier	Limits		
Ba Carrier	85.3		30 - 110		
Y Carrier	85.2		30 - 110		

Lab Sample ID: LCSD 160-602829/3-A
Matrix: Water
Analysis Batch: 604715

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 602829

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec		RER
									Limits	RER	Limit
Radium-228	8.10	11.22		1.52	1.00	0.594	pCi/L	139	75 - 125	0.46	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

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

Lab Sample ID: LCSD 160-602829/3-A
Matrix: Water
Analysis Batch: 604715

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 602829

Carrier	LCSD		Limits
	%Yield	Qualifier	
Ba Carrier	80.8		30 - 110
Y Carrier	81.1		30 - 110

Lab Sample ID: MB 160-602838/1-A
Matrix: Water
Analysis Batch: 604790

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602838

Analyte	MB		Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-228	0.6552		0.342	0.347	1.00	0.477	pCi/L	03/08/23 13:13	03/23/23 11:56	1

Carrier	MB		Limits	Prepared	Analyzed	Dil Fac
	%Yield	Qualifier				
Ba Carrier	97.2		30 - 110	03/08/23 13:13	03/23/23 11:56	1
Y Carrier	83.0		30 - 110	03/08/23 13:13	03/23/23 11:56	1

Lab Sample ID: LCS 160-602838/2-A
Matrix: Water
Analysis Batch: 604790

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602838

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits

Carrier	LCS		Limits
	%Yield	Qualifier	
Ba Carrier	92.4		30 - 110
Y Carrier	82.6		30 - 110

Lab Sample ID: LCSD 160-602838/25-A
Matrix: Water
Analysis Batch: 604790

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 602838

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit

Carrier	LCSD		Limits
	%Yield	Qualifier	
Ba Carrier	93.8		30 - 110
Y Carrier	80.7		30 - 110

Lab Sample ID: MB 160-603347/1-A
Matrix: Water
Analysis Batch: 605094

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 603347

Analyte	MB		Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-228	0.2953	U	0.337	0.338	1.00	0.553	pCi/L	03/13/23 10:14	03/27/23 12:10	1

Eurofins Canton

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

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

Lab Sample ID: MB 160-603347/1-A
Matrix: Water
Analysis Batch: 605094

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 603347

Carrier	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Yield	Qualifier				
Ba Carrier	89.5		30 - 110	03/13/23 10:14	03/27/23 12:10	1
Y Carrier	79.6		30 - 110	03/13/23 10:14	03/27/23 12:10	1

Lab Sample ID: LCS 160-603347/2-A
Matrix: Water
Analysis Batch: 605094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 603347

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits

Carrier	LCS LCS		Limits
	%Yield	Qualifier	
Ba Carrier	89.3		30 - 110
Y Carrier	79.3		30 - 110

Lab Sample ID: LCSD 160-603347/3-A
Matrix: Water
Analysis Batch: 605094

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 603347

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit

Carrier	LCSD LCSD		Limits
	%Yield	Qualifier	
Ba Carrier	85.6		30 - 110
Y Carrier	79.3		30 - 110

Lab Sample ID: 240-181314-6 MS
Matrix: Water
Analysis Batch: 605094

Client Sample ID: BAC-05-F-20230302-01
Prep Type: Total/NA
Prep Batch: 603347

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits

Carrier	MS MS		Limits
	%Yield	Qualifier	
Ba Carrier	76.3		30 - 110
Y Carrier	79.6		30 - 110

Lab Sample ID: 240-181314-6 MSD
Matrix: Water
Analysis Batch: 605094

Client Sample ID: BAC-05-F-20230302-01
Prep Type: Total/NA
Prep Batch: 603347

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

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

Lab Sample ID: 240-181314-6 MSD

Matrix: Water

Analysis Batch: 605094

Client Sample ID: BAC-05-F-20230302-01

Prep Type: Total/NA

Prep Batch: 603347

Carrier	MSD		Limits
	%Yield	Qualifier	
Ba Carrier	83.9		30 - 110
Y Carrier	80.7		30 - 110

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Metals

Prep Batch: 564268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-1	BAC-07-F-20230302-01	Total Recoverable	Water	3005A	
240-181314-2	DUP-003-BAC-07-F-20230302-01	Total Recoverable	Water	3005A	
240-181314-3	BAC-02-F-20230302-01	Total Recoverable	Water	3005A	
240-181314-4	BAC-18-F-20230302-01	Total Recoverable	Water	3005A	
240-181314-5	BAC-06-F-20230302-01	Total Recoverable	Water	3005A	
240-181314-6	BAC-05-F-20230302-01	Total Recoverable	Water	3005A	
240-181314-7	BAC-04-F-20230302-01	Total Recoverable	Water	3005A	
240-181314-8	EB-001-F-20230302-01	Total Recoverable	Water	3005A	
MB 240-564268/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-564268/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-181314-6 MS	BAC-05-F-20230302-01	Total Recoverable	Water	3005A	
240-181314-6 MSD	BAC-05-F-20230302-01	Total Recoverable	Water	3005A	

Prep Batch: 564269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-1	BAC-07-F-20230302-01	Total/NA	Water	7470A	
240-181314-2	DUP-003-BAC-07-F-20230302-01	Total/NA	Water	7470A	
240-181314-3	BAC-02-F-20230302-01	Total/NA	Water	7470A	
240-181314-4	BAC-18-F-20230302-01	Total/NA	Water	7470A	
240-181314-5	BAC-06-F-20230302-01	Total/NA	Water	7470A	
240-181314-6	BAC-05-F-20230302-01	Total/NA	Water	7470A	
240-181314-7	BAC-04-F-20230302-01	Total/NA	Water	7470A	
240-181314-8	EB-001-F-20230302-01	Total/NA	Water	7470A	
MB 240-564269/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-564269/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-181314-6 MS	BAC-05-F-20230302-01	Total/NA	Water	7470A	
240-181314-6 MSD	BAC-05-F-20230302-01	Total/NA	Water	7470A	

Analysis Batch: 564598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-1	BAC-07-F-20230302-01	Total/NA	Water	7470A	564269
240-181314-2	DUP-003-BAC-07-F-20230302-01	Total/NA	Water	7470A	564269
240-181314-3	BAC-02-F-20230302-01	Total/NA	Water	7470A	564269
240-181314-4	BAC-18-F-20230302-01	Total/NA	Water	7470A	564269
240-181314-5	BAC-06-F-20230302-01	Total/NA	Water	7470A	564269
240-181314-6	BAC-05-F-20230302-01	Total/NA	Water	7470A	564269
240-181314-7	BAC-04-F-20230302-01	Total/NA	Water	7470A	564269
240-181314-8	EB-001-F-20230302-01	Total/NA	Water	7470A	564269
MB 240-564269/1-A	Method Blank	Total/NA	Water	7470A	564269
LCS 240-564269/2-A	Lab Control Sample	Total/NA	Water	7470A	564269
240-181314-6 MS	BAC-05-F-20230302-01	Total/NA	Water	7470A	564269
240-181314-6 MSD	BAC-05-F-20230302-01	Total/NA	Water	7470A	564269

Analysis Batch: 564732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-1	BAC-07-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-2	DUP-003-BAC-07-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-3	BAC-02-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-4	BAC-18-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-5	BAC-06-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-6	BAC-05-F-20230302-01	Total Recoverable	Water	6020B	564268

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Metals (Continued)

Analysis Batch: 564732 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-7	BAC-04-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-8	EB-001-F-20230302-01	Total Recoverable	Water	6020B	564268
MB 240-564268/1-A	Method Blank	Total Recoverable	Water	6020B	564268
LCS 240-564268/2-A	Lab Control Sample	Total Recoverable	Water	6020B	564268
240-181314-6 MS	BAC-05-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-6 MSD	BAC-05-F-20230302-01	Total Recoverable	Water	6020B	564268

Analysis Batch: 564901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-1	BAC-07-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-2	DUP-003-BAC-07-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-3	BAC-02-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-4	BAC-18-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-5	BAC-06-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-6	BAC-05-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-7	BAC-04-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-8	EB-001-F-20230302-01	Total Recoverable	Water	6020B	564268
MB 240-564268/1-A	Method Blank	Total Recoverable	Water	6020B	564268
LCS 240-564268/2-A	Lab Control Sample	Total Recoverable	Water	6020B	564268
240-181314-6 MS	BAC-05-F-20230302-01	Total Recoverable	Water	6020B	564268
240-181314-6 MSD	BAC-05-F-20230302-01	Total Recoverable	Water	6020B	564268

General Chemistry

Analysis Batch: 564459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-2	DUP-003-BAC-07-F-20230302-01	Total/NA	Water	2320B-1997	
240-181314-3	BAC-02-F-20230302-01	Total/NA	Water	2320B-1997	
240-181314-5	BAC-06-F-20230302-01	Total/NA	Water	2320B-1997	
240-181314-6	BAC-05-F-20230302-01	Total/NA	Water	2320B-1997	
240-181314-7	BAC-04-F-20230302-01	Total/NA	Water	2320B-1997	
240-181314-8	EB-001-F-20230302-01	Total/NA	Water	2320B-1997	
MB 240-564459/109	Method Blank	Total/NA	Water	2320B-1997	
MB 240-564459/136	Method Blank	Total/NA	Water	2320B-1997	
MB 240-564459/83	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-564459/108	Lab Control Sample	Total/NA	Water	2320B-1997	
LCS 240-564459/135	Lab Control Sample	Total/NA	Water	2320B-1997	
240-181314-6 DU	BAC-05-F-20230302-01	Total/NA	Water	2320B-1997	

Analysis Batch: 565385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-1	BAC-07-F-20230302-01	Total/NA	Water	2320B-1997	
MB 240-565385/28	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-565385/27	Lab Control Sample	Total/NA	Water	2320B-1997	
240-181314-7 DU	BAC-04-F-20230302-01	Total/NA	Water	2320B-1997	

Analysis Batch: 566226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-4	BAC-18-F-20230302-01	Total/NA	Water	2320B-1997	
MB 240-566226/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-566226/3	Lab Control Sample	Total/NA	Water	2320B-1997	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

General Chemistry

Analysis Batch: 566932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-1	BAC-07-F-20230302-01	Total/NA	Water	300.0-1993 R2.1	
240-181314-2	DUP-003-BAC-07-F-20230302-01	Total/NA	Water	300.0-1993 R2.1	
240-181314-3	BAC-02-F-20230302-01	Total/NA	Water	300.0-1993 R2.1	
240-181314-4	BAC-18-F-20230302-01	Total/NA	Water	300.0-1993 R2.1	
240-181314-5	BAC-06-F-20230302-01	Total/NA	Water	300.0-1993 R2.1	
240-181314-6	BAC-05-F-20230302-01	Total/NA	Water	300.0-1993 R2.1	
240-181314-7	BAC-04-F-20230302-01	Total/NA	Water	300.0-1993 R2.1	
240-181314-8	EB-001-F-20230302-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-566932/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-566932/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-181314-6 MS	BAC-05-F-20230302-01	Total/NA	Water	300.0-1993 R2.1	
240-181314-6 MSD	BAC-05-F-20230302-01	Total/NA	Water	300.0-1993 R2.1	

Rad

Prep Batch: 602828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-1	BAC-07-F-20230302-01	Total/NA	Water	PrecSep-21	
MB 160-602828/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-602828/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-602828/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 602829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-1	BAC-07-F-20230302-01	Total/NA	Water	PrecSep_0	
MB 160-602829/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-602829/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-602829/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Prep Batch: 602832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-2	DUP-003-BAC-07-F-20230302-01	Total/NA	Water	PrecSep-21	
240-181314-4	BAC-18-F-20230302-01	Total/NA	Water	PrecSep-21	
240-181314-5	BAC-06-F-20230302-01	Total/NA	Water	PrecSep-21	
240-181314-7	BAC-04-F-20230302-01	Total/NA	Water	PrecSep-21	
240-181314-8	EB-001-F-20230302-01	Total/NA	Water	PrecSep-21	
MB 160-602832/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-602832/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-602832/25-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 602838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-2	DUP-003-BAC-07-F-20230302-01	Total/NA	Water	PrecSep_0	
240-181314-4	BAC-18-F-20230302-01	Total/NA	Water	PrecSep_0	
240-181314-5	BAC-06-F-20230302-01	Total/NA	Water	PrecSep_0	
240-181314-7	BAC-04-F-20230302-01	Total/NA	Water	PrecSep_0	
240-181314-8	EB-001-F-20230302-01	Total/NA	Water	PrecSep_0	
MB 160-602838/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-602838/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-602838/25-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Rad

Prep Batch: 603346

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-3	BAC-02-F-20230302-01	Total/NA	Water	PrecSep-21	
240-181314-6	BAC-05-F-20230302-01	Total/NA	Water	PrecSep-21	
MB 160-603346/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-603346/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-603346/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	
240-181314-6 MS	BAC-05-F-20230302-01	Total/NA	Water	PrecSep-21	
240-181314-6 MSD	BAC-05-F-20230302-01	Total/NA	Water	PrecSep-21	

Prep Batch: 603347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181314-3	BAC-02-F-20230302-01	Total/NA	Water	PrecSep_0	
240-181314-6	BAC-05-F-20230302-01	Total/NA	Water	PrecSep_0	
MB 160-603347/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-603347/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-603347/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	
240-181314-6 MS	BAC-05-F-20230302-01	Total/NA	Water	PrecSep_0	
240-181314-6 MSD	BAC-05-F-20230302-01	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-07-F-20230302-01

Lab Sample ID: 240-181314-1

Date Collected: 03/02/23 11:26

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 17:37
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564901	AJC	EET CAN	03/09/23 14:39
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:23
Total/NA	Analysis	2320B-1997		1	565385	MED	EET CAN	03/14/23 14:41
Total/NA	Analysis	300.0-1993 R2.1		1	566932	JWW	EET CAN	03/28/23 08:15
Total/NA	Prep	PrecSep-21			602828	DJP	EET SL	03/08/23 11:39
Total/NA	Analysis	9315		1	606125	FLC	EET SL	04/04/23 19:58
Total/NA	Prep	PrecSep_0			602829	DJP	EET SL	03/08/23 12:03
Total/NA	Analysis	9320		1	604718	FLC	EET SL	03/22/23 12:41
Total/NA	Analysis	Ra226_Ra228		1	606185	SCB	EET SL	04/05/23 12:45

Client Sample ID: DUP-003-BAC-07-F-20230302-01

Lab Sample ID: 240-181314-2

Date Collected: 03/02/23 11:26

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 17:41
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564901	AJC	EET CAN	03/09/23 14:47
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:25
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 19:53
Total/NA	Analysis	300.0-1993 R2.1		1	566932	JWW	EET CAN	03/28/23 08:35
Total/NA	Prep	PrecSep-21			602832	DJP	EET SL	03/08/23 12:16
Total/NA	Analysis	9315		1	605833	EMH	EET SL	04/03/23 15:04
Total/NA	Prep	PrecSep_0			602838	DJP	EET SL	03/08/23 13:13
Total/NA	Analysis	9320		1	604790	FLC	EET SL	03/23/23 11:56
Total/NA	Analysis	Ra226_Ra228		1	605951	SCB	EET SL	04/03/23 17:14

Client Sample ID: BAC-02-F-20230302-01

Lab Sample ID: 240-181314-3

Date Collected: 03/02/23 12:37

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 17:46
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564901	AJC	EET CAN	03/09/23 14:50
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:27

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-02-F-20230302-01

Lab Sample ID: 240-181314-3

Date Collected: 03/02/23 12:37

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 19:57
Total/NA	Analysis	300.0-1993 R2.1		1	566932	JWW	EET CAN	03/28/23 08:55
Total/NA	Prep	PrecSep-21			603346	DJP	EET SL	03/13/23 09:56
Total/NA	Analysis	9315		1	606124	FLC	EET SL	04/04/23 15:13
Total/NA	Prep	PrecSep_0			603347	DJP	EET SL	03/13/23 10:14
Total/NA	Analysis	9320		1	605094	FLC	EET SL	03/27/23 12:12
Total/NA	Analysis	Ra226_Ra228		1	606190	SCB	EET SL	04/05/23 13:07

Client Sample ID: BAC-18-F-20230302-01

Lab Sample ID: 240-181314-4

Date Collected: 03/02/23 13:33

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 17:50
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564901	AJC	EET CAN	03/09/23 14:53
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:29
Total/NA	Analysis	2320B-1997		1	566226	JMB	EET CAN	03/16/23 16:07
Total/NA	Analysis	300.0-1993 R2.1		1	566932	JWW	EET CAN	03/28/23 10:56
Total/NA	Prep	PrecSep-21			602832	DJP	EET SL	03/08/23 12:16
Total/NA	Analysis	9315		1	605833	EMH	EET SL	04/03/23 15:04
Total/NA	Prep	PrecSep_0			602838	DJP	EET SL	03/08/23 13:13
Total/NA	Analysis	9320		1	604790	FLC	EET SL	03/23/23 11:57
Total/NA	Analysis	Ra226_Ra228		1	605951	SCB	EET SL	04/03/23 17:14

Client Sample ID: BAC-06-F-20230302-01

Lab Sample ID: 240-181314-5

Date Collected: 03/02/23 14:16

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 17:54
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564901	AJC	EET CAN	03/09/23 14:55
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:31
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 20:16
Total/NA	Analysis	300.0-1993 R2.1		1	566932	JWW	EET CAN	03/28/23 11:16
Total/NA	Prep	PrecSep-21			602832	DJP	EET SL	03/08/23 12:16
Total/NA	Analysis	9315		1	605833	EMH	EET SL	04/03/23 15:04
Total/NA	Prep	PrecSep_0			602838	DJP	EET SL	03/08/23 13:13
Total/NA	Analysis	9320		1	604790	FLC	EET SL	03/23/23 11:57

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: BAC-06-F-20230302-01

Lab Sample ID: 240-181314-5

Date Collected: 03/02/23 14:16

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228		1	605951	SCB	EET SL	04/03/23 17:14

Client Sample ID: BAC-05-F-20230302-01

Lab Sample ID: 240-181314-6

Date Collected: 03/02/23 15:30

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 16:48
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564901	AJC	EET CAN	03/09/23 14:22
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:02
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 20:20
Total/NA	Analysis	300.0-1993 R2.1		1	566932	JWW	EET CAN	03/28/23 09:15
Total/NA	Prep	PrecSep-21			603346	DJP	EET SL	03/13/23 09:56
Total/NA	Analysis	9315		1	606124	FLC	EET SL	04/04/23 15:13
Total/NA	Prep	PrecSep_0			603347	DJP	EET SL	03/13/23 10:14
Total/NA	Analysis	9320		1	605094	FLC	EET SL	03/27/23 12:12
Total/NA	Analysis	Ra226_Ra228		1	606190	SCB	EET SL	04/05/23 13:07

Client Sample ID: BAC-04-F-20230302-01

Lab Sample ID: 240-181314-7

Date Collected: 03/02/23 16:26

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 17:59
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564901	AJC	EET CAN	03/09/23 14:58
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:33
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 20:28
Total/NA	Analysis	300.0-1993 R2.1		1	566932	JWW	EET CAN	03/28/23 11:36
Total/NA	Prep	PrecSep-21			602832	DJP	EET SL	03/08/23 12:16
Total/NA	Analysis	9315		1	605833	EMH	EET SL	04/03/23 15:04
Total/NA	Prep	PrecSep_0			602838	DJP	EET SL	03/08/23 13:13
Total/NA	Analysis	9320		1	604790	FLC	EET SL	03/23/23 11:57
Total/NA	Analysis	Ra226_Ra228		1	605951	SCB	EET SL	04/03/23 17:14

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Client Sample ID: EB-001-F-20230302-01

Lab Sample ID: 240-181314-8

Date Collected: 03/02/23 16:45

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 18:03
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564901	AJC	EET CAN	03/09/23 15:01
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:35
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 20:31
Total/NA	Analysis	300.0-1993 R2.1		1	566932	JWW	EET CAN	03/28/23 11:56
Total/NA	Prep	PrecSep-21			602832	DJP	EET SL	03/08/23 12:16
Total/NA	Analysis	9315		1	605833	EMH	EET SL	04/03/23 15:04
Total/NA	Prep	PrecSep_0			602838	DJP	EET SL	03/08/23 13:13
Total/NA	Analysis	9320		1	604790	FLC	EET SL	03/23/23 11:59
Total/NA	Analysis	Ra226_Ra228		1	605951	SCB	EET SL	04/03/23 17:14

Laboratory References:

EET CAN = Eurofins Canton, 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
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23 *
Connecticut	State	PH-0590	06-29-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-28-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23 *
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-23 *
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	03-29-23
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-23
Florida	NELAP	E87689	06-30-23
HI - RadChem Recognition	State	n/a	06-30-23
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana (All)	NELAP	04080	06-30-23
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-23
MI - RadChem Recognition	State	9005	06-30-23
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-23
New Jersey	NELAP	MO002	06-30-23
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-23
North Dakota	State	R-207	06-30-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Canton

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181314-1

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
Oklahoma	NELAP	9997	08-31-23
Oregon	NELAP	4157	09-01-23
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23
Texas	NELAP	T104704193	07-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00028	06-11-23
Utah	NELAP	MO000542021-14	07-31-23
Virginia	NELAP	10310	06-14-23
Washington	State	C592	08-30-23
West Virginia DEP	State	381	10-31-23

Chain of Custody Record



Client Information		Lab PM: Cisneros, Roxanne		Carrier Tracking No(s): 240-93466-34578-1	
Client Contact: Taylor Huffman		E-Mail: roxanne.cisneros@Eurofins.net		State of Origin:	
Company: Lightstone Generation Gavin Power LLC		PWSID:		Job #:	
Address: 7397 OH-7		City: Cheshire		TAT Requested (days):	
State: OH, Zip: 45620		Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Preservation Codes:	
Phone: 740-925-3171(Tel)		PO #: 2935505		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 - Na2OAS Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Email: taylor.huffman@lightstonegen.com		Project #: 24019633		Other:	
Federal CCR Wells - App IV		Site: <i>Gavin Plant</i>		Special Instructions/Note:	

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (Water, Soil, Sediment, etc.)	Field Filtered Sample (Yes or No)	Perform HPLC (Yes or No)		300.0.28D - Fluoride		2320B - Alkalinity		9315_Ra226, 9320_Ra228, Ra226Ra228_GFPc	Total Number of Containers	Special Instructions/Note:
						D	N	D	N	D	N			
BAC-07-F-20230302-01	3-2-23	1126	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
DUP-003-BAC-07-F-20230302-01	3-2-23	1126	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
BAC-02-F-20230302-01	3-2-23	1237	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
BAC-18-F-20230302-01	3-2-23	1333	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
BAC-06-F-20230302-01	3-2-23	1416	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
BAC-05-F-20230302-01	3-2-23	1530	G	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
BAC-05-F-20230302-MS	3-2-23	1530	G	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
BAC-05-F-20230302-MSD	3-2-23	1530	G	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
BAC-04-F-20230302-01	3-2-23	1626	G	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
EB-001-F-20230302-01	3-2-23	1645	G	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			

240-181314 Chain of Custody

<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab		<input type="checkbox"/> Archive For _____ Months	
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
Special Instructions/QC Requirements:					
Empty Kit Relinquished by: <i>Tom Edwards</i>		Date: 3-3-23/1030		Method of Shipment:	
Relinquished by: <i>Tom Edwards</i>		Date/Time: 3-3-23/1030		Received by: <i>Tom Edwards</i>	
Relinquished by: <i>Tom Edwards</i>		Date/Time: 3-3-23/1435hrs		Received by: <i>M.A. A.</i>	
Relinquished by:		Date/Time:		Received by:	
Custody Seals Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:	



Eurofins - Canton Sample Receipt Form/Narrative Login # : _____
Barberton Facility

Client Lishtone Site Name _____ Cooler unpacked by: Mandaly
Cooler Received on 3-3-23 Opened on 3-3-23
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off Eurofins Courier Other _____

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

Eurofins Cooler # 217C Foam Box _____ Client Cooler Box Other _____
Packing material used: Bubble Wrap Foam Plastic Bag None Other _____
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt See Multiple Cooler Form
IR GUN # IR-13 (CF -0.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
IR GUN # IR-16 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
IR GUN # IR-17 (CF -0.3 °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# HC293086
14. Were VOAs on the COC? Yes No
15. Were air bubbles >6 mm in any VOA vials? Yes 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 _____

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

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: _____

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container		Preservative	
			pH	Temp	Added (mls)	Lot #
BAC-07-F-20230302-01	240-181314-C-1	Plastic 500ml - with Nitric Acid				
BAC-07-F-20230302-01	240-181314-D-1	Plastic 1 liter - Nitric Acid				
BAC-07-F-20230302-01	240-181314-E-1	Plastic 1 liter - Nitric Acid				
DUP-003-BAC-07-F-20230302-01	240-181314-C-2	Plastic 500ml - with Nitric Acid				
DUP-003-BAC-07-F-20230302-01	240-181314-D-2	Plastic 1 liter - Nitric Acid				
DUP-003-BAC-07-F-20230302-01	240-181314-E-2	Plastic 1 liter - Nitric Acid				
BAC-02-F-20230302-01	240-181314-C-3	Plastic 500ml - with Nitric Acid				
BAC-02-F-20230302-01	240-181314-D-3	Plastic 1 liter - Nitric Acid				
BAC-02-F-20230302-01	240-181314-E-3	Plastic 1 liter - Nitric Acid				
BAC-18-F-20230302-01	240-181314-C-4	Plastic 500ml - with Nitric Acid				
BAC-18-F-20230302-01	240-181314-D-4	Plastic 1 liter - Nitric Acid				
BAC-18-F-20230302-01	240-181314-E-4	Plastic 1 liter - Nitric Acid				
BAC-06-F-20230302-01	240-181314-C-5	Plastic 500ml - with Nitric Acid				
BAC-06-F-20230302-01	240-181314-D-5	Plastic 1 liter - Nitric Acid				
BAC-06-F-20230302-01	240-181314-E-5	Plastic 1 liter - Nitric Acid				
BAC-05-F-20230302-01	240-181314-D-6	Plastic 250ml - with Nitric Acid	<2			
BAC-05-F-20230302-01	240-181314-E-6	Plastic 250ml - with Nitric Acid	<2			
BAC-05-F-20230302-01	240-181314-F-6	Plastic 250ml - with Nitric Acid	<2			
BAC-05-F-20230302-01	240-181314-J-6	Plastic 1 liter - Nitric Acid	<2			
BAC-05-F-20230302-01	240-181314-K-6	Plastic 1 liter - Nitric Acid	<2			
BAC-05-F-20230302-01	240-181314-L-6	Plastic 1 liter - Nitric Acid	<2			
BAC-05-F-20230302-01	240-181314-M-6	Plastic 1 liter - Nitric Acid	<2			
BAC-05-F-20230302-01	240-181314-N-6	Plastic 1 liter - Nitric Acid	<2			
BAC-05-F-20230302-01	240-181314-O-6	Plastic 1 liter - Nitric Acid	<2			
BAC-04-F-20230302-01	240-181314-C-7	Plastic 500ml - with Nitric Acid				
BAC-04-F-20230302-01	240-181314-D-7	Plastic 1 liter - Nitric Acid				
BAC-04-F-20230302-01	240-181314-E-7	Plastic 1 liter - Nitric Acid				
EB-001-F-20230302-01	240-181314-C-8	Plastic 500ml - with Nitric Acid				
EB-001-F-20230302-01	240-181314-D-8	Plastic 1 liter - Nitric Acid				
EB-001-F-20230302-01	240-181314-E-8	Plastic 1 liter - Nitric Acid				

Chain of Custody Record



Client Information Client Contact: Bobby Casio Phone: 740-373-4308 E-Mail: roxanne.cisneros@Eurofins.com		Lab PM: Cisneros, Roxanne E-Mail: roxanne.cisneros@Eurofins.com		Carrier Tracking No(s): State of Origin:		COC No: 240-93466-34578.1 Page: Page 1 of 1 Job #:	
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: Federal CCR Wells - App IV Site: Gavin Plant		Analysis Requested Total Number of Containers:		Preservation Codes: M - Heane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 L - EDTA Z - other (specify)	
Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: 2935505 WFO #:		Field Filtered Sample (Yes or No) Perform MS/ESD (Yes or No)		Special Instructions/Note: 240-181314 Chain of Custody		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Sample Identification BAC-07-F-20230302-01 DUP-003-BA-07-F-20230302-01 BA-07-F-20230302-01 BA-18-F-20230302-01 BAC-06-F-20230302-01 BAC-05-F-20230302-01 BAC-05-F-20230302-MS BAC-04-F-20230302-01 EB-001-F-20230302-01		Sample Date Sample Time Sample Type (C=comp, G=grab) Matrix (Water, Solid, Other) Preservation Code:		Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time		Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Deliverable Requested: <input type="checkbox"/> I, II, III, IV, Other (specify)		Empty Kit Relinquished by:		Method of Shipment:	
Relinquished by: Bobby Casio Relinquished by: Tom Edwards Relinquished by:		Date/Time: 3-3-23 10:30 Date/Time: 3-3-23 14:35 hrs Date/Time:		Received by: Tom Edwards Received by: M.A. Received by:		Date/Time: 3-3-23 10:45 Date/Time: 3/3/23 14:35 Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Company: Hub Optics Company: RFCS Company:	



Eurofins - Canton Sample Receipt Form/Narrative Login # : _____
Barberton Facility

Client Lisht Spine Site Name _____ Cooler unpacked by: Mandy
Cooler Received on 3-3-23 Opened on 3-3-23
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off Eurofins Courier Other _____

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

Eurofins Cooler # 2111 Foam Box Client Cooler Box Other _____
Packing material used: Bubble Wrap Foam Plastic Bag None Other _____
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt See Multiple Cooler Form
IR GUN # IR-13 (CF -0.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
IR GUN # IR-16 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
IR GUN # IR-17 (CF -0.3 °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 NA
-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# HC293086
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: _____

Temperature readings:

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-07-F-20230302-01	240-181314-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-07-F-20230302-01	240-181314-D-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-20230302-01	240-181314-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-003-BAC-07-F-20230302-01	240-181314-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-003-BAC-07-F-20230302-01	240-181314-D-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-003-BAC-07-F-20230302-01	240-181314-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-02-F-20230302-01	240-181314-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-02-F-20230302-01	240-181314-D-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-02-F-20230302-01	240-181314-E-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-18-F-20230302-01	240-181314-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-18-F-20230302-01	240-181314-D-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-18-F-20230302-01	240-181314-E-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-20230302-01	240-181314-C-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-06-F-20230302-01	240-181314-D-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-20230302-01	240-181314-E-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-05-F-20230302-01	240-181314-G-6	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-05-F-20230302-01	240-181314-H-6	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-05-F-20230302-01	240-181314-I-6	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-05-F-20230302-01	240-181314-J-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-05-F-20230302-01	240-181314-K-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-05-F-20230302-01	240-181314-L-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-05-F-20230302-01	240-181314-M-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-05-F-20230302-01	240-181314-N-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-05-F-20230302-01	240-181314-O-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-04-F-20230302-01	240-181314-C-7	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-04-F-20230302-01	240-181314-D-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-04-F-20230302-01	240-181314-E-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230302-01	240-181314-C-8	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230302-01	240-181314-D-8	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230302-01	240-181314-E-8	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

Login #: _____

Eurofins - Canton 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	06	0.4	Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: 13	2.5	2.3	Water	None	
EC	Client	Box	Other	IR GUN #: 13	1.2	1.0	Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	

See Temperature Excursion Form

Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler:		Lab PM:		Carrier Tracking No(s):		COC No:				
Client Contact: Shipping/Receiving Company: TestAmerica Laboratories, Inc.		Phone: Address: City: State, Zip: MO, 63045 Phone: 314-298-8566(Tel) 314-298-8757(Fax) Email:		Cisneros, Roxanne E-Mail: roxanne.cisneros@et.eurofinsus.com		Page: Page 1 of 2		240-164631.1				
Due Date Requested: 4/3/2023 TAT Requested (days):		Project #: 24019633 SSOW#:		Field Filtered Sample (Yes or No)		Accreditations Required (See note):		Job #: 240-181314-1				
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Sealed, On-site, BTA, Tissue, AAB)	Preservation Code:	Field Filtered Sample (Yes or No)	Perform MSD (Yes or No)	9315_Raz28/PreSep_21 Radium-226 (GFPC)	9320_Raz28/PreSep_0 Radium-228 (GFPC)	Ra228Ra228_GFPC/ Combined Radium-226 and	Total Number of Containers	Special Instructions/Note:
BAC-07-F-20230302-01 (240-181314-1)	3/2/23	11:26 Eastern	Water	Water		X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
DUP-003-BAC-07-F-20230302-01 (240-181314-2)	3/2/23	11:26 Eastern	Water	Water		X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-02-F-20230302-01 (240-181314-3)	3/2/23	12:37 Eastern	Water	Water		X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-18-F-20230302-01 (240-181314-4)	3/2/23	13:33 Eastern	Water	Water		X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-06-F-20230302-01 (240-181314-5)	3/2/23	14:16 Eastern	Water	Water		X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-05-F-20230302-01 (240-181314-6)	3/2/23	15:30 Eastern	Water	Water		X	X	X	X	X	6	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-05-F-20230302-01 MS (240-181314-6MS)	3/2/23	15:30 Eastern	MS	Water		X	X	X	X	X	1	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-05-F-20230302-01 MSD (240-181314-6MSD)	3/2/23	15:30 Eastern	MSD	Water		X	X	X	X	X	1	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-04-F-20230302-01 (240-181314-7)	3/2/23	16:26 Eastern	Water	Water		X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet

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/test/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
 Deliverable Requested: I, II, III, IV, Other (specify) _____
 Primary Deliverable Rank: 2

Empty Kit Relinquished by: _____ Date: _____
 Relinquished by: *Michelle Havelid* Date: *3-6-23*
 Relinquished by: *Felix* Date: _____
 Relinquished by: _____ Date: _____

Received by: _____ Date/Time: _____
 Received by: *Shanley - Shanley* Date/Time: *3/23 09:20*
 Received by: _____ Date/Time: _____

Company: *EFEX*
 Company: *EFEX*
 Company: *EFEX*

Custody Seal No.: _____
 Δ Yes Δ No

Cooler Temperature(s) °C and Other Remarks:



Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler: Lab PM: Cisneros, Roxanne		Carrier Tracking No(s): 240-164631.2	
Client Contact: Shipping/Receiving		E-Mail: roxanne.cisneros@et.eurofinsus.com		Page: Page 2 of 2	
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 240-181314-1	
Address: 13715 Rider Trail North,		Due Date Requested: 4/3/2023		Preservation Codes:	
City: Earth City		TAT Requested (days):		M - Hexane	
State, Zip: MO, 63045		PO #:		N - None	
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		WO #:		O - AsNaO2	
Email:		Project #:		P - Na2O4S	
Project Name: Federal CCR Wells - App IV		24019633		Q - Na2SO3	
Site:		SSOW#:		R - NaHSO4	
Sample Identification - Client ID (Lab ID)		Sample Date		Sample Time	
EB-001-F-20230302-01 (240-181314-8)		3/2/23		16:45 Eastern	
Sample Type (C=Comp, G=grab)		Sample Preservation Code:		Matrix	
G=grab		Water		(W=water, S=solid, O=soil, BT=tissue, A=AK)	
Field Filtered Sample (Yes or No)		Field Filtered Sample (Yes or No)		Field Filtered Sample (Yes or No)	
X		X		X	
Perform MS/MSD (Yes or No)		9315_Ra226/PreSep_21 Radium-226 (GFC)		9320_Ra226/PreSep_0 Radium-226 (GFC)	
X		X		X	
Radium-226		Ra226Ra226 GFC/ Combined Radium-226 and		Ra226Ra226 GFC/ Combined Radium-226 and	
X		X		X	
Total Number of Containers		2		2	
Special Instructions/Note:		Recount of TAR after 21 day ingrowth if > action limit; save planchet			

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/test/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
 Deliverable Requested: I, II, III, IV, Other (specify) _____ Primary Deliverable Rank: 2
 Method of Shipment: _____
 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
 Special Instructions/QC Requirements: _____
 Time: _____
 Received by: _____ Date/Time: _____
 Received by: _____ Date/Time: _____
 Received by: _____ Date/Time: _____
 Cooler Temperature(s) °C and Other Remarks: _____
 Custody Seal No.: _____
 A Yes A No



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-181314-1

Login Number: 181314

List Number: 2

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

List Creation: 03/07/23 12:45 PM

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





ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 3/20/2023 5:46:43 PM

JOB DESCRIPTION

Federal CCR Wells - App III

JOB NUMBER

240-181316-1

Eurofins Canton

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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



Generated
3/20/2023 5:46:43 PM

Authorized for release by
Patrick O'Meara, Manager of Project Management
Patrick.O'Meara@et.eurofinsus.com
Designee for
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Sample Summary	7
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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
E	Result exceeded calibration range.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Job ID: 240-181316-1

Laboratory: Eurofins Canton

Narrative

**Job Narrative
240-181316-1**

Receipt

The samples were received on 3/3/2023 @ 2:35 PM. 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 0.4°C, 1.0°C and 2.3°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 - App III

Job ID: 240-181316-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CAN
6020B	Metals (ICP/MS)	SW846	EET CAN
2320B-1997	Alkalinity, Total	SM	EET CAN
300.0	Anions, Ion Chromatography	EPA	EET CAN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CAN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CAN

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 CAN = Eurofins Canton, 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 - App III

Job ID: 240-181316-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-181316-1	BAC-07-F-20230302-01	Water	03/02/23 11:26	03/03/23 14:35
240-181316-2	DUP-003-BAC-07-F-20230302-01	Water	03/02/23 11:26	03/03/23 14:35
240-181316-3	BAC-18-F-20230302-01	Water	03/02/23 13:33	03/03/23 14:35
240-181316-4	BAC-06-F-20230302-01	Water	03/02/23 14:16	03/03/23 14:35
240-181316-5	EB-001-F-20230302-01	Water	03/02/23 16:45	03/03/23 14:35

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Client Sample ID: BAC-07-F-20230302-01

Lab Sample ID: 240-181316-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1100		100	57	ug/L	1		6010D	Total Recoverable
Calcium	95000		1000	580	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	130		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	130		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	25		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.079		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	440		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-003-BAC-07-F-20230302-01

Lab Sample ID: 240-181316-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1100		100	57	ug/L	1		6010D	Total Recoverable
Calcium	94000		1000	580	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	130		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	130		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	25		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.083		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	450		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-18-F-20230302-01

Lab Sample ID: 240-181316-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1400		100	57	ug/L	1		6010D	Total Recoverable
Calcium	79000		1000	580	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	96		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	96		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	25		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.064		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	420		10	7.8	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Client Sample ID: BAC-06-F-20230302-01

Lab Sample ID: 240-181316-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1900		100	57	ug/L	1		6010D	Total Recoverable
Calcium	120000		1000	580	ug/L	1		6020B	Total Recoverable
Magnesium	27000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	1500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	24		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.098		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	220		2.0	0.70	mg/L	2		300.0	Total/NA
Total Dissolved Solids	560		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-001-F-20230302-01

Lab Sample ID: 240-181316-5

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Client Sample ID: BAC-07-F-20230302-01

Lab Sample ID: 240-181316-1

Date Collected: 03/02/23 11:26

Matrix: Water

Date Received: 03/03/23 14:35

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1100		100	57	ug/L		03/06/23 14:00	03/07/23 22:34	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	95000		1000	580	ug/L		03/06/23 14:00	03/07/23 20:13	1
Magnesium	22000		1000	200	ug/L		03/06/23 14:00	03/07/23 20:13	1
Potassium	1400		1000	220	ug/L		03/06/23 14:00	03/07/23 20:13	1
Sodium	16000		1000	330	ug/L		03/06/23 14:00	03/07/23 20:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	130		5.0	2.6	mg/L			03/06/23 19:49	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	130		5.0	2.6	mg/L			03/06/23 19:49	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 19:49	1
Chloride (EPA 300.0)	25		1.0	0.13	mg/L			03/16/23 00:36	1
Fluoride (EPA 300.0)	0.079		0.050	0.024	mg/L			03/16/23 00:36	1
Sulfate (EPA 300.0)	190		1.0	0.35	mg/L			03/16/23 00:36	1
Total Dissolved Solids (SM 2540C)	440		10	7.8	mg/L			03/09/23 10:39	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Client Sample ID: DUP-003-BAC-07-F-20230302-01

Lab Sample ID: 240-181316-2

Date Collected: 03/02/23 11:26

Matrix: Water

Date Received: 03/03/23 14:35

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1100		100	57	ug/L		03/06/23 14:00	03/07/23 22:46	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	94000		1000	580	ug/L		03/06/23 14:00	03/07/23 20:16	1
Magnesium	22000		1000	200	ug/L		03/06/23 14:00	03/07/23 20:16	1
Potassium	1400		1000	220	ug/L		03/06/23 14:00	03/07/23 20:16	1
Sodium	16000		1000	330	ug/L		03/06/23 14:00	03/07/23 20:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	130		5.0	2.6	mg/L			03/06/23 20:39	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	130		5.0	2.6	mg/L			03/06/23 20:39	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 20:39	1
Chloride (EPA 300.0)	25		1.0	0.13	mg/L			03/16/23 01:41	1
Fluoride (EPA 300.0)	0.083		0.050	0.024	mg/L			03/16/23 01:41	1
Sulfate (EPA 300.0)	190		1.0	0.35	mg/L			03/16/23 01:41	1
Total Dissolved Solids (SM 2540C)	450		10	7.8	mg/L			03/09/23 10:39	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Client Sample ID: BAC-18-F-20230302-01

Lab Sample ID: 240-181316-3

Date Collected: 03/02/23 13:33

Matrix: Water

Date Received: 03/03/23 14:35

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1400		100	57	ug/L		03/06/23 14:00	03/07/23 22:50	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	79000		1000	580	ug/L		03/06/23 14:00	03/07/23 20:19	1
Magnesium	21000		1000	200	ug/L		03/06/23 14:00	03/07/23 20:19	1
Potassium	1500		1000	220	ug/L		03/06/23 14:00	03/07/23 20:19	1
Sodium	15000		1000	330	ug/L		03/06/23 14:00	03/07/23 20:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	96		5.0	2.6	mg/L			03/06/23 20:43	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	96		5.0	2.6	mg/L			03/06/23 20:43	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 20:43	1
Chloride (EPA 300.0)	25		1.0	0.13	mg/L			03/16/23 02:03	1
Fluoride (EPA 300.0)	0.064		0.050	0.024	mg/L			03/16/23 02:03	1
Sulfate (EPA 300.0)	190		1.0	0.35	mg/L			03/16/23 02:03	1
Total Dissolved Solids (SM 2540C)	420		10	7.8	mg/L			03/09/23 10:39	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Client Sample ID: BAC-06-F-20230302-01

Lab Sample ID: 240-181316-4

Date Collected: 03/02/23 14:16

Matrix: Water

Date Received: 03/03/23 14:35

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1900		100	57	ug/L		03/06/23 14:00	03/07/23 22:55	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	120000		1000	580	ug/L		03/06/23 14:00	03/07/23 20:21	1
Magnesium	27000		1000	200	ug/L		03/06/23 14:00	03/07/23 20:21	1
Potassium	1500		1000	220	ug/L		03/06/23 14:00	03/07/23 20:21	1
Sodium	16000		1000	330	ug/L		03/06/23 14:00	03/07/23 20:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	190		5.0	2.6	mg/L			03/06/23 20:02	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	190		5.0	2.6	mg/L			03/06/23 20:02	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 20:02	1
Chloride (EPA 300.0)	24		1.0	0.13	mg/L			03/16/23 02:25	1
Fluoride (EPA 300.0)	0.098		0.050	0.024	mg/L			03/16/23 02:25	1
Sulfate (EPA 300.0)	220		2.0	0.70	mg/L			03/16/23 15:24	2
Total Dissolved Solids (SM 2540C)	560		10	7.8	mg/L			03/09/23 10:39	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Client Sample ID: EB-001-F-20230302-01

Lab Sample ID: 240-181316-5

Date Collected: 03/02/23 16:45

Matrix: Water

Date Received: 03/03/23 14:35

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		03/06/23 14:00	03/07/23 22:59	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	580	ug/L		03/06/23 14:00	03/07/23 20:24	1
Magnesium	ND		1000	200	ug/L		03/06/23 14:00	03/07/23 20:24	1
Potassium	ND		1000	220	ug/L		03/06/23 14:00	03/07/23 20:24	1
Sodium	ND		1000	330	ug/L		03/06/23 14:00	03/07/23 20:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 20:53	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 20:53	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 20:53	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			03/16/23 03:30	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			03/16/23 03:30	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			03/16/23 03:30	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			03/09/23 10:39	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-564412/1-A
 Matrix: Water
 Analysis Batch: 564578

Client Sample ID: Method Blank
 Prep Type: Total Recoverable
 Prep Batch: 564412

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		03/06/23 14:00	03/07/23 22:01	1

Lab Sample ID: LCS 240-564412/2-A
 Matrix: Water
 Analysis Batch: 564578

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 564412

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 240-564412/1-A
 Matrix: Water
 Analysis Batch: 564592

Client Sample ID: Method Blank
 Prep Type: Total Recoverable
 Prep Batch: 564412

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	580	ug/L		03/06/23 14:00	03/07/23 19:45	1
Magnesium	ND		1000	200	ug/L		03/06/23 14:00	03/07/23 19:45	1
Potassium	ND		1000	220	ug/L		03/06/23 14:00	03/07/23 19:45	1
Sodium	ND		1000	330	ug/L		03/06/23 14:00	03/07/23 19:45	1

Lab Sample ID: LCS 240-564412/3-A
 Matrix: Water
 Analysis Batch: 564592

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 564412

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	24200		ug/L		97	80 - 120
Magnesium	25000	25000		ug/L		100	80 - 120
Potassium	25000	24600		ug/L		98	80 - 120
Sodium	25000	24800		ug/L		99	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-564459/109
 Matrix: Water
 Analysis Batch: 564459

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			03/06/23 18:23	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 18:23	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 18:23	1

Lab Sample ID: MB 240-564459/136
 Matrix: Water
 Analysis Batch: 564459

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			03/06/23 20:12	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 20:12	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 20:12	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Method: 2320B-1997 - Alkalinity, Total (Continued)

Lab Sample ID: MB 240-564459/83
Matrix: Water
Analysis Batch: 564459

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			03/06/23 16:43	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 16:43	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 16:43	1

Lab Sample ID: LCS 240-564459/108
Matrix: Water
Analysis Batch: 564459

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	141		mg/L		97	86 - 123

Lab Sample ID: LCS 240-564459/135
Matrix: Water
Analysis Batch: 564459

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	139		mg/L		95	86 - 123

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-565543/3
Matrix: Water
Analysis Batch: 565543

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			03/15/23 14:29	1
Fluoride	ND		0.050	0.024	mg/L			03/15/23 14:29	1
Sulfate	ND		1.0	0.35	mg/L			03/15/23 14:29	1

Lab Sample ID: LCS 240-565543/4
Matrix: Water
Analysis Batch: 565543

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	2.72		mg/L		109	90 - 110
Sulfate	50.0	50.8		mg/L		102	90 - 110

Lab Sample ID: 240-181316-1 MS
Matrix: Water
Analysis Batch: 565543

Client Sample ID: BAC-07-F-20230302-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25		50.0	76.9		mg/L		104	80 - 120
Fluoride	0.079		2.50	2.94		mg/L		114	80 - 120
Sulfate	190		50.0	231	E	mg/L		91	80 - 120

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-181316-1 MSD
Matrix: Water
Analysis Batch: 565543

Client Sample ID: BAC-07-F-20230302-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	25		50.0	76.7		mg/L		103	80 - 120	0	15
Fluoride	0.079		2.50	2.92		mg/L		114	80 - 120	1	15
Sulfate	190		50.0	231	E	mg/L		91	80 - 120	0	15

Lab Sample ID: MB 240-565679/3
Matrix: Water
Analysis Batch: 565679

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			03/16/23 12:34	1
Fluoride	ND		0.050	0.024	mg/L			03/16/23 12:34	1
Sulfate	ND		1.0	0.35	mg/L			03/16/23 12:34	1

Lab Sample ID: LCS 240-565679/4
Matrix: Water
Analysis Batch: 565679

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	50.5		mg/L		101	90 - 110
Fluoride	2.50	2.64		mg/L		105	90 - 110
Sulfate	50.0	52.9		mg/L		106	90 - 110

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

Lab Sample ID: MB 240-564824/1
Matrix: Water
Analysis Batch: 564824

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			03/09/23 10:39	1

Lab Sample ID: LCS 240-564824/2
Matrix: Water
Analysis Batch: 564824

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	500	455		mg/L		91	80 - 120

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Metals

Prep Batch: 564412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181316-1	BAC-07-F-20230302-01	Total Recoverable	Water	3005A	
240-181316-2	DUP-003-BAC-07-F-20230302-01	Total Recoverable	Water	3005A	
240-181316-3	BAC-18-F-20230302-01	Total Recoverable	Water	3005A	
240-181316-4	BAC-06-F-20230302-01	Total Recoverable	Water	3005A	
240-181316-5	EB-001-F-20230302-01	Total Recoverable	Water	3005A	
MB 240-564412/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-564412/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-564412/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 564578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181316-1	BAC-07-F-20230302-01	Total Recoverable	Water	6010D	564412
240-181316-2	DUP-003-BAC-07-F-20230302-01	Total Recoverable	Water	6010D	564412
240-181316-3	BAC-18-F-20230302-01	Total Recoverable	Water	6010D	564412
240-181316-4	BAC-06-F-20230302-01	Total Recoverable	Water	6010D	564412
240-181316-5	EB-001-F-20230302-01	Total Recoverable	Water	6010D	564412
MB 240-564412/1-A	Method Blank	Total Recoverable	Water	6010D	564412
LCS 240-564412/2-A	Lab Control Sample	Total Recoverable	Water	6010D	564412

Analysis Batch: 564592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181316-1	BAC-07-F-20230302-01	Total Recoverable	Water	6020B	564412
240-181316-2	DUP-003-BAC-07-F-20230302-01	Total Recoverable	Water	6020B	564412
240-181316-3	BAC-18-F-20230302-01	Total Recoverable	Water	6020B	564412
240-181316-4	BAC-06-F-20230302-01	Total Recoverable	Water	6020B	564412
240-181316-5	EB-001-F-20230302-01	Total Recoverable	Water	6020B	564412
MB 240-564412/1-A	Method Blank	Total Recoverable	Water	6020B	564412
LCS 240-564412/3-A	Lab Control Sample	Total Recoverable	Water	6020B	564412

General Chemistry

Analysis Batch: 564459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181316-1	BAC-07-F-20230302-01	Total/NA	Water	2320B-1997	
240-181316-2	DUP-003-BAC-07-F-20230302-01	Total/NA	Water	2320B-1997	
240-181316-3	BAC-18-F-20230302-01	Total/NA	Water	2320B-1997	
240-181316-4	BAC-06-F-20230302-01	Total/NA	Water	2320B-1997	
240-181316-5	EB-001-F-20230302-01	Total/NA	Water	2320B-1997	
MB 240-564459/109	Method Blank	Total/NA	Water	2320B-1997	
MB 240-564459/136	Method Blank	Total/NA	Water	2320B-1997	
MB 240-564459/83	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-564459/108	Lab Control Sample	Total/NA	Water	2320B-1997	
LCS 240-564459/135	Lab Control Sample	Total/NA	Water	2320B-1997	

Analysis Batch: 564824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181316-1	BAC-07-F-20230302-01	Total/NA	Water	SM 2540C	
240-181316-2	DUP-003-BAC-07-F-20230302-01	Total/NA	Water	SM 2540C	
240-181316-3	BAC-18-F-20230302-01	Total/NA	Water	SM 2540C	
240-181316-4	BAC-06-F-20230302-01	Total/NA	Water	SM 2540C	
240-181316-5	EB-001-F-20230302-01	Total/NA	Water	SM 2540C	

Eurofins Canton

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

General Chemistry (Continued)

Analysis Batch: 564824 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-564824/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-564824/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 565543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181316-1	BAC-07-F-20230302-01	Total/NA	Water	300.0	
240-181316-2	DUP-003-BAC-07-F-20230302-01	Total/NA	Water	300.0	
240-181316-3	BAC-18-F-20230302-01	Total/NA	Water	300.0	
240-181316-4	BAC-06-F-20230302-01	Total/NA	Water	300.0	
240-181316-5	EB-001-F-20230302-01	Total/NA	Water	300.0	
MB 240-565543/3	Method Blank	Total/NA	Water	300.0	
LCS 240-565543/4	Lab Control Sample	Total/NA	Water	300.0	
240-181316-1 MS	BAC-07-F-20230302-01	Total/NA	Water	300.0	
240-181316-1 MSD	BAC-07-F-20230302-01	Total/NA	Water	300.0	

Analysis Batch: 565679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181316-4	BAC-06-F-20230302-01	Total/NA	Water	300.0	
MB 240-565679/3	Method Blank	Total/NA	Water	300.0	
LCS 240-565679/4	Lab Control Sample	Total/NA	Water	300.0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Client Sample ID: BAC-07-F-20230302-01

Lab Sample ID: 240-181316-1

Date Collected: 03/02/23 11:26

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6010D		1	564578	KLC	EET CAN	03/07/23 22:34
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6020B		1	564592	AJC	EET CAN	03/07/23 20:13
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 19:49
Total/NA	Analysis	300.0		1	565543	JMB	EET CAN	03/16/23 00:36
Total/NA	Analysis	SM 2540C		1	564824	GH	EET CAN	03/09/23 10:39

Client Sample ID: DUP-003-BAC-07-F-20230302-01

Lab Sample ID: 240-181316-2

Date Collected: 03/02/23 11:26

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6010D		1	564578	KLC	EET CAN	03/07/23 22:46
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6020B		1	564592	AJC	EET CAN	03/07/23 20:16
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 20:39
Total/NA	Analysis	300.0		1	565543	JMB	EET CAN	03/16/23 01:41
Total/NA	Analysis	SM 2540C		1	564824	GH	EET CAN	03/09/23 10:39

Client Sample ID: BAC-18-F-20230302-01

Lab Sample ID: 240-181316-3

Date Collected: 03/02/23 13:33

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6010D		1	564578	KLC	EET CAN	03/07/23 22:50
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6020B		1	564592	AJC	EET CAN	03/07/23 20:19
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 20:43
Total/NA	Analysis	300.0		1	565543	JMB	EET CAN	03/16/23 02:03
Total/NA	Analysis	SM 2540C		1	564824	GH	EET CAN	03/09/23 10:39

Client Sample ID: BAC-06-F-20230302-01

Lab Sample ID: 240-181316-4

Date Collected: 03/02/23 14:16

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6010D		1	564578	KLC	EET CAN	03/07/23 22:55
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6020B		1	564592	AJC	EET CAN	03/07/23 20:21
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 20:02

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Client Sample ID: BAC-06-F-20230302-01

Lab Sample ID: 240-181316-4

Date Collected: 03/02/23 14:16

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	565543	JMB	EET CAN	03/16/23 02:25
Total/NA	Analysis	300.0		2	565679	JMB	EET CAN	03/16/23 15:24
Total/NA	Analysis	SM 2540C		1	564824	GH	EET CAN	03/09/23 10:39

Client Sample ID: EB-001-F-20230302-01

Lab Sample ID: 240-181316-5

Date Collected: 03/02/23 16:45

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6010D		1	564578	KLC	EET CAN	03/07/23 22:59
Total Recoverable	Prep	3005A			564412	MRL	EET CAN	03/06/23 14:00
Total Recoverable	Analysis	6020B		1	564592	AJC	EET CAN	03/07/23 20:24
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 20:53
Total/NA	Analysis	300.0		1	565543	JMB	EET CAN	03/16/23 03:30
Total/NA	Analysis	SM 2540C		1	564824	GH	EET CAN	03/09/23 10:39

Laboratory References:

EET CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396



Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-181316-1

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23 *
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-27-23 *
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23 *
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-23 *
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.



Chain of Custody Record



Client Information Client Contact: <u>Taylor Huffman</u> Phone: <u>740-373-4308</u> PWSID: _____		Lab PM: <u>Cisneros, Roxanne</u> E-Mail: <u>roxanne.cisneros@Eurofins.com</u>		Carrier Tracking No(s): _____ State of Origin: _____ COC No: <u>240-93465-34577.1</u> Page: <u>Page 1 of 1</u> Job #: _____		
Due Date Requested: _____ TAT Requested (days): _____ Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: <u>2935505</u> WO #: _____ Project #: <u>24019633</u> SSOW#: _____		Analysis Requested Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> <input type="checkbox"/> Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> <input type="checkbox"/> 60108.6020 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 2540C_Calcd 300.0_280 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 2320B - Alkalinity <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
City: <u>Cheshire</u> State, Zip: <u>OH, 45620</u> Phone: <u>740-925-3171(Tel)</u> Email: <u>taylor.huffman@lightstonegen.com</u> Project Name: <u>Federal CCR Wells - App III</u> Site: <u>Garvin Plant</u>		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 Other: _____ 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)				
Sample Identification <u>BAC-07-F-20230302-01</u> <u>DUP-003-BAC-07-F-20230302-01</u> <u>BAC-18-F-20230302-01</u> <u>BAC-06-F-20230302-01</u> <u>BAC-EB-001-F-20230302-01</u>		Sample Date <u>3-2-23</u> <u>3-2-23</u> <u>3-2-23</u> <u>3-2-23</u> <u>3-2-23</u>	Sample Time <u>1126</u> <u>1126</u> <u>1333</u> <u>1416</u> <u>1645</u>	Sample Type (G=Comp, G=grab) <u>G</u> <u>G</u> <u>G</u> <u>G</u> <u>G</u>	Matrix (W=Water, S=Soil, O=Other, L=Liquid) <u>W</u> <u>W</u> <u>W</u> <u>W</u> <u>W</u>	Total Number of Containers Special Instructions/Note: _____
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify) _____		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements: _____				
Relinquished by: <u>Bobby Costo</u> Relinquished by: <u>Tom Edwards</u> Relinquished by: _____		Date: <u>3-3-23/1030</u> Date/Time: <u>3-3-23 1435hrs</u> Date/Time: _____		Received by: <u>Tom Edwards</u> Received by: <u>M. A. D.</u> Received by: _____ Company: <u>Auto Options</u> Company: _____ Company: _____		
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks: _____				



Eurofins - Canton Sample Receipt Form/Narrative
Barberton Facility

Login # : _____

Client Lightsone Site Name _____
 Cooler Received on 3-3-23 Opened on 3-3-23
 FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off Eurofins Courier Other _____

Cooler unpacked by:
Mandaly

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

Eurofins Cooler # 0276 Foam Box _____ Client Cooler _____ Box _____ Other _____
 Packing material used: Bubble Wrap _____ Foam _____ Plastic Bag _____ None _____ Other _____
 COOLANT: Wet Ice Blue Ice _____ Dry Ice _____ Water _____ None _____

1. Cooler temperature upon receipt See Multiple Cooler Form
 IR GUN # IR-13 (CF -0.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN # IR-16 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN # IR-17 (CF -0.3 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity _____
 -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

Tests that are not checked for pH by Receiving:
 VOAs
 Oil and Grease
 TOC

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# HC293086
 14. Were VOAs on the COC? Yes No
 15. Were air bubbles >6 mm in any VOA vials? Yes ← 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: _____

- 1
- 2
- 3
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- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-07-F-20230302-01	240-181316-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-003-BAC-07-F-20230302-01	240-181316-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-18-F-20230302-01	240-181316-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-06-F-20230302-01	240-181316-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230302-01	240-181316-C-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____

Login # : _____

Eurofins - Canton Sample Receipt Multiple Cooler Form									
Cooler Description (Circle)				IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)		
<input checked="" type="radio"/> EC	Client	Box	Other	IR GUN #: 13	06	0.4	<input checked="" type="radio"/> Wet Ice	Blue Ice	Dry Ice
<input checked="" type="radio"/> EC	Client	Box	Other	IR GUN #: 13	2.3	2.3	<input checked="" type="radio"/> Wet Ice	Blue Ice	Dry Ice
<input checked="" type="radio"/> EC	Client	Box	Other	IR GUN #: 13	1.2	1.0	<input checked="" type="radio"/> Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
<input type="checkbox"/> See Temperature Excursion Form									

1
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15



ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 4/4/2023 9:17:39 AM

JOB DESCRIPTION

Federal CCR Wells - App IV

JOB NUMBER

240-181320-1

Eurofins Canton

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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
4/4/2023 9:17:39 AM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

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.

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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Job ID: 240-181320-1

Laboratory: Eurofins Canton

Narrative

Job Narrative 240-181320-1

Receipt

The samples were received on 3/3/2023 2:35 PM. 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 1.0°C

Metals

Method 6020B: The continuing calibration verification (CCV) associated with batch 240-564732 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: BAC-03-F-20230303-01 (240-181320-1) and EB-001-F-20230303-01 (240-181320-2).

Method 6020B: The continuing calibration verification (CCV) associated with batch 240-564732 recovered above the upper control limit for Lithium. 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: BAC-03-F-20230303-01 (240-181320-1) and EB-001-F-20230303-01 (240-181320-2).

Method 6020B: The continuing calibration verification (CCV) associated with batch 240-564732 recovered above the upper control limit for Chromium. 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: BAC-03-F-20230303-01 (240-181320-1) and EB-001-F-20230303-01 (240-181320-2).

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 prep batch 160-602832: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-03-F-20230303-01 (240-181320-1), EB-001-F-20230303-01 (240-181320-2), (LCS 160-602832/2-A), (LCSD 160-602832/25-A) and (MB 160-602832/1-A)

Method 9320_Ra228: Radium-228 batch 602838: The LCS/LCSD recovered at (143% / 130%). 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/LCSD are not from this agency and are therefore held to our in-house statistical limits of (62-148%) per method requirements. The LCS/LCSD pass, no further action is required (LCS 160-602838/2-A) and (LCSD 160-602838/25-A)

Method 9320_Ra228: Radium-228 batch 602838: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-03-F-20230303-01 (240-181320-1), EB-001-F-20230303-01 (240-181320-2), (LCS 160-602838/2-A), (LCSD 160-602838/25-A) and (MB 160-602838/1-A)

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 - App IV

Job ID: 240-181320-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CAN
7470A	Mercury (CVAA)	SW846	EET CAN
2320B-1997	Alkalinity, Total	SM	EET CAN
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CAN
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 CAN
7470A	Preparation, Mercury	SW846	EET CAN
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 CAN = Eurofins Canton, 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 - App IV

Job ID: 240-181320-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-181320-1	BAC-03-F-20230303-01	Water	03/03/23 09:47	03/03/23 14:35
240-181320-2	EB-001-F-20230303-01	Water	03/03/23 10:15	03/03/23 14:35

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Client Sample ID: BAC-03-F-20230303-01

Lab Sample ID: 240-181320-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.1	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	52		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.6		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	3.7		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.4	J ^+	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	16000		1000	200	ug/L	1		6020B	Total Recoverable
Potassium	2000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	30000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	82		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	82		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.062		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: EB-001-F-20230303-01

Lab Sample ID: 240-181320-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	1.8	J	8.0	1.7	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Client Sample ID: BAC-03-F-20230303-01

Lab Sample ID: 240-181320-1

Date Collected: 03/03/23 09:47

Matrix: Water

Date Received: 03/03/23 14:35

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		03/05/23 14:00	03/08/23 18:08	1
Arsenic	1.1	J	5.0	0.75	ug/L		03/05/23 14:00	03/08/23 18:08	1
Barium	52		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 18:08	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 18:08	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 18:08	1
Chromium	ND	^+	5.0	2.5	ug/L		03/05/23 14:00	03/08/23 18:08	1
Cobalt	1.6		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 18:08	1
Lead	3.7		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 18:08	1
Lithium	6.4	J ^+	8.0	1.7	ug/L		03/05/23 14:00	03/08/23 18:08	1
Magnesium	16000		1000	200	ug/L		03/05/23 14:00	03/08/23 18:08	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 18:08	1
Potassium	2000		1000	220	ug/L		03/05/23 14:00	03/08/23 18:08	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 18:08	1
Sodium	30000		1000	330	ug/L		03/05/23 14:00	03/08/23 18:08	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 18:08	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		03/06/23 10:00	03/07/23 20:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	82		5.0	2.6	mg/L			03/06/23 20:57	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	82		5.0	2.6	mg/L			03/06/23 20:57	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 20:57	1
Fluoride (EPA 300.0-1993 R2.1)	0.062		0.050	0.024	mg/L			03/28/23 12:16	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	0.197		0.126	0.127	1.00	0.166	pCi/L	03/08/23 12:16	04/03/23 15:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	63.3		30 - 110					03/08/23 12:16	04/03/23 15:06	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	0.758	U	0.619	0.623	1.00	0.960	pCi/L	03/08/23 13:13	03/23/23 12:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	63.3		30 - 110					03/08/23 13:13	03/23/23 12:00	1
Y Carrier	81.9		30 - 110					03/08/23 13:13	03/23/23 12:00	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Client Sample ID: BAC-03-F-20230303-01

Lab Sample ID: 240-181320-1

Date Collected: 03/03/23 09:47

Matrix: Water

Date Received: 03/03/23 14:35

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	0.954	U	0.632	0.636	5.00	0.960	pCi/L		04/03/23 17:14	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Client Sample ID: EB-001-F-20230303-01

Lab Sample ID: 240-181320-2

Date Collected: 03/03/23 10:15

Matrix: Water

Date Received: 03/03/23 14:35

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		03/05/23 14:00	03/08/23 18:21	1
Arsenic	ND		5.0	0.75	ug/L		03/05/23 14:00	03/08/23 18:21	1
Barium	ND		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 18:21	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 18:21	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 18:21	1
Chromium	ND	^+	5.0	2.5	ug/L		03/05/23 14:00	03/08/23 18:21	1
Cobalt	ND		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 18:21	1
Lead	ND		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 18:21	1
Lithium	1.8	J	8.0	1.7	ug/L		03/05/23 14:00	03/08/23 18:21	1
Magnesium	ND		1000	200	ug/L		03/05/23 14:00	03/08/23 18:21	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 18:21	1
Potassium	ND		1000	220	ug/L		03/05/23 14:00	03/08/23 18:21	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 18:21	1
Sodium	ND		1000	330	ug/L		03/05/23 14:00	03/08/23 18:21	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 18:21	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		03/06/23 10:00	03/07/23 20:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 21:00	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 21:00	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			03/06/23 21:00	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			03/28/23 12:36	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0269	U	0.0447	0.0448	1.00	0.0794	pCi/L	03/08/23 12:16	04/03/23 15:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.4		30 - 110					03/08/23 12:16	04/03/23 15:06	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	1.11		0.486	0.497	1.00	0.662	pCi/L	03/08/23 13:13	03/23/23 12:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.4		30 - 110					03/08/23 13:13	03/23/23 12:00	1
Y Carrier	81.5		30 - 110					03/08/23 13:13	03/23/23 12:00	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Client Sample ID: EB-001-F-20230303-01

Lab Sample ID: 240-181320-2

Date Collected: 03/03/23 10:15

Matrix: Water

Date Received: 03/03/23 14:35

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		0.488	0.499	5.00	0.662	pCi/L		04/03/23 17:14	1

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Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
240-181320-1	BAC-03-F-20230303-01	63.3	
240-181320-2	EB-001-F-20230303-01	81.4	
LCS 160-602832/2-A	Lab Control Sample	92.4	
LCSD 160-602832/25-A	Lab Control Sample Dup	93.8	
MB 160-602832/1-A	Method Blank	97.2	

Tracer/Carrier Legend
Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-181320-1	BAC-03-F-20230303-01	63.3	81.9
240-181320-2	EB-001-F-20230303-01	81.4	81.5
LCS 160-602838/2-A	Lab Control Sample	92.4	82.6
LCSD 160-602838/25-A	Lab Control Sample Dup	93.8	80.7
MB 160-602838/1-A	Method Blank	97.2	83.0

Tracer/Carrier Legend
Ba = Ba Carrier
Y = Y Carrier

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-564268/1-A
Matrix: Water
Analysis Batch: 564732

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 564268

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/05/23 14:00	03/08/23 16:39	1
Arsenic	ND		5.0	0.75	ug/L		03/05/23 14:00	03/08/23 16:39	1
Barium	ND		5.0	2.2	ug/L		03/05/23 14:00	03/08/23 16:39	1
Beryllium	ND	^+	1.0	0.62	ug/L		03/05/23 14:00	03/08/23 16:39	1
Cadmium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 16:39	1
Chromium	ND		5.0	2.5	ug/L		03/05/23 14:00	03/08/23 16:39	1
Cobalt	ND		1.0	0.19	ug/L		03/05/23 14:00	03/08/23 16:39	1
Lead	ND		1.0	0.45	ug/L		03/05/23 14:00	03/08/23 16:39	1
Lithium	ND	^+	8.0	1.7	ug/L		03/05/23 14:00	03/08/23 16:39	1
Magnesium	ND		1000	200	ug/L		03/05/23 14:00	03/08/23 16:39	1
Molybdenum	ND		5.0	1.1	ug/L		03/05/23 14:00	03/08/23 16:39	1
Potassium	ND		1000	220	ug/L		03/05/23 14:00	03/08/23 16:39	1
Selenium	ND		5.0	0.89	ug/L		03/05/23 14:00	03/08/23 16:39	1
Sodium	ND		1000	330	ug/L		03/05/23 14:00	03/08/23 16:39	1
Thallium	ND		1.0	0.20	ug/L		03/05/23 14:00	03/08/23 16:39	1

Lab Sample ID: LCS 240-564268/2-A
Matrix: Water
Analysis Batch: 564732

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 564268

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	101		ug/L		101	80 - 120
Arsenic	1000	908		ug/L		91	80 - 120
Barium	1000	962		ug/L		96	80 - 120
Beryllium	500	485	^+	ug/L		97	80 - 120
Cadmium	500	480		ug/L		96	80 - 120
Chromium	500	514		ug/L		103	80 - 120
Cobalt	500	462		ug/L		92	80 - 120
Lead	500	501		ug/L		100	80 - 120
Lithium	500	476	^+	ug/L		95	80 - 120
Magnesium	25000	24900		ug/L		99	80 - 120
Molybdenum	500	467		ug/L		93	80 - 120
Potassium	25000	24000		ug/L		96	80 - 120
Selenium	1000	915		ug/L		91	80 - 120
Sodium	25000	24900		ug/L		100	80 - 120
Thallium	1000	968		ug/L		97	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-564269/1-A
Matrix: Water
Analysis Batch: 564598

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 564269

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/06/23 10:00	03/07/23 19:58	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-564269/2-A
 Matrix: Water
 Analysis Batch: 564598

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 564269

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.19		ug/L		104	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-564459/109
 Matrix: Water
 Analysis Batch: 564459

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			03/06/23 18:23	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 18:23	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 18:23	1

Lab Sample ID: MB 240-564459/136
 Matrix: Water
 Analysis Batch: 564459

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			03/06/23 20:12	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 20:12	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/06/23 20:12	1

Lab Sample ID: LCS 240-564459/135
 Matrix: Water
 Analysis Batch: 564459

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	139		mg/L		95	86 - 123

Lab Sample ID: 240-181320-2 DU
 Matrix: Water
 Analysis Batch: 564459

Client Sample ID: EB-001-F-20230303-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Alkalinity	ND		ND		mg/L		NC	20
Bicarbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-566932/3
 Matrix: Water
 Analysis Batch: 566932

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			03/28/23 02:32	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 240-566932/4
 Matrix: Water
 Analysis Batch: 566932

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.58		mg/L		103	90 - 110

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-602832/1-A
 Matrix: Water
 Analysis Batch: 605833

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 602832

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.006515	U	0.0337	0.0337	1.00	0.0790	pCi/L	03/08/23 12:16	04/03/23 15:02	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.2		30 - 110					03/08/23 12:16	04/03/23 15:02	1

Lab Sample ID: LCS 160-602832/2-A
 Matrix: Water
 Analysis Batch: 605833

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 602832

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	11.3	11.49		1.18	1.00	0.124	pCi/L	101	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	92.4		30 - 110						

Lab Sample ID: LCSD 160-602832/25-A
 Matrix: Water
 Analysis Batch: 605835

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 602832

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-226	11.3	11.17		1.15	1.00	0.0864	pCi/L	99	75 - 125	0.14	1
Carrier	LCSD %Yield	LCSD Qualifier	Limits								
Ba Carrier	93.8		30 - 110								

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-602838/1-A
 Matrix: Water
 Analysis Batch: 604790

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 602838

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.6552		0.342	0.347	1.00	0.477	pCi/L	03/08/23 13:13	03/23/23 11:56	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

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

Lab Sample ID: MB 160-602838/1-A
Matrix: Water
Analysis Batch: 604790

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602838

Carrier	MB MB		Limits
	%Yield	Qualifier	
Ba Carrier	97.2		30 - 110
Y Carrier	83.0		30 - 110

Prepared	Analyzed	Dil Fac
03/08/23 13:13	03/23/23 11:56	1
03/08/23 13:13	03/23/23 11:56	1

Lab Sample ID: LCS 160-602838/2-A
Matrix: Water
Analysis Batch: 604790

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602838

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	
Radium-228	8.09	11.54		1.47	1.00	0.464	pCi/L	143	75 - 125	

Carrier	LCS LCS		Limits
	%Yield	Qualifier	
Ba Carrier	92.4		30 - 110
Y Carrier	82.6		30 - 110

Lab Sample ID: LCSD 160-602838/25-A
Matrix: Water
Analysis Batch: 604790

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 602838

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		RER	RER Limit
Radium-228	8.09	10.51		1.39	1.00	0.494	pCi/L	130	75 - 125	0.36	1	

Carrier	LCSD LCSD		Limits
	%Yield	Qualifier	
Ba Carrier	93.8		30 - 110
Y Carrier	80.7		30 - 110

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Metals

Prep Batch: 564268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181320-1	BAC-03-F-20230303-01	Total Recoverable	Water	3005A	
240-181320-2	EB-001-F-20230303-01	Total Recoverable	Water	3005A	
MB 240-564268/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-564268/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 564269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181320-1	BAC-03-F-20230303-01	Total/NA	Water	7470A	
240-181320-2	EB-001-F-20230303-01	Total/NA	Water	7470A	
MB 240-564269/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-564269/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 564598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181320-1	BAC-03-F-20230303-01	Total/NA	Water	7470A	564269
240-181320-2	EB-001-F-20230303-01	Total/NA	Water	7470A	564269
MB 240-564269/1-A	Method Blank	Total/NA	Water	7470A	564269
LCS 240-564269/2-A	Lab Control Sample	Total/NA	Water	7470A	564269

Analysis Batch: 564732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181320-1	BAC-03-F-20230303-01	Total Recoverable	Water	6020B	564268
240-181320-2	EB-001-F-20230303-01	Total Recoverable	Water	6020B	564268
MB 240-564268/1-A	Method Blank	Total Recoverable	Water	6020B	564268
LCS 240-564268/2-A	Lab Control Sample	Total Recoverable	Water	6020B	564268

General Chemistry

Analysis Batch: 564459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181320-1	BAC-03-F-20230303-01	Total/NA	Water	2320B-1997	
240-181320-2	EB-001-F-20230303-01	Total/NA	Water	2320B-1997	
MB 240-564459/109	Method Blank	Total/NA	Water	2320B-1997	
MB 240-564459/136	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-564459/135	Lab Control Sample	Total/NA	Water	2320B-1997	
240-181320-2 DU	EB-001-F-20230303-01	Total/NA	Water	2320B-1997	

Analysis Batch: 566932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181320-1	BAC-03-F-20230303-01	Total/NA	Water	300.0-1993 R2.1	
240-181320-2	EB-001-F-20230303-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-566932/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-566932/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

Rad

Prep Batch: 602832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181320-1	BAC-03-F-20230303-01	Total/NA	Water	PrecSep-21	
240-181320-2	EB-001-F-20230303-01	Total/NA	Water	PrecSep-21	
MB 160-602832/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-602832/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Rad (Continued)

Prep Batch: 602832 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 160-602832/25-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 602838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-181320-1	BAC-03-F-20230303-01	Total/NA	Water	PrecSep_0	
240-181320-2	EB-001-F-20230303-01	Total/NA	Water	PrecSep_0	
MB 160-602838/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-602838/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-602838/25-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Client Sample ID: BAC-03-F-20230303-01

Lab Sample ID: 240-181320-1

Date Collected: 03/03/23 09:47

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 18:08
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:37
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 20:57
Total/NA	Analysis	300.0-1993 R2.1		1	566932	JWW	EET CAN	03/28/23 12:16
Total/NA	Prep	PrecSep-21			602832	DJP	EET SL	03/08/23 12:16
Total/NA	Analysis	9315		1	605833	EMH	EET SL	04/03/23 15:06
Total/NA	Prep	PrecSep_0			602838	DJP	EET SL	03/08/23 13:13
Total/NA	Analysis	9320		1	604790	FLC	EET SL	03/23/23 12:00
Total/NA	Analysis	Ra226_Ra228		1	605951	SCB	EET SL	04/03/23 17:14

Client Sample ID: EB-001-F-20230303-01

Lab Sample ID: 240-181320-2

Date Collected: 03/03/23 10:15

Matrix: Water

Date Received: 03/03/23 14:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			564268	MRL	EET CAN	03/05/23 14:00
Total Recoverable	Analysis	6020B		1	564732	AJC	EET CAN	03/08/23 18:21
Total/NA	Prep	7470A			564269	MRL	EET CAN	03/06/23 10:00
Total/NA	Analysis	7470A		1	564598	DSH	EET CAN	03/07/23 20:39
Total/NA	Analysis	2320B-1997		1	564459	JMR	EET CAN	03/06/23 21:00
Total/NA	Analysis	300.0-1993 R2.1		1	566932	JWW	EET CAN	03/28/23 12:36
Total/NA	Prep	PrecSep-21			602832	DJP	EET SL	03/08/23 12:16
Total/NA	Analysis	9315		1	605833	EMH	EET SL	04/03/23 15:06
Total/NA	Prep	PrecSep_0			602838	DJP	EET SL	03/08/23 13:13
Total/NA	Analysis	9320		1	604790	FLC	EET SL	03/23/23 12:00
Total/NA	Analysis	Ra226_Ra228		1	605951	SCB	EET SL	04/03/23 17:14

Laboratory References:

EET CAN = Eurofins Canton, 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
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23 *
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-28-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23 *
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-23 *
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	03-29-23
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-23
Florida	NELAP	E87689	06-30-23
HI - RadChem Recognition	State	n/a	06-30-23
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana (All)	NELAP	04080	06-30-23
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-23
MI - RadChem Recognition	State	9005	06-30-23
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-23
New Jersey	NELAP	MO002	06-30-23
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-23
North Dakota	State	R-207	06-30-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Canton

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-181320-1

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
Oklahoma	NELAP	9997	08-31-23
Oregon	NELAP	4157	09-01-23
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23
Texas	NELAP	T104704193	07-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00028	06-11-23
Utah	NELAP	MO000542021-14	07-31-23
Virginia	NELAP	10310	06-14-24
Washington	State	C592	08-30-23
West Virginia DEP	State	381	10-31-23

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: Federal CCR Wells - App IV Site:	Lab PM: Cisneros, Roxanne E-Mail: roxanne.cisneros@Eurofinsnet.com	Carrier Tracking No(s): 240-93466-34578.1 State of Origin: Page 1 of 1 Job #	Analysis Requested Perform MS/MSD (Yes or No) Field Filtered Sample (Yes or No) 300.0_28D - Fluoride 2220B - Alkalinity 9315_Ra226, 9320_Ra228, Ra226Ra228_GFPc	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 Other: 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)									
Sample Identification BAC-03-F-20230303-01 EB-001-F-20230303-01		Sample Date 3-3-23 0947 3-3-23 1615		Sample Type (C=Comp, G=grab) 6 6		Matrix (Water, Soil, Sediment, Other) Water Water Water Water Water		Preservation Code: D N N D Z Z		Total Number of Containers 6 6		Special Instructions/Note: 240-181320 Chain of Custody	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Deliverable Requested: <input type="checkbox"/> I, <input type="checkbox"/> II, <input type="checkbox"/> III, <input type="checkbox"/> IV, Other (specify)											
Empty Kit Relinquished by: _____ Date: _____ Relinquished by: <i>Tom Edwards</i> Date/Time: 3-3-23 10:30 Relinquished by: <i>Tom Edwards</i> Date/Time: 3-3-23 14:35 hrs Relinquished by: _____ Date/Time: _____													
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:													
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Received by: <i>Tom Edwards</i> Date/Time: 3-3-23 10:46 Received by: <i>M. A. A.</i> Date/Time: 3/3/23 14:35 Received by: _____ Date/Time: _____		Company: <i>Auto Options</i> Company: <i>FLC</i> Company:					



Eurofins - Canton Sample Receipt Form/Narrative Login # : _____
Barberton Facility

Client Lighthouse Gavin Site Name _____ Cooler unpacked by: Mandy
Cooler Received on 3-3-23 Opened on 3-3-23
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off Eurofins Courier Other _____

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


Eurofins Cooler # 221 Foam Box _____ Client Cooler Box Other _____
Packing material used: Bubble Wrap _____ Foam Plastic Bag None _____ Other _____
COOLANT: Wet Ice Blue Ice _____ Dry Ice _____ Water _____ None _____

1. Cooler temperature upon receipt See Multiple Cooler Form
IR GUN # IR-13 (CF -0.2 °C) Observed Cooler Temp. 1.2 °C Corrected Cooler Temp. 1.0 °C
IR GUN # IR-16 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
IR GUN # IR-17 (CF -0.3 °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 NA
-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# HC293086
14. Were VOAs on the COC? Yes No NA
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 NA
17. Was a LL Hg or Me Hg trip blank present? Yes No NA

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

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

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: _____

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-03-F-20230303-01	240-181320-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-03-F-20230303-01	240-181320-D-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-03-F-20230303-01	240-181320-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230303-01	240-181320-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230303-01	240-181320-D-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230303-01	240-181320-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____



Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Carrier Tracking No(s):	COC No:
Shipping/Receiving		Phone:	Cisneros, Roxanne	State of Origin:	240-164631.1
Company: TestAmerica Laboratories, Inc.		E-Mail: roxanne.cisneros@et.eurofins.com		Page:	Page 1 of 1
Address: 13715 Rider Trail North,		Accreditations Required (See note):		Job #:	240-181320-1
City: Earth City	Due Date Requested: 3/16/2023	Analysis Requested			
State, Zip: MO, 63045	TAT Requested (days):	Total Number of Containers			
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:	Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/>			
Email:	WO #:	Perform MSMSD (Yes or No) <input checked="" type="checkbox"/>			
Project Name: Federal GWM Wells	Project #: 24019633	9315_Ra226/PresSep_21 Radium-226 (GFC) <input checked="" type="checkbox"/>			
Site:	SSOW#:	9320_Ra226/PresSep_0 Radium-226 (GFC) <input checked="" type="checkbox"/>			
		Radium-228 <input checked="" type="checkbox"/>			
		Special Instructions/Note:			
		Recount of TAR after 21 day ingrowth if > action limit: save planchet			
		Recount of TAR after 21 day ingrowth if > action limit: save planchet			

Sample Identification - Client ID (Lab ID)

Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soil, B=biota, A=air)	Preservation Code:	Field Filtered Sample (Yes or No)	Perform MSMSD (Yes or No)	9315_Ra226/PresSep_21 Radium-226 (GFC)	9320_Ra226/PresSep_0 Radium-226 (GFC)	Radium-228	Total Number of Containers	Special Instructions/Note:
BAC-03-F-20230303-01 (240-181320-1)	3/3/23	09:47 Eastern	G=grab	Water		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2	Recount of TAR after 21 day ingrowth if > action limit: save planchet
EB-001-F-20230303-01 (240-181320-2)	3/3/23	10:15 Eastern	G=grab	Water		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2	Recount of TAR after 21 day ingrowth if > action limit: save planchet

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/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
 Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Empty Kit Relinquished by: _____ Date: _____ Method of Shipment: _____
 Relinquished by: *Roxanne Cisneros* Date/Time: 3/16/23 8:36 AM Company: Eurofins
 Relinquished by: _____ Date/Time: _____ Company: _____
 Relinquished by: _____ Date/Time: _____ Company: _____

Received by: *Roxanne Cisneros* Date/Time: 3/17/23 09:20 Company: Eurofins
 Received by: _____ Date/Time: _____ Company: _____

Cooler Temperature(s) °C and Other Remarks:



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-181320-1

Login Number: 181320

List Number: 2

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

List Creation: 03/07/23 12:14 PM

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



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ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 5/16/2023 12:45:09 PM

JOB DESCRIPTION

Federal CCR Wells - App IV

JOB NUMBER

240-183294-1

Eurofins Cleveland

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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 5/16/2023 12:45:09 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

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
*+	LCS and/or LCSD is outside acceptance limits, high biased.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
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.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Job ID: 240-183294-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-183294-1

Receipt

The samples were received on 4/11/2023 4:49 PM. 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 0.4°C, 0.7°C, 0.8°C, 2.3°C, 3.7°C and 23.8°C

Metals

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

General Chemistry

Method 2320B: Reanalysis of the following sample(s) was performed outside of the analytical holding time due to failure of quality control parameters in the initial analysis. BAC-21-F-20230410-01 (240-183294-1), BAC-22-F-20230410-01 (240-183294-2) and EB-001-F-20230410-01 (240-183294-3)

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 608190: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-21-F-20230410-01 (240-183294-1), BAC-21-F-20230410-01 (240-183294-1[MSJ]), BAC-21-F-20230410-01 (240-183294-1[MSD]), BAC-22-F-20230410-01 (240-183294-2), EB-001-F-20230410-01 (240-183294-3), (LCS 160-608190/2-A) and (MB 160-608190/1-A)

Method 9320_Ra228: Radium-228 batch 608193: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-21-F-20230410-01 (240-183294-1), BAC-21-F-20230410-01 (240-183294-1[MSJ]), BAC-21-F-20230410-01 (240-183294-1[MSD]), BAC-22-F-20230410-01 (240-183294-2), EB-001-F-20230410-01 (240-183294-3), (LCS 160-608193/2-A) and (MB 160-608193/1-A)

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 - App IV

Job ID: 240-183294-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0-1993 R2.1	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 - App IV

Job ID: 240-183294-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-183294-1	BAC-21-F-20230410-01	Water	04/10/23 12:49	04/11/23 16:49
240-183294-2	BAC-22-F-20230410-01	Water	04/10/23 14:40	04/11/23 16:49
240-183294-3	EB-001-F-20230410-01	Water	04/10/23 15:15	04/11/23 16:49

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Client Sample ID: BAC-21-F-20230410-01

Lab Sample ID: 240-183294-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.1	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	150		5.0	2.2	ug/L	1		6020B	Total Recoverable
Beryllium	0.67	J	1.0	0.62	ug/L	1		6020B	Total Recoverable
Cobalt	0.76	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.70	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.0	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	14000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.5	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2000		1000	220	ug/L	1		6020B	Total Recoverable
Selenium	1.0	J	5.0	0.89	ug/L	1		6020B	Total Recoverable
Sodium	25000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.48	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	280	*+	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Total Alkalinity	250	*+	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	280		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.11		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Total Alkalinity - RA	250	H	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3 - RA	250	H	5.0	2.6	mg/L	1		2320B-1997	Total/NA

Client Sample ID: BAC-22-F-20230410-01

Lab Sample ID: 240-183294-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.7	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	130		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.59	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.50	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	5.3	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	18000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	20000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220	*+	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.083		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Total Alkalinity - RA	230	H	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3 - RA	230	H	5.0	2.6	mg/L	1		2320B-1997	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 - App IV

Job ID: 240-183294-1

Client Sample ID: EB-001-F-20230410-01

Lab Sample ID: 240-183294-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity	2.8	J*+	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	2.8	J	5.0	2.6	mg/L	1		2320B-1997	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland



Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Client Sample ID: BAC-21-F-20230410-01

Lab Sample ID: 240-183294-1

Date Collected: 04/10/23 12:49

Matrix: Water

Date Received: 04/11/23 16:49

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		04/12/23 14:00	04/13/23 12:21	1
Arsenic	3.1	J	5.0	0.75	ug/L		04/12/23 14:00	04/13/23 12:21	1
Barium	150		5.0	2.2	ug/L		04/12/23 14:00	04/13/23 12:21	1
Beryllium	0.67	J	1.0	0.62	ug/L		04/12/23 14:00	04/13/23 12:21	1
Cadmium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 12:21	1
Chromium	ND		5.0	1.2	ug/L		04/12/23 14:00	04/13/23 12:21	1
Cobalt	0.76	J	1.0	0.19	ug/L		04/12/23 14:00	04/13/23 12:21	1
Lead	0.70	J	1.0	0.45	ug/L		04/12/23 14:00	04/13/23 12:21	1
Lithium	6.0	J	8.0	1.7	ug/L		04/12/23 14:00	04/13/23 12:21	1
Magnesium	14000		1000	61	ug/L		04/12/23 14:00	04/13/23 12:21	1
Molybdenum	1.5	J	5.0	1.1	ug/L		04/12/23 14:00	04/13/23 12:21	1
Potassium	2000		1000	220	ug/L		04/12/23 14:00	04/13/23 12:21	1
Selenium	1.0	J	5.0	0.89	ug/L		04/12/23 14:00	04/13/23 12:21	1
Sodium	25000		1000	330	ug/L		04/12/23 14:00	04/13/23 12:21	1
Thallium	0.48	J	1.0	0.20	ug/L		04/12/23 14:00	04/13/23 12:21	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		04/12/23 14:00	04/12/23 18:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	280	*+	5.0	2.6	mg/L			04/24/23 11:16	1
Total Alkalinity (SM 2320B-1997)	250	*+	5.0	2.6	mg/L			04/24/23 11:42	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	280		5.0	2.6	mg/L			04/24/23 11:16	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 11:16	1
Fluoride (EPA 300.0-1993 R2.1)	0.11		0.050	0.024	mg/L			05/08/23 14:49	1

General Chemistry - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	250	H	5.0	2.6	mg/L			04/25/23 14:10	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	250	H	5.0	2.6	mg/L			04/25/23 14:10	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND	H	5.0	2.6	mg/L			04/25/23 14:10	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.239		0.129	0.131	1.00	0.155	pCi/L	04/20/23 09:47	05/15/23 10:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.5		30 - 110					04/20/23 09:47	05/15/23 10:08	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.100	U	0.320	0.320	1.00	0.570	pCi/L	04/20/23 10:16	05/12/23 14:33	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Client Sample ID: BAC-21-F-20230410-01

Lab Sample ID: 240-183294-1

Date Collected: 04/10/23 12:49

Matrix: Water

Date Received: 04/11/23 16:49

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	86.5		30 - 110	04/20/23 10:16	05/12/23 14:33	1
Y Carrier	83.0		30 - 110	04/20/23 10:16	05/12/23 14:33	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.340	U	0.345	0.346	5.00	0.570	pCi/L		05/16/23 09:58	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Client Sample ID: BAC-22-F-20230410-01

Lab Sample ID: 240-183294-2

Date Collected: 04/10/23 14:40

Matrix: Water

Date Received: 04/11/23 16:49

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		04/12/23 14:00	04/13/23 13:36	1
Arsenic	1.7	J	5.0	0.75	ug/L		04/12/23 14:00	04/13/23 13:36	1
Barium	130		5.0	2.2	ug/L		04/12/23 14:00	04/13/23 13:36	1
Beryllium	ND		1.0	0.62	ug/L		04/12/23 14:00	04/13/23 13:36	1
Cadmium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 13:36	1
Chromium	ND		5.0	1.2	ug/L		04/12/23 14:00	04/13/23 13:36	1
Cobalt	0.59	J	1.0	0.19	ug/L		04/12/23 14:00	04/13/23 13:36	1
Lead	0.50	J	1.0	0.45	ug/L		04/12/23 14:00	04/13/23 13:36	1
Lithium	5.3	J	8.0	1.7	ug/L		04/12/23 14:00	04/13/23 13:36	1
Magnesium	18000		1000	61	ug/L		04/12/23 14:00	04/13/23 13:36	1
Molybdenum	ND		5.0	1.1	ug/L		04/12/23 14:00	04/13/23 13:36	1
Potassium	2600		1000	220	ug/L		04/12/23 14:00	04/13/23 13:36	1
Selenium	ND		5.0	0.89	ug/L		04/12/23 14:00	04/13/23 13:36	1
Sodium	20000		1000	330	ug/L		04/12/23 14:00	04/13/23 13:36	1
Thallium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 13:36	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		04/12/23 14:00	04/12/23 19:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220	*+	5.0	2.6	mg/L			04/24/23 11:57	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			04/24/23 11:57	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 11:57	1
Fluoride (EPA 300.0-1993 R2.1)	0.083		0.050	0.024	mg/L			05/08/23 15:49	1

General Chemistry - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230	H	5.0	2.6	mg/L			04/25/23 14:19	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230	H	5.0	2.6	mg/L			04/25/23 14:19	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND	H	5.0	2.6	mg/L			04/25/23 14:19	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	0.236		0.129	0.131	1.00	0.160	pCi/L	04/20/23 09:47	05/15/23 10:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.2		30 - 110					04/20/23 09:47	05/15/23 10:09	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	0.432	U	0.331	0.334	1.00	0.509	pCi/L	04/20/23 10:16	05/12/23 14:33	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Client Sample ID: BAC-22-F-20230410-01

Lab Sample ID: 240-183294-2

Date Collected: 04/10/23 14:40

Matrix: Water

Date Received: 04/11/23 16:49

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	90.2		30 - 110	04/20/23 10:16	05/12/23 14:33	1
Y Carrier	86.7		30 - 110	04/20/23 10:16	05/12/23 14:33	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
Combined Radium 226 + 228	0.668		(2σ+/-) 0.355	(2σ+/-) 0.359	5.00	0.509	pCi/L		05/16/23 09:58	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Client Sample ID: EB-001-F-20230410-01

Lab Sample ID: 240-183294-3

Date Collected: 04/10/23 15:15

Matrix: Water

Date Received: 04/11/23 16:49

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		04/12/23 14:00	04/13/23 13:39	1
Arsenic	ND		5.0	0.75	ug/L		04/12/23 14:00	04/13/23 13:39	1
Barium	ND		5.0	2.2	ug/L		04/12/23 14:00	04/13/23 13:39	1
Beryllium	ND		1.0	0.62	ug/L		04/12/23 14:00	04/13/23 13:39	1
Cadmium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 13:39	1
Chromium	ND		5.0	1.2	ug/L		04/12/23 14:00	04/13/23 13:39	1
Cobalt	ND		1.0	0.19	ug/L		04/12/23 14:00	04/13/23 13:39	1
Lead	ND		1.0	0.45	ug/L		04/12/23 14:00	04/13/23 13:39	1
Lithium	ND		8.0	1.7	ug/L		04/12/23 14:00	04/13/23 13:39	1
Magnesium	ND		1000	61	ug/L		04/12/23 14:00	04/13/23 13:39	1
Molybdenum	ND		5.0	1.1	ug/L		04/12/23 14:00	04/13/23 13:39	1
Potassium	ND		1000	220	ug/L		04/12/23 14:00	04/13/23 13:39	1
Selenium	ND		5.0	0.89	ug/L		04/12/23 14:00	04/13/23 13:39	1
Sodium	ND		1000	330	ug/L		04/12/23 14:00	04/13/23 13:39	1
Thallium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 13:39	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		04/12/23 14:00	04/12/23 19:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	2.8	J**	5.0	2.6	mg/L			04/24/23 11:52	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	2.8	J	5.0	2.6	mg/L			04/24/23 11:52	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 11:52	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			05/08/23 16:09	1

General Chemistry - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND	H	5.0	2.6	mg/L			04/25/23 14:23	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND	H	5.0	2.6	mg/L			04/25/23 14:23	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND	H	5.0	2.6	mg/L			04/25/23 14:23	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0625	U	0.0892	0.0893	1.00	0.152	pCi/L	04/20/23 09:47	05/15/23 10:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.9		30 - 110					04/20/23 09:47	05/15/23 10:09	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.149	U	0.287	0.287	1.00	0.497	pCi/L	04/20/23 10:16	05/12/23 14:33	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Client Sample ID: EB-001-F-20230410-01

Lab Sample ID: 240-183294-3

Date Collected: 04/10/23 15:15

Matrix: Water

Date Received: 04/11/23 16:49

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	89.9		30 - 110	04/20/23 10:16	05/12/23 14:33	1
Y Carrier	89.0		30 - 110	04/20/23 10:16	05/12/23 14:33	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.211	U	0.301	0.301	5.00	0.497	pCi/L		05/16/23 09:58	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)
240-183294-1	BAC-21-F-20230410-01	86.5
240-183294-1 MS	BAC-21-F-20230410-01	89.4
240-183294-1 MSD	BAC-21-F-20230410-01	72.5
240-183294-2	BAC-22-F-20230410-01	90.2
240-183294-3	EB-001-F-20230410-01	89.9
LCS 160-608190/2-A	Lab Control Sample	98.0
MB 160-608190/1-A	Method Blank	88.5

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-183294-1	BAC-21-F-20230410-01	86.5	83.0
240-183294-1 MS	BAC-21-F-20230410-01	89.4	84.5
240-183294-1 MSD	BAC-21-F-20230410-01	72.5	83.7
240-183294-2	BAC-22-F-20230410-01	90.2	86.7
240-183294-3	EB-001-F-20230410-01	89.9	89.0
LCS 160-608193/2-A	Lab Control Sample	98.0	86.0
MB 160-608193/1-A	Method Blank	88.5	89.3

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-569069/1-A
Matrix: Water
Analysis Batch: 569329

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 569069

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		04/12/23 14:00	04/13/23 12:07	1
Arsenic	ND		5.0	0.75	ug/L		04/12/23 14:00	04/13/23 12:07	1
Barium	ND		5.0	2.2	ug/L		04/12/23 14:00	04/13/23 12:07	1
Beryllium	ND		1.0	0.62	ug/L		04/12/23 14:00	04/13/23 12:07	1
Cadmium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 12:07	1
Chromium	ND		5.0	1.2	ug/L		04/12/23 14:00	04/13/23 12:07	1
Cobalt	ND		1.0	0.19	ug/L		04/12/23 14:00	04/13/23 12:07	1
Lead	ND		1.0	0.45	ug/L		04/12/23 14:00	04/13/23 12:07	1
Lithium	ND		8.0	1.7	ug/L		04/12/23 14:00	04/13/23 12:07	1
Magnesium	ND		1000	61	ug/L		04/12/23 14:00	04/13/23 12:07	1
Molybdenum	ND		5.0	1.1	ug/L		04/12/23 14:00	04/13/23 12:07	1
Potassium	ND		1000	220	ug/L		04/12/23 14:00	04/13/23 12:07	1
Selenium	ND		5.0	0.89	ug/L		04/12/23 14:00	04/13/23 12:07	1
Sodium	ND		1000	330	ug/L		04/12/23 14:00	04/13/23 12:07	1
Thallium	ND		1.0	0.20	ug/L		04/12/23 14:00	04/13/23 12:07	1

Lab Sample ID: LCS 240-569069/2-A
Matrix: Water
Analysis Batch: 569329

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 569069

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	97.8		ug/L		98	80 - 120
Arsenic	1000	913		ug/L		91	80 - 120
Barium	1000	910		ug/L		91	80 - 120
Beryllium	500	476		ug/L		95	80 - 120
Cadmium	500	464		ug/L		93	80 - 120
Chromium	500	470		ug/L		94	80 - 120
Cobalt	500	462		ug/L		92	80 - 120
Lead	500	470		ug/L		94	80 - 120
Lithium	500	479		ug/L		96	80 - 120
Magnesium	25000	22700		ug/L		91	80 - 120
Molybdenum	500	467		ug/L		93	80 - 120
Potassium	25000	22500		ug/L		90	80 - 120
Selenium	1000	927		ug/L		93	80 - 120
Sodium	25000	22500		ug/L		90	80 - 120
Thallium	1000	941		ug/L		94	80 - 120

Lab Sample ID: 240-183294-1 MS
Matrix: Water
Analysis Batch: 569329

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total Recoverable
Prep Batch: 569069

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND		100	99.6		ug/L		100	80 - 120
Arsenic	3.1	J	1000	944		ug/L		94	80 - 120
Barium	150		1000	1080		ug/L		93	80 - 120
Beryllium	0.67	J	500	494		ug/L		99	80 - 120
Cadmium	ND		500	472		ug/L		94	80 - 120
Chromium	ND		500	472		ug/L		94	80 - 120
Cobalt	0.76	J	500	466		ug/L		93	80 - 120

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

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

Lab Sample ID: 240-183294-1 MS
Matrix: Water
Analysis Batch: 569329

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total Recoverable
Prep Batch: 569069

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	0.70	J	500	468		ug/L		93	80 - 120
Lithium	6.0	J	500	503		ug/L		99	80 - 120
Magnesium	14000		25000	36700		ug/L		90	80 - 120
Molybdenum	1.5	J	500	484		ug/L		96	80 - 120
Potassium	2000		25000	25200		ug/L		93	80 - 120
Selenium	1.0	J	1000	955		ug/L		95	80 - 120
Sodium	25000		25000	48100		ug/L		92	80 - 120
Thallium	0.48	J	1000	949		ug/L		95	80 - 120

Lab Sample ID: 240-183294-1 MSD
Matrix: Water
Analysis Batch: 569329

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total Recoverable
Prep Batch: 569069

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		100	98.7		ug/L		99	80 - 120	1	20
Arsenic	3.1	J	1000	924		ug/L		92	80 - 120	2	20
Barium	150		1000	1080		ug/L		93	80 - 120	1	20
Beryllium	0.67	J	500	475		ug/L		95	80 - 120	4	20
Cadmium	ND		500	466		ug/L		93	80 - 120	1	20
Chromium	ND		500	466		ug/L		93	80 - 120	1	20
Cobalt	0.76	J	500	460		ug/L		92	80 - 120	1	20
Lead	0.70	J	500	468		ug/L		93	80 - 120	0	20
Lithium	6.0	J	500	483		ug/L		95	80 - 120	4	20
Magnesium	14000		25000	36800		ug/L		91	80 - 120	0	20
Molybdenum	1.5	J	500	473		ug/L		94	80 - 120	2	20
Potassium	2000		25000	25000		ug/L		92	80 - 120	1	20
Selenium	1.0	J	1000	930		ug/L		93	80 - 120	3	20
Sodium	25000		25000	48500		ug/L		93	80 - 120	1	20
Thallium	0.48	J	1000	951		ug/L		95	80 - 120	0	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-569077/1-A
Matrix: Water
Analysis Batch: 569170

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 569077

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		04/12/23 14:00	04/12/23 18:49	1

Lab Sample ID: LCS 240-569077/2-A
Matrix: Water
Analysis Batch: 569170

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 569077

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.35		ug/L		107	80 - 120

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 240-183294-1 MS
Matrix: Water
Analysis Batch: 569170

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total/NA
Prep Batch: 569077

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: 240-183294-1 MSD
Matrix: Water
Analysis Batch: 569170

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total/NA
Prep Batch: 569077

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		1.00	0.971		ug/L		97	80 - 120	16	20

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-570651/4
Matrix: Water
Analysis Batch: 570651

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			04/24/23 11:12	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 11:12	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 11:12	1

Lab Sample ID: 240-183294-1 DU
Matrix: Water
Analysis Batch: 570651

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	Prepared	Analyzed	RPD	RPD Limit
Total Alkalinity	250	*+	247	*+	mg/L				0.8	20
Bicarbonate Alkalinity as CaCO3	250		247		mg/L				0.8	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L				NC	20

Lab Sample ID: MB 240-570826/4
Matrix: Water
Analysis Batch: 570826

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			04/25/23 13:05	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/25/23 13:05	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/25/23 13:05	1

Lab Sample ID: LCS 240-570826/3
Matrix: Water
Analysis Batch: 570826

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	149		mg/L		102	86 - 123

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Method: 2320B-1997 - Alkalinity, Total (Continued)

Lab Sample ID: 240-183294-1 DU
 Matrix: Water
 Analysis Batch: 570826

Client Sample ID: BAC-21-F-20230410-01
 Prep Type: Total/NA

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Total Alkalinity	250	H	247		mg/L		3	20
Bicarbonate Alkalinity as CaCO3	250	H	247		mg/L		3	20
Carbonate Alkalinity as CaCO3	ND	H	ND		mg/L		NC	20

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-572493/3
 Matrix: Water
 Analysis Batch: 572493

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Fluoride	ND		0.050	0.024	mg/L			05/08/23 13:48	1

Lab Sample ID: LCS 240-572493/4
 Matrix: Water
 Analysis Batch: 572493

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Fluoride	2.50	2.62		mg/L		105	90 - 110

Lab Sample ID: 240-183294-1 MS
 Matrix: Water
 Analysis Batch: 572493

Client Sample ID: BAC-21-F-20230410-01
 Prep Type: Total/NA

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
Fluoride	0.11		2.50	2.60		mg/L		100	80 - 120

Lab Sample ID: 240-183294-1 MSD
 Matrix: Water
 Analysis Batch: 572493

Client Sample ID: BAC-21-F-20230410-01
 Prep Type: Total/NA

Analyte	Sample	Sample	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Fluoride	0.11		2.50	2.69		mg/L		103	80 - 120	3	15

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-608190/1-A
 Matrix: Water
 Analysis Batch: 611502

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 608190

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.04942	U	0.0841	0.0842	1.00	0.149	pCi/L	04/20/23 09:47	05/15/23 10:07	1

Carrier	MB	MB	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	%Yield	Qualifier				
Ba Carrier	88.5		30 - 110	04/20/23 09:47	05/15/23 10:07	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: LCS 160-608190/2-A
Matrix: Water
Analysis Batch: 611502

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 608190

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	
									75	113
Radium-226	11.3	9.162		1.04	1.00	0.205	pCi/L	81	75 - 113	
Carrier		LCS %Yield	LCS Qualifier	Limits						
Ba Carrier		98.0		30 - 110						

Lab Sample ID: 240-183294-1 MS
Matrix: Water
Analysis Batch: 611502

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total/NA
Prep Batch: 608190

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	
											60	140
Radium-226	0.239		11.4	9.168		1.05	1.00	0.150	pCi/L	78	60 - 140	
Carrier		MS %Yield	MS Qualifier	Limits								
Ba Carrier		89.4		30 - 110								

Lab Sample ID: 240-183294-1 MSD
Matrix: Water
Analysis Batch: 611502

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total/NA
Prep Batch: 608190

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		RER	Limit
											60	140	0.05	1
Radium-226	0.239		11.3	9.266		1.10	1.00	0.179	pCi/L	80	60 - 140	0.05	1	
Carrier		MSD %Yield	MSD Qualifier	Limits										
Ba Carrier		72.5		30 - 110										

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-608193/1-A
Matrix: Water
Analysis Batch: 611287

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 608193

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared		Analyzed		Dil Fac
								04/20/23 10:16	10:16	05/12/23 14:32	14:32	1
Radium-228	0.05470	U	0.271	0.271	1.00	0.493	pCi/L	04/20/23 10:16	10:16	05/12/23 14:32	14:32	1
Carrier		MB %Yield	MB Qualifier	Limits				Prepared		Analyzed		Dil Fac
Ba Carrier		88.5		30 - 110				04/20/23 10:16	10:16	05/12/23 14:32	14:32	1
Y Carrier		89.3		30 - 110				04/20/23 10:16	10:16	05/12/23 14:32	14:32	1

Eurofins Cleveland

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

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

Lab Sample ID: LCS 160-608193/2-A
Matrix: Water
Analysis Batch: 611287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 608193

Analyte	Spike Added	LCS		Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
		Result	Qual						
Radium-228	7.96	6.545		0.964	1.00	0.456	pCi/L	82	75 - 125
LCS LCS									
Carrier	%Yield	Qualifier	Limits						
Ba Carrier	98.0		30 - 110						
Y Carrier	86.0		30 - 110						

Lab Sample ID: 240-183294-1 MS
Matrix: Water
Analysis Batch: 611287

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total/NA
Prep Batch: 608193

Analyte	Sample Result	Sample Qual	Spike Added	MS		Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
				Result	Qual						
Radium-228	0.100	U	8.02	7.930		1.13	1.00	0.513	pCi/L	98	60 - 140
MS MS											
Carrier	%Yield	Qualifier	Limits								
Ba Carrier	89.4		30 - 110								
Y Carrier	84.5		30 - 110								

Lab Sample ID: 240-183294-1 MSD
Matrix: Water
Analysis Batch: 611287

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total/NA
Prep Batch: 608193

Analyte	Sample Result	Sample Qual	Spike Added	MSD		Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
				Result	Qual								
Radium-228	0.100	U	7.92	6.767		1.10	1.00	0.580	pCi/L	84	60 - 140	0.52	1
MSD MSD													
Carrier	%Yield	Qualifier	Limits										
Ba Carrier	72.5		30 - 110										
Y Carrier	83.7		30 - 110										

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Metals

Prep Batch: 569069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183294-1	BAC-21-F-20230410-01	Total Recoverable	Water	3005A	
240-183294-2	BAC-22-F-20230410-01	Total Recoverable	Water	3005A	
240-183294-3	EB-001-F-20230410-01	Total Recoverable	Water	3005A	
MB 240-569069/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-569069/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-183294-1 MS	BAC-21-F-20230410-01	Total Recoverable	Water	3005A	
240-183294-1 MSD	BAC-21-F-20230410-01	Total Recoverable	Water	3005A	

Prep Batch: 569077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183294-1	BAC-21-F-20230410-01	Total/NA	Water	7470A	
240-183294-2	BAC-22-F-20230410-01	Total/NA	Water	7470A	
240-183294-3	EB-001-F-20230410-01	Total/NA	Water	7470A	
MB 240-569077/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-569077/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-183294-1 MS	BAC-21-F-20230410-01	Total/NA	Water	7470A	
240-183294-1 MSD	BAC-21-F-20230410-01	Total/NA	Water	7470A	

Analysis Batch: 569170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183294-1	BAC-21-F-20230410-01	Total/NA	Water	7470A	569077
240-183294-2	BAC-22-F-20230410-01	Total/NA	Water	7470A	569077
240-183294-3	EB-001-F-20230410-01	Total/NA	Water	7470A	569077
MB 240-569077/1-A	Method Blank	Total/NA	Water	7470A	569077
LCS 240-569077/2-A	Lab Control Sample	Total/NA	Water	7470A	569077
240-183294-1 MS	BAC-21-F-20230410-01	Total/NA	Water	7470A	569077
240-183294-1 MSD	BAC-21-F-20230410-01	Total/NA	Water	7470A	569077

Analysis Batch: 569329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183294-1	BAC-21-F-20230410-01	Total Recoverable	Water	6020B	569069
240-183294-2	BAC-22-F-20230410-01	Total Recoverable	Water	6020B	569069
240-183294-3	EB-001-F-20230410-01	Total Recoverable	Water	6020B	569069
MB 240-569069/1-A	Method Blank	Total Recoverable	Water	6020B	569069
LCS 240-569069/2-A	Lab Control Sample	Total Recoverable	Water	6020B	569069
240-183294-1 MS	BAC-21-F-20230410-01	Total Recoverable	Water	6020B	569069
240-183294-1 MSD	BAC-21-F-20230410-01	Total Recoverable	Water	6020B	569069

General Chemistry

Analysis Batch: 570651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183294-1	BAC-21-F-20230410-01	Total/NA	Water	2320B-1997	
240-183294-1	BAC-21-F-20230410-01	Total/NA	Water	2320B-1997	
240-183294-2	BAC-22-F-20230410-01	Total/NA	Water	2320B-1997	
240-183294-3	EB-001-F-20230410-01	Total/NA	Water	2320B-1997	
MB 240-570651/4	Method Blank	Total/NA	Water	2320B-1997	
240-183294-1 DU	BAC-21-F-20230410-01	Total/NA	Water	2320B-1997	

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

General Chemistry

Analysis Batch: 570826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183294-1 - RA	BAC-21-F-20230410-01	Total/NA	Water	2320B-1997	
240-183294-2 - RA	BAC-22-F-20230410-01	Total/NA	Water	2320B-1997	
240-183294-3 - RA	EB-001-F-20230410-01	Total/NA	Water	2320B-1997	
MB 240-570826/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-570826/3	Lab Control Sample	Total/NA	Water	2320B-1997	
240-183294-1 DU	BAC-21-F-20230410-01	Total/NA	Water	2320B-1997	

Analysis Batch: 572493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183294-1	BAC-21-F-20230410-01	Total/NA	Water	300.0-1993 R2.1	
240-183294-2	BAC-22-F-20230410-01	Total/NA	Water	300.0-1993 R2.1	
240-183294-3	EB-001-F-20230410-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-572493/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-572493/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-183294-1 MS	BAC-21-F-20230410-01	Total/NA	Water	300.0-1993 R2.1	
240-183294-1 MSD	BAC-21-F-20230410-01	Total/NA	Water	300.0-1993 R2.1	

Rad

Prep Batch: 608190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183294-1	BAC-21-F-20230410-01	Total/NA	Water	PrecSep-21	
240-183294-2	BAC-22-F-20230410-01	Total/NA	Water	PrecSep-21	
240-183294-3	EB-001-F-20230410-01	Total/NA	Water	PrecSep-21	
MB 160-608190/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-608190/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
240-183294-1 MS	BAC-21-F-20230410-01	Total/NA	Water	PrecSep-21	
240-183294-1 MSD	BAC-21-F-20230410-01	Total/NA	Water	PrecSep-21	

Prep Batch: 608193

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183294-1	BAC-21-F-20230410-01	Total/NA	Water	PrecSep_0	
240-183294-2	BAC-22-F-20230410-01	Total/NA	Water	PrecSep_0	
240-183294-3	EB-001-F-20230410-01	Total/NA	Water	PrecSep_0	
MB 160-608193/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-608193/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
240-183294-1 MS	BAC-21-F-20230410-01	Total/NA	Water	PrecSep_0	
240-183294-1 MSD	BAC-21-F-20230410-01	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Client Sample ID: BAC-21-F-20230410-01

Lab Sample ID: 240-183294-1

Date Collected: 04/10/23 12:49

Matrix: Water

Date Received: 04/11/23 16:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569069	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569329	RKT	EET CLE	04/13/23 12:21
Total/NA	Prep	7470A			569077	MRL	EET CLE	04/12/23 14:00
Total/NA	Analysis	7470A		1	569170	AJC	EET CLE	04/12/23 18:53
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 11:16
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 11:42
Total/NA	Analysis	2320B-1997	RA	1	570826	JWW	EET CLE	04/25/23 14:10
Total/NA	Analysis	300.0-1993 R2.1		1	572493	JWW	EET CLE	05/08/23 14:49
Total/NA	Prep	PrecSep-21			608190	KAC	EET SL	04/20/23 09:47
Total/NA	Analysis	9315		1	611502	FLC	EET SL	05/15/23 10:08
Total/NA	Prep	PrecSep_0			608193	KAC	EET SL	04/20/23 10:16
Total/NA	Analysis	9320		1	611287	FLC	EET SL	05/12/23 14:33
Total/NA	Analysis	Ra226_Ra228		1	611699	EMH	EET SL	05/16/23 09:58

Client Sample ID: BAC-22-F-20230410-01

Lab Sample ID: 240-183294-2

Date Collected: 04/10/23 14:40

Matrix: Water

Date Received: 04/11/23 16:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569069	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569329	RKT	EET CLE	04/13/23 13:36
Total/NA	Prep	7470A			569077	MRL	EET CLE	04/12/23 14:00
Total/NA	Analysis	7470A		1	569170	AJC	EET CLE	04/12/23 19:44
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 11:57
Total/NA	Analysis	2320B-1997	RA	1	570826	JWW	EET CLE	04/25/23 14:19
Total/NA	Analysis	300.0-1993 R2.1		1	572493	JWW	EET CLE	05/08/23 15:49
Total/NA	Prep	PrecSep-21			608190	KAC	EET SL	04/20/23 09:47
Total/NA	Analysis	9315		1	611502	FLC	EET SL	05/15/23 10:09
Total/NA	Prep	PrecSep_0			608193	KAC	EET SL	04/20/23 10:16
Total/NA	Analysis	9320		1	611287	FLC	EET SL	05/12/23 14:33
Total/NA	Analysis	Ra226_Ra228		1	611699	EMH	EET SL	05/16/23 09:58

Client Sample ID: EB-001-F-20230410-01

Lab Sample ID: 240-183294-3

Date Collected: 04/10/23 15:15

Matrix: Water

Date Received: 04/11/23 16:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569069	MRL	EET CLE	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569329	RKT	EET CLE	04/13/23 13:39
Total/NA	Prep	7470A			569077	MRL	EET CLE	04/12/23 14:00
Total/NA	Analysis	7470A		1	569170	AJC	EET CLE	04/12/23 19:46
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 11:52
Total/NA	Analysis	2320B-1997	RA	1	570826	JWW	EET CLE	04/25/23 14:23
Total/NA	Analysis	300.0-1993 R2.1		1	572493	JWW	EET CLE	05/08/23 16:09

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

Client Sample ID: EB-001-F-20230410-01

Lab Sample ID: 240-183294-3

Date Collected: 04/10/23 15:15

Matrix: Water

Date Received: 04/11/23 16:49

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total/NA	Prep	PrecSep-21			608190	KAC	EET SL	04/20/23 09:47
Total/NA	Analysis	9315		1	611502	FLC	EET SL	05/15/23 10:09
Total/NA	Prep	PrecSep_0			608193	KAC	EET SL	04/20/23 10:16
Total/NA	Analysis	9320		1	611287	FLC	EET SL	05/12/23 14:33
Total/NA	Analysis	Ra226_Ra228		1	611699	EMH	EET SL	05/16/23 09:58

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
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

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
California	State	2927	02-27-24
Connecticut	State	PH-0590	06-29-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-28-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-23
Florida	NELAP	E87689	06-30-23
HI - RadChem Recognition	State	n/a	06-30-23
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana (All)	NELAP	04080	06-30-23
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-23
MI - RadChem Recognition	State	9005	06-30-23
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-23
New Jersey	NELAP	MO002	06-30-23
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-23
North Dakota	State	R-207	06-30-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-183294-1

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
Oklahoma	NELAP	9997	08-31-23
Oregon	NELAP	4157	09-01-23
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23
Texas	NELAP	T104704193	07-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00028	06-11-23
Utah	NELAP	MO000542021-14	07-31-23
Virginia	NELAP	10310	06-14-23
Washington	State	C592	08-30-23
West Virginia DEP	State	381	10-31-23

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: Federal CCR Wells - App IV Site:		Supplier: Bobby Casio Lab PM: Cisneros, Roxanne Phone: 740-373-4308 E-Mail: roxanne.cisneros@eurofins.com PWSID:		Carrier Tracking No(s): State of Origin:		COC No: 240-93466-34578.1 Page: Page 1 of 1 Job #:			
Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: 2935505 WO #:		Analysis Requested Perform HARS (Yes or No) <input checked="" type="checkbox"/> <input type="checkbox"/> Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> <input type="checkbox"/> 6020, 7470A 300.0, 28D - Fluoride 2320B - Alkalinity 9315, R4226, 9320, R4228, R4226R4228, GPPC		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 Other:		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - H2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)		Special Instructions/Note: Total Number of Containers:	
Sample Identification Sample ID: BAC-21-F-20230410-01 Sample ID: BAC-21-F-20230410-MS Sample ID: BAC-21-F-20230410-MSD Sample ID: BAC-22-F-20230410-01 Sample ID: EB-001-F-20230410-01		Sample Date: 4-10-23 Sample Time: 1249 Sample Type (C=Comp, G=grab): G Matrix (Water, Sediment, Organic, Inorganic, Air): Water		Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> <input type="checkbox"/> Perform HARS (Yes or No) <input checked="" type="checkbox"/> <input type="checkbox"/> 6020, 7470A 300.0, 28D - Fluoride 2320B - Alkalinity 9315, R4226, 9320, R4228, R4226R4228, GPPC		Special Instructions/Note: Total Number of Containers:			
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Deliverable Requested: <input type="checkbox"/> I, II, III, IV, Other (specify)		Empty Kit Relinquished by:		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Relinquished by: Tom Eduardson Relinquished Date: 4-11-23 / 13:45 Relinquished by: Tom Eduardson Relinquished Date: 4-11-23 / 13:45		Relinquished by: Tom Eduardson Relinquished Date: 4-11-23 / 13:45 Relinquished by: Tom Eduardson Relinquished Date: 4-11-23 / 13:45		Relinquished by: Tom Eduardson Relinquished Date: 4-11-23 / 13:45 Relinquished by: Tom Eduardson Relinquished Date: 4-11-23 / 13:45		Relinquished by: Tom Eduardson Relinquished Date: 4-11-23 / 13:45 Relinquished by: Tom Eduardson Relinquished Date: 4-11-23 / 13:45			
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Date/Time: 4-11-23 / 10:00 Date/Time: 4-11-23 / 13:45 Date/Time:			



183294

Eurofins - Canton Sample Receipt Form/Narrative Login # : _____
Barberton Facility

Client LightStone Site Name _____ Cooler unpacked by: Rachelle Haidet

Cooler Received on 4/1/23 Opened on 4/1/23
FedEx: 1st Grd Exp UPS FAS Clipper 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# HC203864
- 14. Were VOAs on the COC? Yes No
- 15. Were air bubbles >6 mm in any VOA vials? Yes ← 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: _____

Temperature readings:

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-21-F-20230410-01	240-183294-G-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-21-F-20230410-01	240-183294-H-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-21-F-20230410-01	240-183294-I-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-21-F-20230410-01	240-183294-J-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-21-F-20230410-01	240-183294-K-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-21-F-20230410-01	240-183294-L-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-21-F-20230410-01	240-183294-M-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-21-F-20230410-01	240-183294-N-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-21-F-20230410-01	240-183294-O-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-22-F-20230410-01	240-183294-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-22-F-20230410-01	240-183294-D-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-22-F-20230410-01	240-183294-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230410-01	240-183294-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230410-01	240-183294-D-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-20230410-01	240-183294-E-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Cistneros, Roxanne		Carrier Tracking No(s):	COC No:	240-166273.1			
Client Contact:		Phone:	E-Mail:	roxanne.cistneros@et.eurofins.com		State of Origin:	Page:	Page 1 of 1			
Shipping/Receiving		Accreditations Required (See note):									
Company:		Test/America Laboratories, Inc.									
Address:		13715 Rider Trail North,									
City:		Earth City									
State, Zip:		MO, 63045									
Phone:		314-298-8566(Tel) 314-298-8757(Fax)									
Email:											
Project Name:		Federal GWM Wells									
Site:		SSOW#:									
Due Date Requested:		4/24/2023									
TAT Requested (days):											
PO #:											
WO #:											
Project #:		24019633									
SSOW#:											
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (w=water, S=solid, O=water/soil, BT=Issue, A=Air)	Field Filtered Sample (Yes or No)	Form MS/MSD (Yes or No)	Analysis Requested	Preservation Codes:	Total Number of Containers	Special Instructions/Note:
BAC-21-F-20230410-01 (240-183294-1)	4/10/23	12:49 Eastern	Water		Water	X	X	9315_Ra226/PreSep_21 Radium-226 (GFPC)	X	6	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-21-F-20230410-01 (240-183294-1MS)	4/10/23	12:49 Eastern	Water	MS	Water	X	X	9320_Ra228/PreSep_0 Radium-228 and Radium-228	X	1	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-21-F-20230410-01 (240-183294-1MSD)	4/10/23	12:49 Eastern	Water	MSD	Water	X	X		X	1	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-22-F-20230410-01 (240-183294-2)	4/10/23	14:40 Eastern	Water		Water	X	X		X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
EB-001-F-20230410-01 (240-183294-3)	4/10/23	15:15 Eastern	Water		Water	X	X		X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
(12)											
<p>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/test/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.</p>											
Possible Hazard Identification											
Unconfirmed											
Deliverable Requested: I, II, III, IV, Other (specify)											
Primary Deliverable Rank: 2											
Empty Kit Relinquished by:											
Date:											
Relinquished by: <i>[Signature]</i>											
Date/Time: 4/10/23 1715											
Relinquished by: <i>[Signature]</i>											
Date/Time: 4/10/23 1715											
Relinquished by: <i>[Signature]</i>											
Date/Time: 4/10/23 1715											
Relinquished by: <i>[Signature]</i>											
Date/Time: 4/10/23 1715											
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No											
Custody Seal No.:											
Cooler Temperature(s) °C and Other Remarks:											
<p>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</p> <p><input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For <input type="checkbox"/> Months</p> <p>Special Instructions/QC Requirements:</p>											
<p>Method of Shipment:</p> <p>Date/Time:</p> <p>Received by: <i>[Signature]</i></p> <p>Date/Time: 4/10/23 1715</p> <p>Received by: <i>[Signature]</i></p> <p>Date/Time: 4/10/23 1715</p> <p>Received by: <i>[Signature]</i></p> <p>Date/Time: 4/10/23 1715</p>											



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-183294-1

Login Number: 183294

List Number: 2

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

List Creation: 04/12/23 06:50 PM

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



 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 4/26/2023 12:42:19 PM

JOB DESCRIPTION

Federal CCR Wells - App III

JOB NUMBER

240-183295-1

Eurofins Canton

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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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4/26/2023 12:42:19 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
H	Sample was prepped or analyzed beyond the specified holding time
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.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

Job ID: 240-183295-1

Laboratory: Eurofins Canton

Narrative

**Job Narrative
240-183295-1**

Receipt

The samples were received on 4/11/2023 1:45 PM. 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 0.4°C, 0.7°C, 0.8°C, 2.3°C, 3.7°C and 23.8°C

Metals

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

General Chemistry

Method 2320B: Reanalysis of the following sample(s) was performed outside of the analytical holding time due to failure of quality control parameters in the initial analysis. BAC-22-F-20230410-01 (240-183295-2) and EB-001-F-20230410-01 (240-183295-3)

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 - App III

Job ID: 240-183295-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CAN
6020B	Metals (ICP/MS)	SW846	EET CAN
2320B-1997	Alkalinity, Total	SM	EET CAN
300.0	Anions, Ion Chromatography	EPA	EET CAN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CAN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CAN

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 CAN = Eurofins Canton, 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 - App III

Job ID: 240-183295-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-183295-1	BAC-21-F-20230410-01	Water	04/10/23 12:49	04/11/23 13:45
240-183295-2	BAC-22-F-20230410-01	Water	04/10/23 14:40	04/11/23 13:45
240-183295-3	EB-001-F-20230410-01	Water	04/10/23 15:15	04/11/23 13:45

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

Client Sample ID: BAC-21-F-20230410-01

Lab Sample ID: 240-183295-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	320		100	57	ug/L	1		6010D	Total Recoverable
Calcium	120000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	14000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2100		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	25000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	250		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	250		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	65		2.0	0.26	mg/L	2		300.0	Total/NA
Fluoride	0.096	J	0.10	0.048	mg/L	2		300.0	Total/NA
Sulfate	120		2.0	0.70	mg/L	2		300.0	Total/NA
Total Dissolved Solids	500		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-22-F-20230410-01

Lab Sample ID: 240-183295-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	230		100	57	ug/L	1		6010D	Total Recoverable
Calcium	150000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	19000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	19000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220	*+	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	35		5.0	0.64	mg/L	5		300.0	Total/NA
Sulfate	260		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	610		10	7.8	mg/L	1		SM 2540C	Total/NA
Total Alkalinity - RA	230	H	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3 - RA	230	H	5.0	2.6	mg/L	1		2320B-1997	Total/NA

Client Sample ID: EB-001-F-20230410-01

Lab Sample ID: 240-183295-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity	2.6	J *+	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	2.6	J	5.0	2.6	mg/L	1		2320B-1997	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

Client Sample ID: BAC-21-F-20230410-01

Lab Sample ID: 240-183295-1

Date Collected: 04/10/23 12:49

Matrix: Water

Date Received: 04/11/23 13:45

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	320		100	57	ug/L		04/12/23 14:00	04/13/23 11:47	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	120000		1000	250	ug/L		04/12/23 14:00	04/14/23 13:20	1
Magnesium	14000		1000	61	ug/L		04/12/23 14:00	04/14/23 13:20	1
Potassium	2100		1000	220	ug/L		04/12/23 14:00	04/14/23 13:20	1
Sodium	25000		1000	330	ug/L		04/12/23 14:00	04/14/23 13:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	250		5.0	2.6	mg/L			04/20/23 20:14	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	250		5.0	2.6	mg/L			04/20/23 20:14	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/20/23 20:14	1
Chloride (EPA 300.0)	65		2.0	0.26	mg/L			04/22/23 14:48	2
Fluoride (EPA 300.0)	0.096	J	0.10	0.048	mg/L			04/22/23 14:48	2
Sulfate (EPA 300.0)	120		2.0	0.70	mg/L			04/22/23 14:48	2
Total Dissolved Solids (SM 2540C)	500		10	7.8	mg/L			04/13/23 10:05	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

Client Sample ID: BAC-22-F-20230410-01

Lab Sample ID: 240-183295-2

Date Collected: 04/10/23 14:40

Matrix: Water

Date Received: 04/11/23 13:45

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	230		100	57	ug/L		04/12/23 14:00	04/13/23 12:09	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	150000		1000	250	ug/L		04/12/23 14:00	04/14/23 13:40	1
Magnesium	19000		1000	61	ug/L		04/12/23 14:00	04/14/23 13:40	1
Potassium	2900		1000	220	ug/L		04/12/23 14:00	04/14/23 13:40	1
Sodium	19000		1000	330	ug/L		04/12/23 14:00	04/14/23 13:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220	*+	5.0	2.6	mg/L			04/24/23 12:02	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			04/24/23 12:02	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 12:02	1
Chloride (EPA 300.0)	35		5.0	0.64	mg/L			04/22/23 15:09	5
Fluoride (EPA 300.0)	ND		0.25	0.12	mg/L			04/22/23 15:09	5
Sulfate (EPA 300.0)	260		5.0	1.7	mg/L			04/22/23 15:09	5
Total Dissolved Solids (SM 2540C)	610		10	7.8	mg/L			04/13/23 10:05	1

General Chemistry - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230	H	5.0	2.6	mg/L			04/25/23 13:39	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230	H	5.0	2.6	mg/L			04/25/23 13:39	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND	H	5.0	2.6	mg/L			04/25/23 13:39	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

Client Sample ID: EB-001-F-20230410-01

Lab Sample ID: 240-183295-3

Date Collected: 04/10/23 15:15

Matrix: Water

Date Received: 04/11/23 13:45

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		04/12/23 14:00	04/13/23 12:13	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		04/12/23 14:00	04/14/23 13:49	1
Magnesium	ND		1000	61	ug/L		04/12/23 14:00	04/14/23 13:49	1
Potassium	ND		1000	220	ug/L		04/12/23 14:00	04/14/23 13:49	1
Sodium	ND		1000	330	ug/L		04/12/23 14:00	04/14/23 13:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	2.6	J **	5.0	2.6	mg/L			04/24/23 12:05	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	2.6	J	5.0	2.6	mg/L			04/24/23 12:05	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 12:05	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			04/22/23 15:29	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			04/22/23 15:29	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			04/22/23 15:29	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			04/13/23 10:05	1

General Chemistry - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND	H	5.0	2.6	mg/L			04/25/23 13:44	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND	H	5.0	2.6	mg/L			04/25/23 13:44	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND	H	5.0	2.6	mg/L			04/25/23 13:44	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-569079/1-A
Matrix: Water
Analysis Batch: 569319

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 569079

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		04/12/23 14:00	04/13/23 11:31	1

Lab Sample ID: LCS 240-569079/2-A
Matrix: Water
Analysis Batch: 569319

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 569079

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	998		ug/L		100	80 - 120

Lab Sample ID: 240-183295-1 MS
Matrix: Water
Analysis Batch: 569319

Client Sample ID: BAC-21-F-20230410-MS
Prep Type: Total Recoverable
Prep Batch: 569079

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	320		1000	1300		ug/L		98	75 - 125

Lab Sample ID: 240-183295-1 MSD
Matrix: Water
Analysis Batch: 569319

Client Sample ID: BAC-21-F-20230410-MSD
Prep Type: Total Recoverable
Prep Batch: 569079

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Boron	320		1000	1300		ug/L		98	75 - 125	0	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-569079/1-A
Matrix: Water
Analysis Batch: 569539

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 569079

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		04/12/23 14:00	04/14/23 13:15	1
Magnesium	ND		1000	61	ug/L		04/12/23 14:00	04/14/23 13:15	1
Potassium	ND		1000	220	ug/L		04/12/23 14:00	04/14/23 13:15	1
Sodium	ND		1000	330	ug/L		04/12/23 14:00	04/14/23 13:15	1

Lab Sample ID: LCS 240-569079/3-A
Matrix: Water
Analysis Batch: 569539

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 569079

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	23200		ug/L		93	80 - 120
Magnesium	25000	23400		ug/L		94	80 - 120
Potassium	25000	23500		ug/L		94	80 - 120
Sodium	25000	23500		ug/L		94	80 - 120

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

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

Lab Sample ID: 240-183295-1 MS
Matrix: Water
Analysis Batch: 569539

Client Sample ID: BAC-21-F-20230410-MS
Prep Type: Total Recoverable
Prep Batch: 569079

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD
Calcium	120000		25000	138000	4	ug/L		72	80 - 120	
Magnesium	14000		25000	36700		ug/L		89	80 - 120	
Potassium	2100		25000	25000		ug/L		92	80 - 120	
Sodium	25000		25000	47300		ug/L		89	80 - 120	

Lab Sample ID: 240-183295-1 MSD
Matrix: Water
Analysis Batch: 569539

Client Sample ID: BAC-21-F-20230410-MSD
Prep Type: Total Recoverable
Prep Batch: 569079

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec		RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD		
Calcium	120000		25000	149000	4	ug/L		113	80 - 120	7	20	
Magnesium	14000		25000	39500		ug/L		101	80 - 120	7	20	
Potassium	2100		25000	26900		ug/L		100	80 - 120	8	20	
Sodium	25000		25000	51100		ug/L		104	80 - 120	8	20	

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-570374/4
Matrix: Water
Analysis Batch: 570374

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			04/20/23 19:28	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/20/23 19:28	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/20/23 19:28	1

Lab Sample ID: LCS 240-570374/3
Matrix: Water
Analysis Batch: 570374

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec	
	Added	Result	Qualifier				Limits	RPD
Total Alkalinity	146	151		mg/L		103	86 - 123	

Lab Sample ID: 240-183295-1 DU
Matrix: Water
Analysis Batch: 570374

Client Sample ID: BAC-21-F-20230410-01
Prep Type: Total/NA

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Total Alkalinity	250		251		mg/L		0.6	20
Bicarbonate Alkalinity as CaCO3	250		251		mg/L		0.6	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Lab Sample ID: MB 240-570651/4
Matrix: Water
Analysis Batch: 570651

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			04/24/23 11:12	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 11:12	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 11:12	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-570826/4
Matrix: Water
Analysis Batch: 570826

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			04/25/23 13:05	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/25/23 13:05	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/25/23 13:05	1

Lab Sample ID: LCS 240-570826/3
Matrix: Water
Analysis Batch: 570826

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	149		mg/L		102	86 - 123

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-570408/3
Matrix: Water
Analysis Batch: 570408

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			04/22/23 14:08	1
Fluoride	ND		0.050	0.024	mg/L			04/22/23 14:08	1
Sulfate	ND		1.0	0.35	mg/L			04/22/23 14:08	1

Lab Sample ID: LCS 240-570408/4
Matrix: Water
Analysis Batch: 570408

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	50.7		mg/L		101	90 - 110
Fluoride	2.50	2.64		mg/L		105	90 - 110
Sulfate	50.0	52.1		mg/L		104	90 - 110

Lab Sample ID: 240-183295-1 MS
Matrix: Water
Analysis Batch: 570408

Client Sample ID: BAC-21-F-20230410-MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	62		50.0	116		mg/L		108	80 - 120
Fluoride	0.10		2.50	3.08		mg/L		119	80 - 120
Sulfate	120		50.0	173		mg/L		106	80 - 120

Lab Sample ID: 240-183295-1 MSD
Matrix: Water
Analysis Batch: 570408

Client Sample ID: BAC-21-F-20230410-MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	62		50.0	117		mg/L		109	80 - 120	0	15
Fluoride	0.10		2.50	3.09		mg/L		119	80 - 120	0	15
Sulfate	120		50.0	173		mg/L		106	80 - 120	0	15

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

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

Lab Sample ID: MB 240-569230/1
Matrix: Water
Analysis Batch: 569230

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			04/13/23 10:05	1

Lab Sample ID: LCS 240-569230/2
Matrix: Water
Analysis Batch: 569230

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	580	543		mg/L		94	80 - 120

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

Metals

Prep Batch: 569079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183295-1	BAC-21-F-20230410-01	Total Recoverable	Water	3005A	
240-183295-2	BAC-22-F-20230410-01	Total Recoverable	Water	3005A	
240-183295-3	EB-001-F-20230410-01	Total Recoverable	Water	3005A	
MB 240-569079/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-569079/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-569079/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-183295-1 MS	BAC-21-F-20230410-MS	Total Recoverable	Water	3005A	
240-183295-1 MS	BAC-21-F-20230410-MS	Total Recoverable	Water	3005A	
240-183295-1 MSD	BAC-21-F-20230410-MSD	Total Recoverable	Water	3005A	
240-183295-1 MSD	BAC-21-F-20230410-MSD	Total Recoverable	Water	3005A	

Analysis Batch: 569319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183295-1	BAC-21-F-20230410-01	Total Recoverable	Water	6010D	569079
240-183295-2	BAC-22-F-20230410-01	Total Recoverable	Water	6010D	569079
240-183295-3	EB-001-F-20230410-01	Total Recoverable	Water	6010D	569079
MB 240-569079/1-A	Method Blank	Total Recoverable	Water	6010D	569079
LCS 240-569079/2-A	Lab Control Sample	Total Recoverable	Water	6010D	569079
240-183295-1 MS	BAC-21-F-20230410-MS	Total Recoverable	Water	6010D	569079
240-183295-1 MSD	BAC-21-F-20230410-MSD	Total Recoverable	Water	6010D	569079

Analysis Batch: 569539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183295-1	BAC-21-F-20230410-01	Total Recoverable	Water	6020B	569079
240-183295-2	BAC-22-F-20230410-01	Total Recoverable	Water	6020B	569079
240-183295-3	EB-001-F-20230410-01	Total Recoverable	Water	6020B	569079
MB 240-569079/1-A	Method Blank	Total Recoverable	Water	6020B	569079
LCS 240-569079/3-A	Lab Control Sample	Total Recoverable	Water	6020B	569079
240-183295-1 MS	BAC-21-F-20230410-MS	Total Recoverable	Water	6020B	569079
240-183295-1 MSD	BAC-21-F-20230410-MSD	Total Recoverable	Water	6020B	569079

General Chemistry

Analysis Batch: 569230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183295-1	BAC-21-F-20230410-01	Total/NA	Water	SM 2540C	
240-183295-2	BAC-22-F-20230410-01	Total/NA	Water	SM 2540C	
240-183295-3	EB-001-F-20230410-01	Total/NA	Water	SM 2540C	
MB 240-569230/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-569230/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 570374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183295-1	BAC-21-F-20230410-01	Total/NA	Water	2320B-1997	
MB 240-570374/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-570374/3	Lab Control Sample	Total/NA	Water	2320B-1997	
240-183295-1 DU	BAC-21-F-20230410-01	Total/NA	Water	2320B-1997	

Analysis Batch: 570408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183295-1	BAC-21-F-20230410-01	Total/NA	Water	300.0	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

General Chemistry (Continued)

Analysis Batch: 570408 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183295-2	BAC-22-F-20230410-01	Total/NA	Water	300.0	
240-183295-3	EB-001-F-20230410-01	Total/NA	Water	300.0	
MB 240-570408/3	Method Blank	Total/NA	Water	300.0	
LCS 240-570408/4	Lab Control Sample	Total/NA	Water	300.0	
240-183295-1 MS	BAC-21-F-20230410-MS	Total/NA	Water	300.0	
240-183295-1 MSD	BAC-21-F-20230410-MSD	Total/NA	Water	300.0	

Analysis Batch: 570651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183295-2	BAC-22-F-20230410-01	Total/NA	Water	2320B-1997	
240-183295-3	EB-001-F-20230410-01	Total/NA	Water	2320B-1997	
MB 240-570651/4	Method Blank	Total/NA	Water	2320B-1997	

Analysis Batch: 570826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183295-2 - RA	BAC-22-F-20230410-01	Total/NA	Water	2320B-1997	
240-183295-3 - RA	EB-001-F-20230410-01	Total/NA	Water	2320B-1997	
MB 240-570826/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-570826/3	Lab Control Sample	Total/NA	Water	2320B-1997	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

Client Sample ID: BAC-21-F-20230410-01

Lab Sample ID: 240-183295-1

Date Collected: 04/10/23 12:49

Matrix: Water

Date Received: 04/11/23 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569079	MRL	EET CAN	04/12/23 14:00
Total Recoverable	Analysis	6010D		1	569319	KLC	EET CAN	04/13/23 11:47
Total Recoverable	Prep	3005A			569079	MRL	EET CAN	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569539	RKT	EET CAN	04/14/23 13:20
Total/NA	Analysis	2320B-1997		1	570374	JWW	EET CAN	04/20/23 20:14
Total/NA	Analysis	300.0		2	570408	JMB	EET CAN	04/22/23 14:48
Total/NA	Analysis	SM 2540C		1	569230	GH	EET CAN	04/13/23 10:05

Client Sample ID: BAC-22-F-20230410-01

Lab Sample ID: 240-183295-2

Date Collected: 04/10/23 14:40

Matrix: Water

Date Received: 04/11/23 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569079	MRL	EET CAN	04/12/23 14:00
Total Recoverable	Analysis	6010D		1	569319	KLC	EET CAN	04/13/23 12:09
Total Recoverable	Prep	3005A			569079	MRL	EET CAN	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569539	RKT	EET CAN	04/14/23 13:40
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 12:02
Total/NA	Analysis	2320B-1997	RA	1	570826	JWW	EET CAN	04/25/23 13:39
Total/NA	Analysis	300.0		5	570408	JMB	EET CAN	04/22/23 15:09
Total/NA	Analysis	SM 2540C		1	569230	GH	EET CAN	04/13/23 10:05

Client Sample ID: EB-001-F-20230410-01

Lab Sample ID: 240-183295-3

Date Collected: 04/10/23 15:15

Matrix: Water

Date Received: 04/11/23 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569079	MRL	EET CAN	04/12/23 14:00
Total Recoverable	Analysis	6010D		1	569319	KLC	EET CAN	04/13/23 12:13
Total Recoverable	Prep	3005A			569079	MRL	EET CAN	04/12/23 14:00
Total Recoverable	Analysis	6020B		1	569539	RKT	EET CAN	04/14/23 13:49
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 12:05
Total/NA	Analysis	2320B-1997	RA	1	570826	JWW	EET CAN	04/25/23 13:44
Total/NA	Analysis	300.0		1	570408	JMB	EET CAN	04/22/23 15:29
Total/NA	Analysis	SM 2540C		1	569230	GH	EET CAN	04/13/23 10:05

Laboratory References:

EET CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-183295-1

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23 *
Connecticut	State	PH-0590	06-29-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-28-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23 *
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-23 *
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

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: Federal CCR Wells - App III Site:		Sample: Bobby Cesto Lab PM: Cisneros, Roxanne Phone: 740-373-4308 E-Mail: roxanne.cisneros@Eurofinset.com PWSID:		Carrier Tracking No(s): State of Origin:		COC No: 240-93465-34577.1 Page: Page 1 of 1 Job #:	
Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: 2935505 WO #: 24019633 Project #: 24019633 SSOW#:		Analysis Requested Total Number of Containers:		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 Other: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4.5 Z - other (specify)		Special Instructions/Note: 240-183295 Chain of Custody	
Sample Identification Sample Date Sample Time Sample Type (C-comp, G-grab) Matrix (Hexamer, Smectit, Chromatit, BT-Tissue, Analy) Preservation Code: Field Filtered Sample (Yes or No) Perform MS/MS (Yes or No)		Sample Date Sample Time Sample Type (C-comp, G-grab) Matrix (Hexamer, Smectit, Chromatit, BT-Tissue, Analy) Preservation Code: Field Filtered Sample (Yes or No) Perform MS/MS (Yes or No)		Sample Date Sample Time Sample Type (C-comp, G-grab) Matrix (Hexamer, Smectit, Chromatit, BT-Tissue, Analy) Preservation Code: Field Filtered Sample (Yes or No) Perform MS/MS (Yes or No)		Sample Date Sample Time Sample Type (C-comp, G-grab) Matrix (Hexamer, Smectit, Chromatit, BT-Tissue, Analy) Preservation Code: Field Filtered Sample (Yes or No) Perform MS/MS (Yes or No)	
BAC-21-F-20230410-01 4-10-23 1249 6 W BAC-21-F-20230410-MS 4-10-23 1249 6 W BAC-21-F-20230410-MSD 4-10-23 1249 6 W BAC-22-F-20230410-01 4-10-23 1440 6 W EB-001-F-20230410-01 4-10-23 1515 6 W		BAC-21-F-20230410-01 4-10-23 1249 6 W BAC-21-F-20230410-MS 4-10-23 1249 6 W BAC-21-F-20230410-MSD 4-10-23 1249 6 W BAC-22-F-20230410-01 4-10-23 1440 6 W EB-001-F-20230410-01 4-10-23 1515 6 W		BAC-21-F-20230410-01 4-10-23 1249 6 W BAC-21-F-20230410-MS 4-10-23 1249 6 W BAC-21-F-20230410-MSD 4-10-23 1249 6 W BAC-22-F-20230410-01 4-10-23 1440 6 W EB-001-F-20230410-01 4-10-23 1515 6 W		BAC-21-F-20230410-01 4-10-23 1249 6 W BAC-21-F-20230410-MS 4-10-23 1249 6 W BAC-21-F-20230410-MSD 4-10-23 1249 6 W BAC-22-F-20230410-01 4-10-23 1440 6 W EB-001-F-20230410-01 4-10-23 1515 6 W	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Special Instructions/QC Requirements:	
Empty Kit Relinquished by:		Relinquished by: Jon Edwards Date/Time: 4-11-23 10:45 Company: Kempco		Relinquished by: Jon Edwards Date/Time: 4-11-23 13:45 Company: Huffman		Relinquished by: Jon Edwards Date/Time: 4-11-23 13:45 Company: Huffman	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Received by: Jon Edwards Date/Time: 4-11-23 10:00 Company: Huffman	



Eurofins - Canton Sample Receipt Form/Narrative Login # : _____
Barberton Facility

Client LightStone Site Name _____ Cooler unpacked by: Rachelle Haidet
Cooler Received on 4/11/23 Opened on 4/11/23
FedEx: 1st Grd Exp UPS FAS Clipper 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 NA
-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# HC203864
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 _____

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

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: _____

Eurofins - Canton 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	23.6	23.8	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 #:	2.1	2.3	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #:	3.5	3.7	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 #:	0.5	0.7	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	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

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-21-F-20230410-01	240-183295-G-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-21-F-20230410-01	240-183295-H-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-21-F-20230410-01	240-183295-I-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-22-F-20230410-01	240-183295-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230410-01	240-183295-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____



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ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 5/22/2023 11:48:51 AM

JOB DESCRIPTION

Federal CCR Wells - App IV

JOB NUMBER

240-183578-1

Eurofins Cleveland

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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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Qualifiers

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
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.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.

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.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Job ID: 240-183578-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-183578-1

Receipt

The samples were received on 4/14/2023 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 1.1°C, 1.2°C, 1.4°C, 1.6°C, 1.8°C, 1.8°C, 2.0°C, 2.3°C, 2.6°C, 2.8°C, 3.2°C and 18.1°C

Metals

Method 6020B: The continuing calibration verification (CCV) associated with batch 240-570098 recovered above the upper control limit for Lithium. The samples associated with this CCV were below the reporting limits for the affected analytes; therefore, the data have been reported. The associated samples are impacted: BAC-23-F-20230411-01 (240-183578-3), BAC-08-F-20230411-01 (240-183578-4), EB-001-F-20230411-01 (240-183578-7), BAC-07-F-20230412-01 (240-183578-8), BAC-18-F--20230412-01 (240-183578-9), BAC-06-F-20230412-01 (240-183578-10) and EB-001-F-20230412-01 (240-183578-12).

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(s) was analyzed outside of analytical holding time due to instrument error. Instrument motor went out and samples had to be rerun on second instrument. BAC-12-F-20230411-01 (240-183578-6) and EB-001-F-20230411-01 (240-183578-7).

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 160-609093The following samples were prepared at a reduced aliquot due to Matrix: BAC-10-F-20230411-01 (240-183578-1), DUP-001-BAC-10-F-20230411-01 (240-183578-2), BAC-14-F-20230411-01 (240-183578-5), BAC-12-F-20230411-01 (240-183578-6) and BAC-16-F-20230412-01 (240-183578-11). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method 9315_Ra226: Radium-22 Prep Batch 160-609093Insufficient sample volume was available to perform a sample duplicate for the following samples: BAC-23-F-20230411-01 (240-183578-3), BAC-08-F-20230411-01 (240-183578-4), EB-001-F-20230411-01 (240-183578-7), BAC-07-F-20230412-01 (240-183578-8), BAC-18-F--20230412-01 (240-183578-9), BAC-06-F-20230412-01 (240-183578-10) and EB-001-F-20230412-01 (240-183578-12). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method 9315_Ra226: Radium-226 batch 609093Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-10-F-20230411-01 (240-183578-1), DUP-001-BAC-10-F-20230411-01 (240-183578-2), BAC-23-F-20230411-01 (240-183578-3), BAC-08-F-20230411-01 (240-183578-4), BAC-14-F-20230411-01 (240-183578-5), BAC-12-F-20230411-01 (240-183578-6), EB-001-F-20230411-01 (240-183578-7), BAC-07-F-20230412-01 (240-183578-8), BAC-18-F--20230412-01 (240-183578-9), BAC-06-F-20230412-01 (240-183578-10), BAC-16-F-20230412-01 (240-183578-11), EB-001-F-20230412-01 (240-183578-12), (LCS 160-609093/2-A), (LCSD 160-609093/3-A) and (MB 160-609093/1-A)

Method 9320_Ra228: Radium-228 Prep Batch 160-609099The following samples were prepared at a reduced aliquot due to Matrix: BAC-10-F-20230411-01 (240-183578-1), DUP-001-BAC-10-F-20230411-01 (240-183578-2), BAC-14-F-20230411-01 (240-183578-5), BAC-12-F-20230411-01 (240-183578-6) and BAC-16-F-20230412-01 (240-183578-11). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method 9320_Ra228: Radium-228 Prep Batch160-609099Insufficient sample volume was available to perform a sample duplicate for the following samples: BAC-23-F-20230411-01 (240-183578-3), BAC-08-F-20230411-01 (240-183578-4), EB-001-F-20230411-01 (240-183578-7), BAC-07-F-20230412-01 (240-183578-8), BAC-18-F--20230412-01 (240-183578-9), BAC-06-F-20230412-01

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Job ID: 240-183578-1 (Continued)

Laboratory: Eurofins Cleveland (Continued)

(240-183578-10) and EB-001-F-20230412-01 (240-183578-12). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method 9320_Ra228: Radium-228 batch 609099The detection goal was not met for the following sample(s). Samples were prepped at a reduced volume due to the presence of matrix interferences: BAC-10-F-20230411-01 (240-183578-1), DUP-001-BAC-10-F-20230411-01 (240-183578-2), BAC-14-F-20230411-01 (240-183578-5) and BAC-12-F-20230411-01 (240-183578-6). Analytical results are reported with the detection limit achieved.

Method 9320_Ra228: Radium-228 batch 609099Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.BAC-10-F-20230411-01 (240-183578-1), DUP-001-BAC-10-F-20230411-01 (240-183578-2), BAC-23-F-20230411-01 (240-183578-3), BAC-08-F-20230411-01 (240-183578-4), BAC-14-F-20230411-01 (240-183578-5), BAC-12-F-20230411-01 (240-183578-6), EB-001-F-20230411-01 (240-183578-7), BAC-07-F-20230412-01 (240-183578-8), BAC-18-F--20230412-01 (240-183578-9), BAC-06-F-20230412-01 (240-183578-10), BAC-16-F-20230412-01 (240-183578-11), EB-001-F-20230412-01 (240-183578-12), (LCS 160-609099/2-A), (LCSD 160-609099/3-A) and (MB 160-609099/1-A)

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 - App IV

Job ID: 240-183578-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0-1993 R2.1	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 - App IV

Job ID: 240-183578-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-183578-1	BAC-10-F-20230411-01	Water	04/11/23 10:03	04/14/23 08:00
240-183578-2	DUP-001-BAC-10-F-20230411-01	Water	04/11/23 10:03	04/14/23 08:00
240-183578-3	BAC-23-F-20230411-01	Water	04/11/23 11:22	04/14/23 08:00
240-183578-4	BAC-08-F-20230411-01	Water	04/11/23 12:27	04/14/23 08:00
240-183578-5	BAC-14-F-20230411-01	Water	04/11/23 14:00	04/14/23 08:00
240-183578-6	BAC-12-F-20230411-01	Water	04/11/23 14:58	04/14/23 08:00
240-183578-7	EB-001-F-20230411-01	Water	04/11/23 15:30	04/14/23 08:00
240-183578-8	BAC-07-F-20230412-01	Water	04/12/23 10:34	04/14/23 08:00
240-183578-9	BAC-18-F--20230412-01	Water	04/12/23 11:31	04/14/23 08:00
240-183578-10	BAC-06-F-20230412-01	Water	04/12/23 13:00	04/14/23 08:00
240-183578-11	BAC-16-F-20230412-01	Water	04/12/23 14:29	04/14/23 08:00
240-183578-12	EB-001-F-20230412-01	Water	04/12/23 15:30	04/14/23 08:00



Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-10-F-20230411-01

Lab Sample ID: 240-183578-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.74	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	75		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.26	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Chromium	5.8		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	5.0		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	3.5		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.8	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	29000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.6	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	55000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.53	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.23		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: DUP-001-BAC-10-F-20230411-01

Lab Sample ID: 240-183578-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.2		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	78		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.24	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Chromium	6.1		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	5.2		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	3.7		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.7	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	30000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	56000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.22		0.050	0.024	mg/L	1		300.0-1993 R2.1	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 - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-23-F-20230411-01

Lab Sample ID: 240-183578-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.0	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	130		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.0		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	4.6	J ^+	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	15000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	18000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.14		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-08-F-20230411-01

Lab Sample ID: 240-183578-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.6	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	180		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.6		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	5.1	J ^+	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	12000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.8	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	1200		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	12000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	210		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	210		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.13		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-14-F-20230411-01

Lab Sample ID: 240-183578-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	4.9	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	110		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	2.0	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.3		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.1		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.9	J	8.0	1.7	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 - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-14-F-20230411-01 (Continued)

Lab Sample ID: 240-183578-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Magnesium	20000		1000	61	ug/L	1			6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1			6020B	Total Recoverable
Sodium	22000		1000	330	ug/L	1			6020B	Total Recoverable
Total Alkalinity	82		5.0	2.6	mg/L	1			2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	82		5.0	2.6	mg/L	1			2320B-1997	Total/NA
Fluoride	0.068		0.050	0.024	mg/L	1			300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-12-F-20230411-01

Lab Sample ID: 240-183578-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Arsenic	6.5		5.0	0.75	ug/L	1			6020B	Total Recoverable
Barium	130		5.0	2.2	ug/L	1			6020B	Total Recoverable
Chromium	4.1	J	5.0	1.2	ug/L	1			6020B	Total Recoverable
Cobalt	8.8		1.0	0.19	ug/L	1			6020B	Total Recoverable
Lead	4.7		1.0	0.45	ug/L	1			6020B	Total Recoverable
Lithium	9.8		8.0	1.7	ug/L	1			6020B	Total Recoverable
Magnesium	17000		1000	61	ug/L	1			6020B	Total Recoverable
Molybdenum	2.0	J	5.0	1.1	ug/L	1			6020B	Total Recoverable
Potassium	2700		1000	220	ug/L	1			6020B	Total Recoverable
Sodium	28000		1000	330	ug/L	1			6020B	Total Recoverable
Total Alkalinity	100		5.0	2.6	mg/L	1			2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	100		5.0	2.6	mg/L	1			2320B-1997	Total/NA
Fluoride	0.086	H	0.050	0.024	mg/L	1			300.0-1993 R2.1	Total/NA

Client Sample ID: EB-001-F-20230411-01

Lab Sample ID: 240-183578-7

No Detections.

Client Sample ID: BAC-07-F-20230412-01

Lab Sample ID: 240-183578-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Barium	45		5.0	2.2	ug/L	1			6020B	Total Recoverable
Cobalt	1.7		1.0	0.19	ug/L	1			6020B	Total Recoverable
Lithium	7.0	J ^+	8.0	1.7	ug/L	1			6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1			6020B	Total Recoverable
Potassium	1300		1000	220	ug/L	1			6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1			6020B	Total Recoverable
Total Alkalinity	140		5.0	2.6	mg/L	1			2320B-1997	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 - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-07-F-20230412-01 (Continued)

Lab Sample ID: 240-183578-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bicarbonate Alkalinity as CaCO3	140		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.084		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-18-F--20230412-01

Lab Sample ID: 240-183578-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.0	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	37		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.7		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	7.9	J ^+	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	110		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	110		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.059		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-06-F-20230412-01

Lab Sample ID: 240-183578-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.85	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	94		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	3.9		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	7.6	J ^+	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	25000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	110		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	110		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.098		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-16-F-20230412-01

Lab Sample ID: 240-183578-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.7	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	63		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.4		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	6.9	J	8.0	1.7	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 - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-16-F-20230412-01 (Continued)

Lab Sample ID: 240-183578-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	21000		1000	61	ug/L	1		6020B	Total
									Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total
									Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total
									Recoverable
Total Alkalinity	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.061		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: EB-001-F-20230412-01

Lab Sample ID: 240-183578-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity	180		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	180		5.0	2.6	mg/L	1		2320B-1997	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland



Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-10-F-20230411-01

Lab Sample ID: 240-183578-1

Date Collected: 04/11/23 10:03

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.74	J	2.0	0.57	ug/L		04/18/23 14:00	04/19/23 23:53	1
Arsenic	4.7	J	5.0	0.75	ug/L		04/18/23 14:00	04/19/23 23:53	1
Barium	75		5.0	2.2	ug/L		04/18/23 14:00	04/19/23 23:53	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/19/23 23:53	1
Cadmium	0.26	J	1.0	0.20	ug/L		04/18/23 14:00	04/19/23 23:53	1
Chromium	5.8		5.0	1.2	ug/L		04/18/23 14:00	04/19/23 23:53	1
Cobalt	5.0		1.0	0.19	ug/L		04/18/23 14:00	04/19/23 23:53	1
Lead	3.5		1.0	0.45	ug/L		04/18/23 14:00	04/19/23 23:53	1
Lithium	6.8	J	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 15:11	1
Magnesium	29000		1000	61	ug/L		04/18/23 14:00	04/19/23 23:53	1
Molybdenum	1.6	J	5.0	1.1	ug/L		04/18/23 14:00	04/19/23 23:53	1
Potassium	2400		1000	220	ug/L		04/18/23 14:00	04/19/23 23:53	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/19/23 23:53	1
Sodium	55000		1000	330	ug/L		04/18/23 14:00	04/19/23 23:53	1
Thallium	0.53	J	1.0	0.20	ug/L		04/18/23 14:00	04/19/23 23:53	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		04/18/23 14:00	04/19/23 19:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			04/24/23 15:35	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			04/24/23 15:35	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 15:35	1
Fluoride (EPA 300.0-1993 R2.1)	0.23		0.050	0.024	mg/L			05/09/23 22:42	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.263	U	0.279	0.280	1.00	0.447	pCi/L	04/27/23 13:34	05/19/23 19:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	61.9		30 - 110					04/27/23 13:34	05/19/23 19:38	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	-0.225	U G	0.790	0.790	1.00	1.55	pCi/L	04/27/23 14:08	05/16/23 11:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	61.9		30 - 110					04/27/23 14:08	05/16/23 11:15	1
Y Carrier	81.9		30 - 110					04/27/23 14:08	05/16/23 11:15	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-10-F-20230411-01

Lab Sample ID: 240-183578-1

Date Collected: 04/11/23 10:03

Matrix: Water

Date Received: 04/14/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.0376	U	0.838	0.838	5.00	1.55	pCi/L		05/22/23 12:41	1

- 1
- 2
- 3
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- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: DUP-001-BAC-10-F-20230411-01

Lab Sample ID: 240-183578-2

Date Collected: 04/11/23 10:03

Matrix: Water

Date Received: 04/14/23 08:00

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		04/18/23 14:00	04/19/23 23:56	1
Arsenic	5.2		5.0	0.75	ug/L		04/18/23 14:00	04/19/23 23:56	1
Barium	78		5.0	2.2	ug/L		04/18/23 14:00	04/19/23 23:56	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/19/23 23:56	1
Cadmium	0.24	J	1.0	0.20	ug/L		04/18/23 14:00	04/19/23 23:56	1
Chromium	6.1		5.0	1.2	ug/L		04/18/23 14:00	04/19/23 23:56	1
Cobalt	5.2		1.0	0.19	ug/L		04/18/23 14:00	04/19/23 23:56	1
Lead	3.7		1.0	0.45	ug/L		04/18/23 14:00	04/19/23 23:56	1
Lithium	6.7	J	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 15:15	1
Magnesium	30000		1000	61	ug/L		04/18/23 14:00	04/19/23 23:56	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/19/23 23:56	1
Potassium	2500		1000	220	ug/L		04/18/23 14:00	04/19/23 23:56	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/19/23 23:56	1
Sodium	56000		1000	330	ug/L		04/18/23 14:00	04/19/23 23:56	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/19/23 23:56	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		04/18/23 14:00	04/19/23 19:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			04/24/23 15:39	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			04/24/23 15:39	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 15:39	1
Fluoride (EPA 300.0-1993 R2.1)	0.22		0.050	0.024	mg/L			05/09/23 23:02	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.288	U	0.356	0.357	1.00	0.588	pCi/L	04/27/23 13:34	05/19/23 19:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	53.8		30 - 110					04/27/23 13:34	05/19/23 19:39	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.963	U G	1.08	1.09	1.00	1.78	pCi/L	04/27/23 14:08	05/16/23 11:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	53.8		30 - 110					04/27/23 14:08	05/16/23 11:15	1
Y Carrier	82.6		30 - 110					04/27/23 14:08	05/16/23 11:15	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: DUP-001-BAC-10-F-20230411-01

Lab Sample ID: 240-183578-2

Date Collected: 04/11/23 10:03

Matrix: Water

Date Received: 04/14/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	1.25	U	1.14	1.15	5.00	1.78	pCi/L		05/22/23 12:41	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-23-F-20230411-01

Lab Sample ID: 240-183578-3

Date Collected: 04/11/23 11:22

Matrix: Water

Date Received: 04/14/23 08:00

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		04/18/23 14:00	04/19/23 23:59	1
Arsenic	2.0	J	5.0	0.75	ug/L		04/18/23 14:00	04/19/23 23:59	1
Barium	130		5.0	2.2	ug/L		04/18/23 14:00	04/19/23 23:59	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/19/23 23:59	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/19/23 23:59	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/19/23 23:59	1
Cobalt	1.0		1.0	0.19	ug/L		04/18/23 14:00	04/19/23 23:59	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/19/23 23:59	1
Lithium	4.6	J ^+	8.0	1.7	ug/L		04/18/23 14:00	04/19/23 23:59	1
Magnesium	15000		1000	61	ug/L		04/18/23 14:00	04/19/23 23:59	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/19/23 23:59	1
Potassium	1800		1000	220	ug/L		04/18/23 14:00	04/19/23 23:59	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/19/23 23:59	1
Sodium	18000		1000	330	ug/L		04/18/23 14:00	04/19/23 23:59	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/19/23 23:59	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		04/18/23 14:00	04/19/23 19:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			04/24/23 15:43	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			04/24/23 15:43	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 15:43	1
Fluoride (EPA 300.0-1993 R2.1)	0.14		0.050	0.024	mg/L			05/09/23 23:23	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	0.125	U	0.116	0.116	1.00	0.180	pCi/L	04/27/23 13:34	05/19/23 19:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.6		30 - 110					04/27/23 13:34	05/19/23 19:39	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	0.172	U	0.279	0.280	1.00	0.477	pCi/L	04/27/23 14:08	05/16/23 11:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.6		30 - 110					04/27/23 14:08	05/16/23 11:15	1
Y Carrier	85.6		30 - 110					04/27/23 14:08	05/16/23 11:15	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-23-F-20230411-01

Lab Sample ID: 240-183578-3

Date Collected: 04/11/23 11:22

Matrix: Water

Date Received: 04/14/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.297	U	0.302	0.303	5.00	0.477	pCi/L		05/22/23 12:41	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-08-F-20230411-01

Lab Sample ID: 240-183578-4

Date Collected: 04/11/23 12:27

Matrix: Water

Date Received: 04/14/23 08:00

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		04/18/23 14:00	04/20/23 00:01	1
Arsenic	3.6	J	5.0	0.75	ug/L		04/18/23 14:00	04/20/23 00:01	1
Barium	180		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 00:01	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 00:01	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:01	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/20/23 00:01	1
Cobalt	2.6		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 00:01	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 00:01	1
Lithium	5.1	J ^+	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 00:01	1
Magnesium	12000		1000	61	ug/L		04/18/23 14:00	04/20/23 00:01	1
Molybdenum	1.8	J	5.0	1.1	ug/L		04/18/23 14:00	04/20/23 00:01	1
Potassium	1200		1000	220	ug/L		04/18/23 14:00	04/20/23 00:01	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 00:01	1
Sodium	12000		1000	330	ug/L		04/18/23 14:00	04/20/23 00:01	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:01	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		04/18/23 14:00	04/19/23 19:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	210		5.0	2.6	mg/L			04/24/23 15:48	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	210		5.0	2.6	mg/L			04/24/23 15:48	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 15:48	1
Fluoride (EPA 300.0-1993 R2.1)	0.13		0.050	0.024	mg/L			05/08/23 23:52	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0642	U	0.0918	0.0920	1.00	0.156	pCi/L	04/27/23 13:34	05/19/23 19:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.3		30 - 110					04/27/23 13:34	05/19/23 19:39	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.131	U	0.271	0.271	1.00	0.473	pCi/L	04/27/23 14:08	05/16/23 11:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.3		30 - 110					04/27/23 14:08	05/16/23 11:16	1
Y Carrier	82.6		30 - 110					04/27/23 14:08	05/16/23 11:16	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-08-F-20230411-01

Lab Sample ID: 240-183578-4

Date Collected: 04/11/23 12:27

Matrix: Water

Date Received: 04/14/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.195	U	0.286	0.286	5.00	0.473	pCi/L		05/22/23 12:41	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-14-F-20230411-01

Lab Sample ID: 240-183578-5

Date Collected: 04/11/23 14:00

Matrix: Water

Date Received: 04/14/23 08:00

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		04/18/23 14:00	04/20/23 00:04	1
Arsenic	4.9	J	5.0	0.75	ug/L		04/18/23 14:00	04/20/23 00:04	1
Barium	110		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 00:04	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 00:04	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:04	1
Chromium	2.0	J	5.0	1.2	ug/L		04/18/23 14:00	04/20/23 00:04	1
Cobalt	2.3		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 00:04	1
Lead	1.1		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 00:04	1
Lithium	6.9	J	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 15:18	1
Magnesium	20000		1000	61	ug/L		04/18/23 14:00	04/20/23 00:04	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/20/23 00:04	1
Potassium	1600		1000	220	ug/L		04/18/23 14:00	04/20/23 00:04	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 00:04	1
Sodium	22000		1000	330	ug/L		04/18/23 14:00	04/20/23 00:04	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:04	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		04/18/23 14:00	04/19/23 19:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	82		5.0	2.6	mg/L			04/24/23 15:51	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	82		5.0	2.6	mg/L			04/24/23 15:51	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 15:51	1
Fluoride (EPA 300.0-1993 R2.1)	0.068		0.050	0.024	mg/L			05/09/23 23:43	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	0.438		0.240	0.244	1.00	0.288	pCi/L	04/27/23 13:34	05/19/23 19:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	52.1		30 - 110					04/27/23 13:34	05/19/23 19:45	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	0.0693	U G	0.572	0.572	1.00	1.06	pCi/L	04/27/23 14:08	05/16/23 11:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	52.1		30 - 110					04/27/23 14:08	05/16/23 11:16	1
Y Carrier	89.7		30 - 110					04/27/23 14:08	05/16/23 11:16	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-14-F-20230411-01

Lab Sample ID: 240-183578-5

Date Collected: 04/11/23 14:00

Matrix: Water

Date Received: 04/14/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.507	U	0.620	0.622	5.00	1.06	pCi/L		05/22/23 12:41	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-12-F-20230411-01

Lab Sample ID: 240-183578-6

Date Collected: 04/11/23 14:58

Matrix: Water

Date Received: 04/14/23 08:00

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		04/18/23 14:00	04/20/23 00:07	1
Arsenic	6.5		5.0	0.75	ug/L		04/18/23 14:00	04/20/23 00:07	1
Barium	130		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 00:07	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 00:07	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:07	1
Chromium	4.1	J	5.0	1.2	ug/L		04/18/23 14:00	04/20/23 00:07	1
Cobalt	8.8		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 00:07	1
Lead	4.7		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 00:07	1
Lithium	9.8		8.0	1.7	ug/L		04/18/23 14:00	04/20/23 15:20	1
Magnesium	17000		1000	61	ug/L		04/18/23 14:00	04/20/23 00:07	1
Molybdenum	2.0	J	5.0	1.1	ug/L		04/18/23 14:00	04/20/23 00:07	1
Potassium	2700		1000	220	ug/L		04/18/23 14:00	04/20/23 00:07	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 00:07	1
Sodium	28000		1000	330	ug/L		04/18/23 14:00	04/20/23 00:07	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:07	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		04/18/23 14:00	04/19/23 19:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	100		5.0	2.6	mg/L			04/24/23 15:55	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	100		5.0	2.6	mg/L			04/24/23 15:55	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 15:55	1
Fluoride (EPA 300.0-1993 R2.1)	0.086	H	0.050	0.024	mg/L			05/10/23 00:03	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	-0.0255	U	0.232	0.232	1.00	0.489	pCi/L	04/27/23 13:34	05/19/23 19:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	56.8		30 - 110					04/27/23 13:34	05/19/23 19:45	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.324	U G	0.878	0.879	1.00	1.56	pCi/L	04/27/23 14:08	05/16/23 11:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	56.8		30 - 110					04/27/23 14:08	05/16/23 11:16	1
Y Carrier	85.6		30 - 110					04/27/23 14:08	05/16/23 11:16	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-12-F-20230411-01

Lab Sample ID: 240-183578-6

Date Collected: 04/11/23 14:58

Matrix: Water

Date Received: 04/14/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.298	U	0.908	0.909	5.00	1.56	pCi/L		05/22/23 12:41	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: EB-001-F-20230411-01

Lab Sample ID: 240-183578-7

Date Collected: 04/11/23 15:30

Matrix: Water

Date Received: 04/14/23 08:00

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		04/18/23 14:00	04/20/23 00:09	1
Arsenic	ND		5.0	0.75	ug/L		04/18/23 14:00	04/20/23 00:09	1
Barium	ND		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 00:09	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 00:09	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:09	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/20/23 00:09	1
Cobalt	ND		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 00:09	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 00:09	1
Lithium	ND	^+	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 00:09	1
Magnesium	ND		1000	61	ug/L		04/18/23 14:00	04/20/23 00:09	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/20/23 00:09	1
Potassium	ND		1000	220	ug/L		04/18/23 14:00	04/20/23 00:09	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 00:09	1
Sodium	ND		1000	330	ug/L		04/18/23 14:00	04/20/23 00:09	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:09	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		04/18/23 14:00	04/19/23 19:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 15:59	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 15:59	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 15:59	1
Fluoride (EPA 300.0-1993 R2.1)	ND	H	0.050	0.024	mg/L			05/10/23 00:23	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.00363	U	0.0760	0.0760	1.00	0.159	pCi/L	04/27/23 13:34	05/19/23 19:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.2		30 - 110					04/27/23 13:34	05/19/23 19:44	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.0687	U	0.312	0.312	1.00	0.573	pCi/L	04/27/23 14:08	05/16/23 11:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.2		30 - 110					04/27/23 14:08	05/16/23 11:18	1
Y Carrier	81.9		30 - 110					04/27/23 14:08	05/16/23 11:18	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: EB-001-F-20230411-01

Lab Sample ID: 240-183578-7

Date Collected: 04/11/23 15:30

Matrix: Water

Date Received: 04/14/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.0723	U	0.321	0.321	5.00	0.573	pCi/L		05/22/23 12:41	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-07-F-20230412-01

Lab Sample ID: 240-183578-8

Date Collected: 04/12/23 10:34

Matrix: Water

Date Received: 04/14/23 08:00

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		04/18/23 14:00	04/20/23 00:12	1
Arsenic	ND		5.0	0.75	ug/L		04/18/23 14:00	04/20/23 00:12	1
Barium	45		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 00:12	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 00:12	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:12	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/20/23 00:12	1
Cobalt	1.7		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 00:12	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 00:12	1
Lithium	7.0	J ^+	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 00:12	1
Magnesium	20000		1000	61	ug/L		04/18/23 14:00	04/20/23 00:12	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/20/23 00:12	1
Potassium	1300		1000	220	ug/L		04/18/23 14:00	04/20/23 00:12	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 00:12	1
Sodium	16000		1000	330	ug/L		04/18/23 14:00	04/20/23 00:12	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:12	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		04/18/23 14:00	04/19/23 19:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	140		5.0	2.6	mg/L			04/24/23 16:05	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	140		5.0	2.6	mg/L			04/24/23 16:05	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 16:05	1
Fluoride (EPA 300.0-1993 R2.1)	0.084		0.050	0.024	mg/L			05/10/23 16:15	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0631	U	0.0869	0.0871	1.00	0.147	pCi/L	04/27/23 13:34	05/19/23 19:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.8		30 - 110					04/27/23 13:34	05/19/23 19:44	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.0948	U	0.321	0.321	1.00	0.578	pCi/L	04/27/23 14:08	05/16/23 11:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.8		30 - 110					04/27/23 14:08	05/16/23 11:18	1
Y Carrier	79.3		30 - 110					04/27/23 14:08	05/16/23 11:18	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-07-F-20230412-01

Lab Sample ID: 240-183578-8

Date Collected: 04/12/23 10:34

Matrix: Water

Date Received: 04/14/23 08:00

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	0.158	U	0.333	0.333	5.00	0.578	pCi/L		05/22/23 12:41	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-18-F--20230412-01

Lab Sample ID: 240-183578-9

Date Collected: 04/12/23 11:31

Matrix: Water

Date Received: 04/14/23 08:00

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		04/18/23 14:00	04/20/23 00:15	1
Arsenic	1.0	J	5.0	0.75	ug/L		04/18/23 14:00	04/20/23 00:15	1
Barium	37		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 00:15	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 00:15	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:15	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/20/23 00:15	1
Cobalt	2.7		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 00:15	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 00:15	1
Lithium	7.9	J ^+	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 00:15	1
Magnesium	20000		1000	61	ug/L		04/18/23 14:00	04/20/23 00:15	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/20/23 00:15	1
Potassium	1300		1000	220	ug/L		04/18/23 14:00	04/20/23 00:15	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 00:15	1
Sodium	15000		1000	330	ug/L		04/18/23 14:00	04/20/23 00:15	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:15	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		04/18/23 14:00	04/19/23 19:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	110		5.0	2.6	mg/L			04/24/23 16:09	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	110		5.0	2.6	mg/L			04/24/23 16:09	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 16:09	1
Fluoride (EPA 300.0-1993 R2.1)	0.059		0.050	0.024	mg/L			05/10/23 16:36	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.109	U	0.0972	0.0977	1.00	0.146	pCi/L	04/27/23 13:34	05/19/23 19:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.9		30 - 110					04/27/23 13:34	05/19/23 19:44	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.239	U	0.293	0.294	1.00	0.485	pCi/L	04/27/23 14:08	05/16/23 11:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.9		30 - 110					04/27/23 14:08	05/16/23 11:18	1
Y Carrier	81.5		30 - 110					04/27/23 14:08	05/16/23 11:18	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-18-F--20230412-01

Lab Sample ID: 240-183578-9

Date Collected: 04/12/23 11:31

Matrix: Water

Date Received: 04/14/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.349	U	0.309	0.310	5.00	0.485	pCi/L		05/22/23 12:41	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-06-F-20230412-01

Lab Sample ID: 240-183578-10

Date Collected: 04/12/23 13:00

Matrix: Water

Date Received: 04/14/23 08:00

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		04/18/23 14:00	04/20/23 00:23	1
Arsenic	0.85	J	5.0	0.75	ug/L		04/18/23 14:00	04/20/23 00:23	1
Barium	94		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 00:23	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 00:23	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:23	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/20/23 00:23	1
Cobalt	3.9		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 00:23	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 00:23	1
Lithium	7.6	J ^+	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 00:23	1
Magnesium	25000		1000	61	ug/L		04/18/23 14:00	04/20/23 00:23	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/20/23 00:23	1
Potassium	1400		1000	220	ug/L		04/18/23 14:00	04/20/23 00:23	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 00:23	1
Sodium	15000		1000	330	ug/L		04/18/23 14:00	04/20/23 00:23	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:23	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		04/18/23 14:00	04/19/23 19:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	110		5.0	2.6	mg/L			04/24/23 16:17	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	110		5.0	2.6	mg/L			04/24/23 16:17	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 16:17	1
Fluoride (EPA 300.0-1993 R2.1)	0.098		0.050	0.024	mg/L			05/10/23 16:56	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	0.182		0.107	0.108	1.00	0.131	pCi/L	04/27/23 13:34	05/19/23 19:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.9		30 - 110					04/27/23 13:34	05/19/23 19:43	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	0.00790	U	0.252	0.252	1.00	0.472	pCi/L	04/27/23 14:08	05/16/23 11:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.9		30 - 110					04/27/23 14:08	05/16/23 11:18	1
Y Carrier	88.6		30 - 110					04/27/23 14:08	05/16/23 11:18	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-06-F-20230412-01

Lab Sample ID: 240-183578-10

Date Collected: 04/12/23 13:00

Matrix: Water

Date Received: 04/14/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.189	U	0.274	0.274	5.00	0.472	pCi/L		05/22/23 12:41	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-16-F-20230412-01

Lab Sample ID: 240-183578-11

Date Collected: 04/12/23 14:29

Matrix: Water

Date Received: 04/14/23 08:00

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		04/18/23 14:00	04/20/23 00:25	1
Arsenic	1.7	J	5.0	0.75	ug/L		04/18/23 14:00	04/20/23 00:25	1
Barium	63		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 00:25	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 00:25	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:25	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/20/23 00:25	1
Cobalt	2.4		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 00:25	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 00:25	1
Lithium	6.9	J	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 15:23	1
Magnesium	21000		1000	61	ug/L		04/18/23 14:00	04/20/23 00:25	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/20/23 00:25	1
Potassium	1600		1000	220	ug/L		04/18/23 14:00	04/20/23 00:25	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 00:25	1
Sodium	15000		1000	330	ug/L		04/18/23 14:00	04/20/23 00:25	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:25	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		04/18/23 14:00	04/19/23 19:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	200		5.0	2.6	mg/L			04/24/23 16:21	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	200		5.0	2.6	mg/L			04/24/23 16:21	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 16:21	1
Fluoride (EPA 300.0-1993 R2.1)	0.061		0.050	0.024	mg/L			05/10/23 17:16	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	0.178		0.117	0.118	1.00	0.146	pCi/L	04/27/23 13:34	05/19/23 19:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.5		30 - 110					04/27/23 13:34	05/19/23 19:43	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	0.377	U	0.364	0.366	1.00	0.583	pCi/L	04/27/23 14:08	05/16/23 11:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.5		30 - 110					04/27/23 14:08	05/16/23 11:19	1
Y Carrier	92.7		30 - 110					04/27/23 14:08	05/16/23 11:19	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-16-F-20230412-01

Lab Sample ID: 240-183578-11

Date Collected: 04/12/23 14:29

Matrix: Water

Date Received: 04/14/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.556	U	0.382	0.385	5.00	0.583	pCi/L		05/22/23 12:41	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: EB-001-F-20230412-01

Lab Sample ID: 240-183578-12

Date Collected: 04/12/23 15:30

Matrix: Water

Date Received: 04/14/23 08:00

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		04/18/23 14:00	04/20/23 00:28	1
Arsenic	ND		5.0	0.75	ug/L		04/18/23 14:00	04/20/23 00:28	1
Barium	ND		5.0	2.2	ug/L		04/18/23 14:00	04/20/23 00:28	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/20/23 00:28	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:28	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/20/23 00:28	1
Cobalt	ND		1.0	0.19	ug/L		04/18/23 14:00	04/20/23 00:28	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/20/23 00:28	1
Lithium	ND	^+	8.0	1.7	ug/L		04/18/23 14:00	04/20/23 00:28	1
Magnesium	ND		1000	61	ug/L		04/18/23 14:00	04/20/23 00:28	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/20/23 00:28	1
Potassium	ND		1000	220	ug/L		04/18/23 14:00	04/20/23 00:28	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/20/23 00:28	1
Sodium	ND		1000	330	ug/L		04/18/23 14:00	04/20/23 00:28	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/20/23 00:28	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	F1	0.20	0.13	ug/L		04/18/23 14:00	04/19/23 19:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	180		5.0	2.6	mg/L			04/24/23 16:25	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	180		5.0	2.6	mg/L			04/24/23 16:25	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 16:25	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			05/10/23 17:36	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	-0.00529	U	0.0737	0.0737	1.00	0.156	pCi/L	04/27/23 13:34	05/19/23 19:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.8		30 - 110					04/27/23 13:34	05/19/23 19:43	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.0554	U	0.275	0.275	1.00	0.500	pCi/L	04/27/23 14:08	05/16/23 11:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.8		30 - 110					04/27/23 14:08	05/16/23 11:20	1
Y Carrier	84.9		30 - 110					04/27/23 14:08	05/16/23 11:20	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: EB-001-F-20230412-01

Lab Sample ID: 240-183578-12

Date Collected: 04/12/23 15:30

Matrix: Water

Date Received: 04/14/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.0501	U	0.285	0.285	5.00	0.500	pCi/L		05/22/23 12:41	1

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Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
240-183578-1	BAC-10-F-20230411-01	61.9	
240-183578-2	DUP-001-BAC-10-F-20230411-01	53.8	
240-183578-3	BAC-23-F-20230411-01	91.6	
240-183578-4	BAC-08-F-20230411-01	97.3	
240-183578-5	BAC-14-F-20230411-01	52.1	
240-183578-6	BAC-12-F-20230411-01	56.8	
240-183578-7	EB-001-F-20230411-01	76.2	
240-183578-8	BAC-07-F-20230412-01	82.8	
240-183578-9	BAC-18-F--20230412-01	91.9	
240-183578-10	BAC-06-F-20230412-01	93.9	
240-183578-11	BAC-16-F-20230412-01	99.5	
240-183578-12	EB-001-F-20230412-01	94.8	
LCS 160-609093/2-A	Lab Control Sample	94.3	
LCS D 160-609093/3-A	Lab Control Sample Dup	99.5	
MB 160-609093/1-A	Method Blank	92.9	

Tracer/Carrier Legend
 Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-183578-1	BAC-10-F-20230411-01	61.9	81.9
240-183578-2	DUP-001-BAC-10-F-20230411-01	53.8	82.6
240-183578-3	BAC-23-F-20230411-01	91.6	85.6
240-183578-4	BAC-08-F-20230411-01	97.3	82.6
240-183578-5	BAC-14-F-20230411-01	52.1	89.7
240-183578-6	BAC-12-F-20230411-01	56.8	85.6
240-183578-7	EB-001-F-20230411-01	76.2	81.9
240-183578-8	BAC-07-F-20230412-01	82.8	79.3
240-183578-9	BAC-18-F--20230412-01	91.9	81.5
240-183578-10	BAC-06-F-20230412-01	93.9	88.6
240-183578-11	BAC-16-F-20230412-01	99.5	92.7
240-183578-12	EB-001-F-20230412-01	94.8	84.9
LCS 160-609099/2-A	Lab Control Sample	94.3	86.4
LCS D 160-609099/3-A	Lab Control Sample Dup	99.5	84.9
MB 160-609099/1-A	Method Blank	92.9	86.7

Tracer/Carrier Legend
 Ba = Ba Carrier
 Y = Y Carrier

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-569804/1-A
Matrix: Water
Analysis Batch: 570098

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 569804

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	ND		2.0	0.57	ug/L		04/18/23 14:00	04/19/23 23:43	1
Arsenic	ND		5.0	0.75	ug/L		04/18/23 14:00	04/19/23 23:43	1
Barium	ND		5.0	2.2	ug/L		04/18/23 14:00	04/19/23 23:43	1
Beryllium	ND		1.0	0.62	ug/L		04/18/23 14:00	04/19/23 23:43	1
Cadmium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/19/23 23:43	1
Chromium	ND		5.0	1.2	ug/L		04/18/23 14:00	04/19/23 23:43	1
Cobalt	ND		1.0	0.19	ug/L		04/18/23 14:00	04/19/23 23:43	1
Lead	ND		1.0	0.45	ug/L		04/18/23 14:00	04/19/23 23:43	1
Lithium	ND	^+	8.0	1.7	ug/L		04/18/23 14:00	04/19/23 23:43	1
Magnesium	ND		1000	61	ug/L		04/18/23 14:00	04/19/23 23:43	1
Molybdenum	ND		5.0	1.1	ug/L		04/18/23 14:00	04/19/23 23:43	1
Potassium	ND		1000	220	ug/L		04/18/23 14:00	04/19/23 23:43	1
Selenium	ND		5.0	0.89	ug/L		04/18/23 14:00	04/19/23 23:43	1
Sodium	ND		1000	330	ug/L		04/18/23 14:00	04/19/23 23:43	1
Thallium	ND		1.0	0.20	ug/L		04/18/23 14:00	04/19/23 23:43	1

Lab Sample ID: LCS 240-569804/2-A
Matrix: Water
Analysis Batch: 570098

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 569804

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec
		Result	Qualifier				
Antimony	100	105		ug/L		105	80 - 120
Arsenic	1000	953		ug/L		95	80 - 120
Barium	1000	980		ug/L		98	80 - 120
Beryllium	500	494		ug/L		99	80 - 120
Cadmium	500	492		ug/L		98	80 - 120
Chromium	500	496		ug/L		99	80 - 120
Cobalt	500	483		ug/L		97	80 - 120
Lead	500	464		ug/L		93	80 - 120
Lithium	500	527	^+	ug/L		105	80 - 120
Magnesium	25000	23800		ug/L		95	80 - 120
Molybdenum	500	487		ug/L		97	80 - 120
Potassium	25000	24100		ug/L		96	80 - 120
Selenium	1000	938		ug/L		94	80 - 120
Sodium	25000	23800		ug/L		95	80 - 120
Thallium	1000	978		ug/L		98	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-569809/1-A
Matrix: Water
Analysis Batch: 570094

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 569809

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.20	0.13	ug/L		04/18/23 14:00	04/19/23 18:53	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-569809/2-A
Matrix: Water
Analysis Batch: 570094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 569809

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.73		ug/L		115	80 - 120

Lab Sample ID: 240-183578-12 MS
Matrix: Water
Analysis Batch: 570094

Client Sample ID: EB-001-F-20230412-01
Prep Type: Total/NA
Prep Batch: 569809

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

Lab Sample ID: 240-183578-12 MSD
Matrix: Water
Analysis Batch: 570094

Client Sample ID: EB-001-F-20230412-01
Prep Type: Total/NA
Prep Batch: 569809

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND	F1	1.00	1.09		ug/L		109	80 - 120	13	20

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-570651/30
Matrix: Water
Analysis Batch: 570651

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			04/24/23 13:02	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 13:02	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 13:02	1

Lab Sample ID: MB 240-570651/56
Matrix: Water
Analysis Batch: 570651

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			04/24/23 15:17	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 15:17	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 15:17	1

Lab Sample ID: LCS 240-570651/55
Matrix: Water
Analysis Batch: 570651

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	146	146		mg/L		100	86 - 123

Lab Sample ID: 240-183578-9 DU
Matrix: Water
Analysis Batch: 570651

Client Sample ID: BAC-18-F--20230412-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	110		98.7		mg/L		6	20
Bicarbonate Alkalinity as CaCO3	110		98.7		mg/L		6	20

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Method: 2320B-1997 - Alkalinity, Total (Continued)

Lab Sample ID: 240-183578-9 DU
 Matrix: Water
 Analysis Batch: 570651

Client Sample ID: BAC-18-F--20230412-01
 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: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-572493/3
 Matrix: Water
 Analysis Batch: 572493

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			05/08/23 13:48	1

Lab Sample ID: LCS 240-572493/4
 Matrix: Water
 Analysis Batch: 572493

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.62		mg/L		105	90 - 110

Lab Sample ID: MB 240-572672/3
 Matrix: Water
 Analysis Batch: 572672

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			05/09/23 18:40	1

Lab Sample ID: LCS 240-572672/4
 Matrix: Water
 Analysis Batch: 572672

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.60		mg/L		104	90 - 110

Lab Sample ID: MB 240-572836/3
 Matrix: Water
 Analysis Batch: 572836

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			05/10/23 15:35	1

Lab Sample ID: LCS 240-572836/4
 Matrix: Water
 Analysis Batch: 572836

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.61		mg/L		104	90 - 110

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-609093/1-A
Matrix: Water
Analysis Batch: 612288

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 609093

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.05188	U	0.0943	0.0944	1.00	0.166	pCi/L	04/27/23 13:34	05/19/23 19:37	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	92.9		30 - 110		04/27/23 13:34	05/19/23 19:37	1			

Lab Sample ID: LCS 160-609093/2-A
Matrix: Water
Analysis Batch: 612288

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 609093

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	9.643		1.07	1.00	0.175	pCi/L	85	75 - 113
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	94.3		30 - 110						

Lab Sample ID: LCSD 160-609093/3-A
Matrix: Water
Analysis Batch: 612288

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 609093

Analyte	Spike Added	LCSD Result	LCSD Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER
				Uncert. (2σ+/-)							Limit
Radium-226	11.3	10.10		1.11	1.00	0.174	pCi/L	89	75 - 113	0.21	1
Carrier	LCSD %Yield	LCSD Qualifier	Limits								
Ba Carrier	99.5		30 - 110								

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-609099/1-A
Matrix: Water
Analysis Batch: 611850

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 609099

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.09285	U	0.270	0.271	1.00	0.481	pCi/L	04/27/23 14:08	05/16/23 11:14	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	92.9		30 - 110		04/27/23 14:08	05/16/23 11:14	1			
Y Carrier	86.7		30 - 110		04/27/23 14:08	05/16/23 11:14	1			

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

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

Lab Sample ID: LCS 160-609099/2-A
Matrix: Water
Analysis Batch: 611850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 609099

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	7.95	8.033		1.12	1.00	0.469	pCi/L	101	75 - 125
LCS LCS									
Carrier	%Yield	Qualifier	Limits						
Ba Carrier	94.3		30 - 110						
Y Carrier	86.4		30 - 110						

Lab Sample ID: LCSD 160-609099/3-A
Matrix: Water
Analysis Batch: 611850

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 609099

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-228	7.95	8.070		1.10	1.00	0.411	pCi/L	101	75 - 125	0.02	1
LCSD LCSD											
Carrier	%Yield	Qualifier	Limits								
Ba Carrier	99.5		30 - 110								
Y Carrier	84.9		30 - 110								

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Metals

Prep Batch: 569804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183578-1	BAC-10-F-20230411-01	Total Recoverable	Water	3005A	
240-183578-2	DUP-001-BAC-10-F-20230411-01	Total Recoverable	Water	3005A	
240-183578-3	BAC-23-F-20230411-01	Total Recoverable	Water	3005A	
240-183578-4	BAC-08-F-20230411-01	Total Recoverable	Water	3005A	
240-183578-5	BAC-14-F-20230411-01	Total Recoverable	Water	3005A	
240-183578-6	BAC-12-F-20230411-01	Total Recoverable	Water	3005A	
240-183578-7	EB-001-F-20230411-01	Total Recoverable	Water	3005A	
240-183578-8	BAC-07-F-20230412-01	Total Recoverable	Water	3005A	
240-183578-9	BAC-18-F--20230412-01	Total Recoverable	Water	3005A	
240-183578-10	BAC-06-F-20230412-01	Total Recoverable	Water	3005A	
240-183578-11	BAC-16-F-20230412-01	Total Recoverable	Water	3005A	
240-183578-12	EB-001-F-20230412-01	Total Recoverable	Water	3005A	
MB 240-569804/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-569804/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 569809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183578-1	BAC-10-F-20230411-01	Total/NA	Water	7470A	
240-183578-2	DUP-001-BAC-10-F-20230411-01	Total/NA	Water	7470A	
240-183578-3	BAC-23-F-20230411-01	Total/NA	Water	7470A	
240-183578-4	BAC-08-F-20230411-01	Total/NA	Water	7470A	
240-183578-5	BAC-14-F-20230411-01	Total/NA	Water	7470A	
240-183578-6	BAC-12-F-20230411-01	Total/NA	Water	7470A	
240-183578-7	EB-001-F-20230411-01	Total/NA	Water	7470A	
240-183578-8	BAC-07-F-20230412-01	Total/NA	Water	7470A	
240-183578-9	BAC-18-F--20230412-01	Total/NA	Water	7470A	
240-183578-10	BAC-06-F-20230412-01	Total/NA	Water	7470A	
240-183578-11	BAC-16-F-20230412-01	Total/NA	Water	7470A	
240-183578-12	EB-001-F-20230412-01	Total/NA	Water	7470A	
MB 240-569809/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-569809/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-183578-12 MS	EB-001-F-20230412-01	Total/NA	Water	7470A	
240-183578-12 MSD	EB-001-F-20230412-01	Total/NA	Water	7470A	

Analysis Batch: 570094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183578-1	BAC-10-F-20230411-01	Total/NA	Water	7470A	569809
240-183578-2	DUP-001-BAC-10-F-20230411-01	Total/NA	Water	7470A	569809
240-183578-3	BAC-23-F-20230411-01	Total/NA	Water	7470A	569809
240-183578-4	BAC-08-F-20230411-01	Total/NA	Water	7470A	569809
240-183578-5	BAC-14-F-20230411-01	Total/NA	Water	7470A	569809
240-183578-6	BAC-12-F-20230411-01	Total/NA	Water	7470A	569809
240-183578-7	EB-001-F-20230411-01	Total/NA	Water	7470A	569809
240-183578-8	BAC-07-F-20230412-01	Total/NA	Water	7470A	569809
240-183578-9	BAC-18-F--20230412-01	Total/NA	Water	7470A	569809
240-183578-10	BAC-06-F-20230412-01	Total/NA	Water	7470A	569809
240-183578-11	BAC-16-F-20230412-01	Total/NA	Water	7470A	569809
240-183578-12	EB-001-F-20230412-01	Total/NA	Water	7470A	569809
MB 240-569809/1-A	Method Blank	Total/NA	Water	7470A	569809
LCS 240-569809/2-A	Lab Control Sample	Total/NA	Water	7470A	569809
240-183578-12 MS	EB-001-F-20230412-01	Total/NA	Water	7470A	569809

Eurofins Cleveland

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Metals (Continued)

Analysis Batch: 570094 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183578-12 MSD	EB-001-F-20230412-01	Total/NA	Water	7470A	569809

Analysis Batch: 570098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183578-1	BAC-10-F-20230411-01	Total Recoverable	Water	6020B	569804
240-183578-2	DUP-001-BAC-10-F-20230411-01	Total Recoverable	Water	6020B	569804
240-183578-3	BAC-23-F-20230411-01	Total Recoverable	Water	6020B	569804
240-183578-4	BAC-08-F-20230411-01	Total Recoverable	Water	6020B	569804
240-183578-5	BAC-14-F-20230411-01	Total Recoverable	Water	6020B	569804
240-183578-6	BAC-12-F-20230411-01	Total Recoverable	Water	6020B	569804
240-183578-7	EB-001-F-20230411-01	Total Recoverable	Water	6020B	569804
240-183578-8	BAC-07-F-20230412-01	Total Recoverable	Water	6020B	569804
240-183578-9	BAC-18-F--20230412-01	Total Recoverable	Water	6020B	569804
240-183578-10	BAC-06-F-20230412-01	Total Recoverable	Water	6020B	569804
240-183578-11	BAC-16-F-20230412-01	Total Recoverable	Water	6020B	569804
240-183578-12	EB-001-F-20230412-01	Total Recoverable	Water	6020B	569804
MB 240-569804/1-A	Method Blank	Total Recoverable	Water	6020B	569804
LCS 240-569804/2-A	Lab Control Sample	Total Recoverable	Water	6020B	569804

Analysis Batch: 570329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183578-1	BAC-10-F-20230411-01	Total Recoverable	Water	6020B	569804
240-183578-2	DUP-001-BAC-10-F-20230411-01	Total Recoverable	Water	6020B	569804
240-183578-5	BAC-14-F-20230411-01	Total Recoverable	Water	6020B	569804
240-183578-6	BAC-12-F-20230411-01	Total Recoverable	Water	6020B	569804
240-183578-11	BAC-16-F-20230412-01	Total Recoverable	Water	6020B	569804

General Chemistry

Analysis Batch: 570651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183578-1	BAC-10-F-20230411-01	Total/NA	Water	2320B-1997	
240-183578-2	DUP-001-BAC-10-F-20230411-01	Total/NA	Water	2320B-1997	
240-183578-3	BAC-23-F-20230411-01	Total/NA	Water	2320B-1997	
240-183578-4	BAC-08-F-20230411-01	Total/NA	Water	2320B-1997	
240-183578-5	BAC-14-F-20230411-01	Total/NA	Water	2320B-1997	
240-183578-6	BAC-12-F-20230411-01	Total/NA	Water	2320B-1997	
240-183578-7	EB-001-F-20230411-01	Total/NA	Water	2320B-1997	
240-183578-8	BAC-07-F-20230412-01	Total/NA	Water	2320B-1997	
240-183578-9	BAC-18-F--20230412-01	Total/NA	Water	2320B-1997	
240-183578-10	BAC-06-F-20230412-01	Total/NA	Water	2320B-1997	
240-183578-11	BAC-16-F-20230412-01	Total/NA	Water	2320B-1997	
240-183578-12	EB-001-F-20230412-01	Total/NA	Water	2320B-1997	
MB 240-570651/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-570651/56	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-570651/55	Lab Control Sample	Total/NA	Water	2320B-1997	
240-183578-9 DU	BAC-18-F--20230412-01	Total/NA	Water	2320B-1997	

Analysis Batch: 572493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183578-4	BAC-08-F-20230411-01	Total/NA	Water	300.0-1993 R2.1	

Eurofins Cleveland

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

General Chemistry (Continued)

Analysis Batch: 572493 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-572493/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-572493/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 572672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183578-1	BAC-10-F-20230411-01	Total/NA	Water	300.0-1993 R2.1	
240-183578-2	DUP-001-BAC-10-F-20230411-01	Total/NA	Water	300.0-1993 R2.1	
240-183578-3	BAC-23-F-20230411-01	Total/NA	Water	300.0-1993 R2.1	
240-183578-5	BAC-14-F-20230411-01	Total/NA	Water	300.0-1993 R2.1	
240-183578-6	BAC-12-F-20230411-01	Total/NA	Water	300.0-1993 R2.1	
240-183578-7	EB-001-F-20230411-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-572672/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-572672/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 572836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183578-8	BAC-07-F-20230412-01	Total/NA	Water	300.0-1993 R2.1	
240-183578-9	BAC-18-F--20230412-01	Total/NA	Water	300.0-1993 R2.1	
240-183578-10	BAC-06-F-20230412-01	Total/NA	Water	300.0-1993 R2.1	
240-183578-11	BAC-16-F-20230412-01	Total/NA	Water	300.0-1993 R2.1	
240-183578-12	EB-001-F-20230412-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-572836/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-572836/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

Rad

Prep Batch: 609093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183578-1	BAC-10-F-20230411-01	Total/NA	Water	PrecSep-21	
240-183578-2	DUP-001-BAC-10-F-20230411-01	Total/NA	Water	PrecSep-21	
240-183578-3	BAC-23-F-20230411-01	Total/NA	Water	PrecSep-21	
240-183578-4	BAC-08-F-20230411-01	Total/NA	Water	PrecSep-21	
240-183578-5	BAC-14-F-20230411-01	Total/NA	Water	PrecSep-21	
240-183578-6	BAC-12-F-20230411-01	Total/NA	Water	PrecSep-21	
240-183578-7	EB-001-F-20230411-01	Total/NA	Water	PrecSep-21	
240-183578-8	BAC-07-F-20230412-01	Total/NA	Water	PrecSep-21	
240-183578-9	BAC-18-F--20230412-01	Total/NA	Water	PrecSep-21	
240-183578-10	BAC-06-F-20230412-01	Total/NA	Water	PrecSep-21	
240-183578-11	BAC-16-F-20230412-01	Total/NA	Water	PrecSep-21	
240-183578-12	EB-001-F-20230412-01	Total/NA	Water	PrecSep-21	
MB 160-609093/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-609093/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-609093/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 609099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183578-1	BAC-10-F-20230411-01	Total/NA	Water	PrecSep_0	
240-183578-2	DUP-001-BAC-10-F-20230411-01	Total/NA	Water	PrecSep_0	
240-183578-3	BAC-23-F-20230411-01	Total/NA	Water	PrecSep_0	
240-183578-4	BAC-08-F-20230411-01	Total/NA	Water	PrecSep_0	
240-183578-5	BAC-14-F-20230411-01	Total/NA	Water	PrecSep_0	

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Rad (Continued)

Prep Batch: 609099 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183578-6	BAC-12-F-20230411-01	Total/NA	Water	PrecSep_0	
240-183578-7	EB-001-F-20230411-01	Total/NA	Water	PrecSep_0	
240-183578-8	BAC-07-F-20230412-01	Total/NA	Water	PrecSep_0	
240-183578-9	BAC-18-F--20230412-01	Total/NA	Water	PrecSep_0	
240-183578-10	BAC-06-F-20230412-01	Total/NA	Water	PrecSep_0	
240-183578-11	BAC-16-F-20230412-01	Total/NA	Water	PrecSep_0	
240-183578-12	EB-001-F-20230412-01	Total/NA	Water	PrecSep_0	
MB 160-609099/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-609099/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-609099/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-10-F-20230411-01

Lab Sample ID: 240-183578-1

Date Collected: 04/11/23 10:03

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/19/23 23:53
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570329	DSH	EET CLE	04/20/23 15:11
Total/NA	Prep	7470A			569809	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 19:02
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 15:35
Total/NA	Analysis	300.0-1993 R2.1		1	572672	JWW	EET CLE	05/09/23 22:42
Total/NA	Prep	PrecSep-21			609093	KAC	EET SL	04/27/23 13:34
Total/NA	Analysis	9315		1	612288	FLC	EET SL	05/19/23 19:38
Total/NA	Prep	PrecSep_0			609099	KAC	EET SL	04/27/23 14:08
Total/NA	Analysis	9320		1	611850	FLC	EET SL	05/16/23 11:15
Total/NA	Analysis	Ra226_Ra228		1	612631	SCB	EET SL	05/22/23 12:41

Client Sample ID: DUP-001-BAC-10-F-20230411-01

Lab Sample ID: 240-183578-2

Date Collected: 04/11/23 10:03

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/19/23 23:56
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570329	DSH	EET CLE	04/20/23 15:15
Total/NA	Prep	7470A			569809	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 19:05
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 15:39
Total/NA	Analysis	300.0-1993 R2.1		1	572672	JWW	EET CLE	05/09/23 23:02
Total/NA	Prep	PrecSep-21			609093	KAC	EET SL	04/27/23 13:34
Total/NA	Analysis	9315		1	612288	FLC	EET SL	05/19/23 19:39
Total/NA	Prep	PrecSep_0			609099	KAC	EET SL	04/27/23 14:08
Total/NA	Analysis	9320		1	611850	FLC	EET SL	05/16/23 11:15
Total/NA	Analysis	Ra226_Ra228		1	612631	SCB	EET SL	05/22/23 12:41

Client Sample ID: BAC-23-F-20230411-01

Lab Sample ID: 240-183578-3

Date Collected: 04/11/23 11:22

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/19/23 23:59
Total/NA	Prep	7470A			569809	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 19:07
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 15:43
Total/NA	Analysis	300.0-1993 R2.1		1	572672	JWW	EET CLE	05/09/23 23:23

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-23-F-20230411-01

Lab Sample ID: 240-183578-3

Date Collected: 04/11/23 11:22

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			609093	KAC	EET SL	04/27/23 13:34
Total/NA	Analysis	9315		1	612288	FLC	EET SL	05/19/23 19:39
Total/NA	Prep	PrecSep_0			609099	KAC	EET SL	04/27/23 14:08
Total/NA	Analysis	9320		1	611850	FLC	EET SL	05/16/23 11:15
Total/NA	Analysis	Ra226_Ra228		1	612631	SCB	EET SL	05/22/23 12:41

Client Sample ID: BAC-08-F-20230411-01

Lab Sample ID: 240-183578-4

Date Collected: 04/11/23 12:27

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 00:01
Total/NA	Prep	7470A			569809	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 19:09
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 15:48
Total/NA	Analysis	300.0-1993 R2.1		1	572493	JWW	EET CLE	05/08/23 23:52
Total/NA	Prep	PrecSep-21			609093	KAC	EET SL	04/27/23 13:34
Total/NA	Analysis	9315		1	612288	FLC	EET SL	05/19/23 19:39
Total/NA	Prep	PrecSep_0			609099	KAC	EET SL	04/27/23 14:08
Total/NA	Analysis	9320		1	611850	FLC	EET SL	05/16/23 11:16
Total/NA	Analysis	Ra226_Ra228		1	612631	SCB	EET SL	05/22/23 12:41

Client Sample ID: BAC-14-F-20230411-01

Lab Sample ID: 240-183578-5

Date Collected: 04/11/23 14:00

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 00:04
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570329	DSH	EET CLE	04/20/23 15:18
Total/NA	Prep	7470A			569809	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 19:11
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 15:51
Total/NA	Analysis	300.0-1993 R2.1		1	572672	JWW	EET CLE	05/09/23 23:43
Total/NA	Prep	PrecSep-21			609093	KAC	EET SL	04/27/23 13:34
Total/NA	Analysis	9315		1	612289	FLC	EET SL	05/19/23 19:45
Total/NA	Prep	PrecSep_0			609099	KAC	EET SL	04/27/23 14:08
Total/NA	Analysis	9320		1	611850	FLC	EET SL	05/16/23 11:16
Total/NA	Analysis	Ra226_Ra228		1	612631	SCB	EET SL	05/22/23 12:41

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-12-F-20230411-01

Lab Sample ID: 240-183578-6

Date Collected: 04/11/23 14:58

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 00:07
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570329	DSH	EET CLE	04/20/23 15:20
Total/NA	Prep	7470A			569809	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 19:13
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 15:55
Total/NA	Analysis	300.0-1993 R2.1		1	572672	JWW	EET CLE	05/10/23 00:03
Total/NA	Prep	PrecSep-21			609093	KAC	EET SL	04/27/23 13:34
Total/NA	Analysis	9315		1	612289	FLC	EET SL	05/19/23 19:45
Total/NA	Prep	PrecSep_0			609099	KAC	EET SL	04/27/23 14:08
Total/NA	Analysis	9320		1	611850	FLC	EET SL	05/16/23 11:16
Total/NA	Analysis	Ra226_Ra228		1	612631	SCB	EET SL	05/22/23 12:41

Client Sample ID: EB-001-F-20230411-01

Lab Sample ID: 240-183578-7

Date Collected: 04/11/23 15:30

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 00:09
Total/NA	Prep	7470A			569809	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 19:15
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 15:59
Total/NA	Analysis	300.0-1993 R2.1		1	572672	JWW	EET CLE	05/10/23 00:23
Total/NA	Prep	PrecSep-21			609093	KAC	EET SL	04/27/23 13:34
Total/NA	Analysis	9315		1	612289	FLC	EET SL	05/19/23 19:44
Total/NA	Prep	PrecSep_0			609099	KAC	EET SL	04/27/23 14:08
Total/NA	Analysis	9320		1	611700	FLC	EET SL	05/16/23 11:18
Total/NA	Analysis	Ra226_Ra228		1	612631	SCB	EET SL	05/22/23 12:41

Client Sample ID: BAC-07-F-20230412-01

Lab Sample ID: 240-183578-8

Date Collected: 04/12/23 10:34

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 00:12
Total/NA	Prep	7470A			569809	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 19:17
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 16:05
Total/NA	Analysis	300.0-1993 R2.1		1	572836	JWW	EET CLE	05/10/23 16:15
Total/NA	Prep	PrecSep-21			609093	KAC	EET SL	04/27/23 13:34
Total/NA	Analysis	9315		1	612289	FLC	EET SL	05/19/23 19:44

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-07-F-20230412-01

Lab Sample ID: 240-183578-8

Date Collected: 04/12/23 10:34

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep_0			609099	KAC	EET SL	04/27/23 14:08
Total/NA	Analysis	9320		1	611700	FLC	EET SL	05/16/23 11:18
Total/NA	Analysis	Ra226_Ra228		1	612631	SCB	EET SL	05/22/23 12:41

Client Sample ID: BAC-18-F--20230412-01

Lab Sample ID: 240-183578-9

Date Collected: 04/12/23 11:31

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 00:15
Total/NA	Prep	7470A			569809	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 19:19
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 16:09
Total/NA	Analysis	300.0-1993 R2.1		1	572836	JWW	EET CLE	05/10/23 16:36
Total/NA	Prep	PrecSep-21			609093	KAC	EET SL	04/27/23 13:34
Total/NA	Analysis	9315		1	612289	FLC	EET SL	05/19/23 19:44
Total/NA	Prep	PrecSep_0			609099	KAC	EET SL	04/27/23 14:08
Total/NA	Analysis	9320		1	611700	FLC	EET SL	05/16/23 11:18
Total/NA	Analysis	Ra226_Ra228		1	612631	SCB	EET SL	05/22/23 12:41

Client Sample ID: BAC-06-F-20230412-01

Lab Sample ID: 240-183578-10

Date Collected: 04/12/23 13:00

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 00:23
Total/NA	Prep	7470A			569809	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 19:26
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 16:17
Total/NA	Analysis	300.0-1993 R2.1		1	572836	JWW	EET CLE	05/10/23 16:56
Total/NA	Prep	PrecSep-21			609093	KAC	EET SL	04/27/23 13:34
Total/NA	Analysis	9315		1	612289	FLC	EET SL	05/19/23 19:43
Total/NA	Prep	PrecSep_0			609099	KAC	EET SL	04/27/23 14:08
Total/NA	Analysis	9320		1	611700	FLC	EET SL	05/16/23 11:18
Total/NA	Analysis	Ra226_Ra228		1	612631	SCB	EET SL	05/22/23 12:41

Client Sample ID: BAC-16-F-20230412-01

Lab Sample ID: 240-183578-11

Date Collected: 04/12/23 14:29

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 00:25

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

Client Sample ID: BAC-16-F-20230412-01

Lab Sample ID: 240-183578-11

Date Collected: 04/12/23 14:29

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570329	DSH	EET CLE	04/20/23 15:23
Total/NA	Prep	7470A			569809	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 19:28
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 16:21
Total/NA	Analysis	300.0-1993 R2.1		1	572836	JWW	EET CLE	05/10/23 17:16
Total/NA	Prep	PrecSep-21			609093	KAC	EET SL	04/27/23 13:34
Total/NA	Analysis	9315		1	612289	FLC	EET SL	05/19/23 19:43
Total/NA	Prep	PrecSep_0			609099	KAC	EET SL	04/27/23 14:08
Total/NA	Analysis	9320		1	611700	FLC	EET SL	05/16/23 11:19
Total/NA	Analysis	Ra226_Ra228		1	612631	SCB	EET SL	05/22/23 12:41

Client Sample ID: EB-001-F-20230412-01

Lab Sample ID: 240-183578-12

Date Collected: 04/12/23 15:30

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569804	AJC	EET CLE	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CLE	04/20/23 00:28
Total/NA	Prep	7470A			569809	AJC	EET CLE	04/18/23 14:00
Total/NA	Analysis	7470A		1	570094	MRL	EET CLE	04/19/23 19:30
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CLE	04/24/23 16:25
Total/NA	Analysis	300.0-1993 R2.1		1	572836	JWW	EET CLE	05/10/23 17:36
Total/NA	Prep	PrecSep-21			609093	KAC	EET SL	04/27/23 13:34
Total/NA	Analysis	9315		1	612289	FLC	EET SL	05/19/23 19:43
Total/NA	Prep	PrecSep_0			609099	KAC	EET SL	04/27/23 14:08
Total/NA	Analysis	9320		1	611700	FLC	EET SL	05/16/23 11:20
Total/NA	Analysis	Ra226_Ra228		1	612631	SCB	EET SL	05/22/23 12:41

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
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

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
California	State	2927	02-27-24
Connecticut	State	PH-0590	06-29-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-28-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-23
Florida	NELAP	E87689	06-30-23
HI - RadChem Recognition	State	n/a	06-30-23
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana (All)	NELAP	04080	06-30-23
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-23
MI - RadChem Recognition	State	9005	06-30-23
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-23
New Jersey	NELAP	MO002	06-30-23
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-23
North Dakota	State	R-207	06-30-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-183578-1

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
Oklahoma	NELAP	9997	08-31-23
Oregon	NELAP	4157	09-01-23
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23
Texas	NELAP	T104704193	07-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO000542021-14	07-31-23
Virginia	NELAP	10310	06-14-23
Washington	State	C592	08-30-23
West Virginia DEP	State	381	10-31-23

Client Information		Sampler: <i>Bobby Caste</i>		Lab PM: Cisneros, Roxanne		Camer Tracking No(s): 240-93466-34578.1	
Client Contact: Taylor Huffman		Phone: 740-373-4308		E-Mail: roxanne.cisneros@Eurofinset.com		Page: <i>Pg 1 of 2</i>	
Company: Lightstone Generation Gavin Power LLC		PWSID:		State of Origin:		Job #:	
Address: 7397 OH-7		City: Cheshire		State: OH, 45620		Preservation Codes:	
Phone: 740-925-3171(Tel)		TAT Requested (days):		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		M - Hazane N - None O - AsNaO2 P - Na2O4S Q - NaHSO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Email: taylor.huffman@lightstonegen.com		PO #: 2935505		Field Filtered Sample (Yes or No):		Other:	
Project Name: Federal CCR Wells - App IV		WO #: 24019633		Perform Filtered Sample (Yes or No):		Special Instructions/Note:	
Site:		SSOW#:		6020, 7470A		Total Number of Containers: <input checked="" type="checkbox"/>	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
BAC-10-F-20230411-01		4-11-23		1003		G Water	
NUP-001-BAC-10-F-20230411-01		4-11-23		1603		G Water	
BAC-23-F-20230411-01		4-11-23		1122		G Water	
BAC-08-F-20230411-01		4-11-23		1227		G Water	
BAC-14-F-20230411-01		4-11-23		1400		G Water	
BAC-12-F-20230411-01		4-11-23		1458		G W	
EB-001-F-20230411-01		4-11-23		1530		G W	
BAC-07-F-20230412-01		4-12-23		1034		G W	
BAC-18-F-20230412-01		4-12-23		1131		G W	
BAC-06-F-20230412-01		4-12-23		1300		G W	
BAC-16-F-20230412-01		4-12-23		1424		G W	
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard		<input type="checkbox"/> Flammable		<input type="checkbox"/> Skin Irritant	
		<input type="checkbox"/> Poison B		<input type="checkbox"/> Unknown		<input type="checkbox"/> Radiological	
						Deliverable Requested: I, II, III, IV, Other (specify)	
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by: <i>Bobby Caste</i>		4-13-23/0840		Company: KEMRON		Date/Time: 4-13-23 1300	
Relinquished by: <i>[Signature]</i>		4-13-23 1700		Company: E77		Date/Time: 4-13-23 800	
Relinquished by: <i>[Signature]</i>				Company: [Signature]		Date/Time: 4-13-23 800	
Custody Seals Intact:		<input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:	



Client Information Client Contact: Taylor Huffman Company: Lightstone Generation Gavin Power LLC Address: 7597 OH-7 City: Cheshire State, Zip: OH, 45620 Phone: 740-925-3171(Tel) Email: taylor.huffman@lightstonegen.com Project Name: Federal CCR Wells - App IV Site:		Sample: Bobby Ceste Phone: 740-373-4308 Lab PM: Cisneros, Roxanne E-Mail: roxanne.cisneros@Eurofinset.com Carrier Tracking No(s): State of Origin:		COC No: 240-93466-34578.1 Page: Page 1 of 1 Job #: Pg 2 of 2	
Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PO #: 2935505 IWO #:		Analysis Requested Perform HPLC/MSD (Yes or No) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 6020, 7470A 300.0_28D - Fluoride 2320B - Alkalinity 9315_Ra226, 9320_Ra228, Ra226Ra228_GFPc		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 Other: M - Hexane N - None O - AsNaOZ P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Sample Identification Sample Date: 4-12-23 Sample Time: 1530 Sample Type (C=Comp, G=grab): 5 Matrix (Water, Soil, Organic, Other): Water Preservation Code:		Special Instructions/Note: Total Number of Containers: X		Special Instructions/Note:	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)					
Empty Kit Relinquished by:					
Relinquished by: <i>[Signature]</i>					
Relinquished by: <i>[Signature]</i>					
Relinquished by: <i>[Signature]</i>					
Custody Seal No.: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
Method of Shipment:					
Date/Time: 4-13-23/0846 Received by: <i>[Signature]</i> Date/Time: 4-13-23/1700 Received by: <i>[Signature]</i> Date/Time:					
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:					
Cooler Temperature(s) °C and Other Remarks:					



183578

Eurofins - Canton Sample Receipt Form/Narrative
Barberton Facility

Login # : _____

Client Lightstone

Site Name _____

Cooler unpacked by:

Cooler Received on 4 14 23

Opened on 4 14 23

Rachelle Haidet

FedEx: 1st Grd Exp UPS FAS Clipper

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 # 22 (CF +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 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 NA
- 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
- 14. Were VOAs on the COC? Yes No NA
- 15. Were air bubbles >6 mm in any VOA vials? Yes No NA
- 16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No NA
- 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 - Canton 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 #: 22	18.1	18.	Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: 22	2.6	2.6	Water	None	
EC	Client	Box	Other	IR GUN #: 22	2.8	2.8	Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: 22	1.8	1.8	Water	None	
EC	Client	Box	Other	IR GUN #: 22	2.0	2.0	Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: 22	1.6	1.6	Water	None	
EC	Client	Box	Other	IR GUN #: 22	1.4	1.4	Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: 22	2.3	2.3	Water	None	
EC	Client	Box	Other	IR GUN #: 22	1.8	1.8	Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: 22	1.1	1.1	Water	None	
EC	Client	Box	Other	IR GUN #: 22	1.2	1.2	Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: 22	3.2	3.2	Water	None	
EC	Client	Box	Other	IR GUN #: 22			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	

See Temperature Excursion Form

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
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Temperature readings:

Client Sample ID	Lab ID	Container Type	Container		Preservative	
			pH	Temp	Added (mls)	Lot #
BAC-10-F-20230411-01	240-183578-C-1	Plastic 500ml - with Nitric Acid	<2			
BAC-10-F-20230411-01	240-183578-D-1	Plastic 1 liter - Nitric Acid	<2			
BAC-10-F-20230411-01	240-183578-E-1	Plastic 1 liter - Nitric Acid	<2			
DUP-001-BAC-10-F-20230411-01	240-183578-C-2	Plastic 500ml - with Nitric Acid	<2			
DUP-001-BAC-10-F-20230411-01	240-183578-D-2	Plastic 1 liter - Nitric Acid	<2			
DUP-001-BAC-10-F-20230411-01	240-183578-E-2	Plastic 1 liter - Nitric Acid	<2			
BAC-23-F-20230411-01	240-183578-C-3	Plastic 500ml - with Nitric Acid	<2			
BAC-23-F-20230411-01	240-183578-D-3	Plastic 1 liter - Nitric Acid	<2			
BAC-23-F-20230411-01	240-183578-E-3	Plastic 1 liter - Nitric Acid	<2			
BAC-08-F-20230411-01	240-183578-C-4	Plastic 500ml - with Nitric Acid	<2			
BAC-08-F-20230411-01	240-183578-D-4	Plastic 1 liter - Nitric Acid	<2			
BAC-08-F-20230411-01	240-183578-E-4	Plastic 1 liter - Nitric Acid	<2			
BAC-14-F-20230411-01	240-183578-C-5	Plastic 500ml - with Nitric Acid	<2			
BAC-14-F-20230411-01	240-183578-D-5	Plastic 1 liter - Nitric Acid	<2			
BAC-14-F-20230411-01	240-183578-E-5	Plastic 1 liter - Nitric Acid	<2			
BAC-12-F-20230411-01	240-183578-C-6	Plastic 500ml - with Nitric Acid	<2			
BAC-12-F-20230411-01	240-183578-D-6	Plastic 1 liter - Nitric Acid	<2			
BAC-12-F-20230411-01	240-183578-E-6	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-20230411-01	240-183578-C-7	Plastic 500ml - with Nitric Acid	<2			
EB-001-F-20230411-01	240-183578-D-7	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-20230411-01	240-183578-E-7	Plastic 1 liter - Nitric Acid	<2			
BAC-07-F-20230412-01	240-183578-C-8	Plastic 500ml - with Nitric Acid	<2			
BAC-07-F-20230412-01	240-183578-D-8	Plastic 1 liter - Nitric Acid	<2			
BAC-07-F-20230412-01	240-183578-E-8	Plastic 1 liter - Nitric Acid	<2			
BAC-18-F--20230412-01	240-183578-C-9	Plastic 500ml - with Nitric Acid	<2			
BAC-18-F--20230412-01	240-183578-D-9	Plastic 1 liter - Nitric Acid	<2			
BAC-18-F--20230412-01	240-183578-E-9	Plastic 1 liter - Nitric Acid	<2			
BAC-06-F-20230412-01	240-183578-C-10	Plastic 500ml - with Nitric Acid	<2			
BAC-06-F-20230412-01	240-183578-D-10	Plastic 1 liter - Nitric Acid	<2			
BAC-06-F-20230412-01	240-183578-E-10	Plastic 1 liter - Nitric Acid	<2			
BAC-16-F-20230412-01	240-183578-C-11	Plastic 500ml - with Nitric Acid	<2			
BAC-16-F-20230412-01	240-183578-D-11	Plastic 1 liter - Nitric Acid	<2			
BAC-16-F-20230412-01	240-183578-E-11	Plastic 1 liter - Nitric Acid	<2			

Client Sample ID

Lab ID

Container Type

Container

Preservative

pH

Temp

Added (mls)

Lot #

EB-001-F-20230412-01

240-183578-C-12

Plastic 500ml - with Nitric Acid

<2

EB-001-F-20230412-01

240-183578-D-12

Plastic 1 liter - Nitric Acid

<2

EB-001-F-20230412-01

240-183578-E-12

Plastic 1 liter - Nitric Acid

<2

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Client Information (Sub Contract Lab)		Lab PM: Cisneros, Roxanne		COC No: 240-166535-1							
Client Contact: Shipping/Receiving		E-Mail: roxanne.cisneros@eurofins.com		Page: Page 1 of 2							
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 240-183578-1							
Address: 13715 Rider Trail North,		Due Date Requested: 5/18/2023		State of Origin: Ohio							
City: Earth City		TAT Requested (days):		Preservation Codes:							
State, Zip: MO, 63045		PO #:		A - HCL M - Hexane B - NaOH N - None O - AsNaO2 C - Zn Acetate P - Na2O4S D - Nitric Acid E - NaHSO4 R - Na2SO3 S - H2SO4 F - MeOH G - Amchlor T - TSP Dodecahydrate H - Ascorbic Acid U - Acetone I - Ice J - DI Water K - EDTA W - pH 4-5 Y - Inzma L - EDA Z - other (specify)							
Email:		WO #:		Other:							
Project Name: Federal CCR Wells - App IV		Project #: 24019633									
Site:		SSOW#:									
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	MATRIX (Water, Swab, Onwaste/soil, BT, Glass, A=Air)	Field Filtered Sample (Yes or No)	Field Filtered Sample (Yes or No)	9315_Ra226/PreSep_21 Radium-226 (GFC)	9320_Ra228/PreSep_0 Radium-228 (GFC)	Ra226Ra228_GFC/ Combined Radium-226 and	Total Number of Containers	Special Instructions/Note:
BAC-10-F-20230411-01 (240-183578-1)	4/11/23	10:03 Eastern		Water			X	X		2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
DUP-001-BAC-10-F-20230411-01 (240-183578-2)	4/11/23	10:03 Eastern		Water			X	X		2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-23-F-20230411-01 (240-183578-3)	4/11/23	11:22 Eastern		Water			X	X		2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-08-F-20230411-01 (240-183578-4)	4/11/23	12:27 Eastern		Water			X	X		2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-14-F-20230411-01 (240-183578-5)	4/11/23	14:00 Eastern		Water			X	X		2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-12-F-20230411-01 (240-183578-6)	4/11/23	14:58 Eastern		Water			X	X		2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
EB-001-F-20230411-01 (240-183578-7)	4/11/23	15:30 Eastern		Water			X	X		2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-07-F-20230412-01 (240-183578-8)	4/12/23	10:34 Eastern		Water			X	X		2	Recount of TAR after 21 day ingrowth if > action limit; save planchet
BAC-18-F--20230412-01 (240-183578-9)	4/12/23	11:31 Eastern		Water			X	X		2	Recount of TAR after 21 day ingrowth if > action limit; save planchet

Possible Hazard Identification
 Unconfirmed
 Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
 Special Instructions/QC Requirements:

Empty Kit Relinquished by: _____ Date: _____ Method of Shipment: _____
 Relinquished by: *Karen Chavale* Date/Time: *4/23 1200* Company: *BEAC*
 Relinquished by: _____ Date/Time: _____ Company: _____
 Relinquished by: _____ Date/Time: _____ Company: *EIA STL*

Custody Seals Intact: _____ Custody Seal No.: _____
 A Yes Δ No



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-183578-1

Login Number: 183578

List Number: 2

Creator: Worthington, Sierra M

List Source: Eurofins St. Louis

List Creation: 04/18/23 01:40 PM

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



 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 4/28/2023 12:27:07 PM

JOB DESCRIPTION

Federal CCR Wells - App III

JOB NUMBER

240-183580-1

Eurofins Canton

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
4/28/2023 12:27:07 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
E	Result exceeded calibration range.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Job ID: 240-183580-1

Laboratory: Eurofins Canton

Narrative

**Job Narrative
240-183580-1**

Comments

No additional comments.

Receipt

The samples were received on 4/14/2023 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 1.1° C, 1.2° C, 1.4° C, 1.6° C, 1.8° C, 1.8° C, 2.0° C, 2.3° C, 2.6° C, 2.8° C, 3.2° C and 18.1° C.

Metals

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

General Chemistry

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

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Method Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CAN
6020B	Metals (ICP/MS)	SW846	EET CAN
2320B-1997	Alkalinity, Total	SM	EET CAN
300.0	Anions, Ion Chromatography	EPA	EET CAN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CAN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CAN

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 CAN = Eurofins Canton, 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 - App III

Job ID: 240-183580-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-183580-1	BAC-10-F-20230411-01	Water	04/11/23 10:03	04/14/23 08:00
240-183580-2	DUP-001-BAC-10-F-20230411-01	Water	04/11/23 10:03	04/14/23 08:00
240-183580-3	BAC-23-F-20230411-01	Water	04/11/23 11:22	04/14/23 08:00
240-183580-4	BAC-08-F-20230411-01	Water	04/11/23 12:27	04/14/23 08:00
240-183580-5	BAC-14-F-20230411-01	Water	04/11/23 14:00	04/14/23 08:00
240-183580-6	BAC-12-F-20230411-01	Water	04/11/23 14:58	04/14/23 08:00
240-183580-7	EB-001-F-20230411-01	Water	04/11/23 15:30	04/14/23 08:00
240-183580-8	BAC-07-F-20230412-01	Water	04/12/23 10:34	04/14/23 08:00
240-183580-9	BAC-18-F-20230412-01	Water	04/12/23 11:31	04/14/23 08:00
240-183580-10	BAC-06-F-20230412-01	Water	04/12/23 13:00	04/14/23 08:00
240-183580-11	BAC-16-F-20230412-01	Water	04/12/23 14:29	04/14/23 08:00
240-183580-12	EB-001-F-20230412-01	Water	04/12/23 15:30	04/14/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-10-F-20230411-01

Lab Sample ID: 240-183580-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	730		100	57	ug/L	1		6010D	Total Recoverable
Calcium	120000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	30000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	56000		1000	330	ug/L	1		6020B	Total Recoverable
Chloride	51		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	270		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	700		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-001-BAC-10-F-20230411-01

Lab Sample ID: 240-183580-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	730		100	57	ug/L	1		6010D	Total Recoverable
Calcium	120000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	29000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	55000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	52		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.22		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	270		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	690		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-23-F-20230411-01

Lab Sample ID: 240-183580-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	280		100	57	ug/L	1		6010D	Total Recoverable
Calcium	130000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	15000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	19000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	44		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.14		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	150		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	500		10	7.8	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-08-F-20230411-01

Lab Sample ID: 240-183580-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	110		100	57	ug/L	1		6010D	Total Recoverable
Calcium	93000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	12000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	12000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	22		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	86		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	350		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-14-F-20230411-01

Lab Sample ID: 240-183580-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2700		100	57	ug/L	1		6010D	Total Recoverable
Calcium	74000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	22000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	34		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.066		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	220		2.0	0.70	mg/L	2		300.0	Total/NA
Total Dissolved Solids	470		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-12-F-20230411-01

Lab Sample ID: 240-183580-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2000		100	57	ug/L	1		6010D	Total Recoverable
Calcium	78000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	18000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	3200		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	29000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	110		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	110		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	59		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.082		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	200		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	460		10	7.8	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: EB-001-F-20230411-01

Lab Sample ID: 240-183580-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity	81		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	81		5.0	2.6	mg/L	1		2320B-1997	Total/NA

Client Sample ID: BAC-07-F-20230412-01

Lab Sample ID: 240-183580-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1100		100	57	ug/L	1		6010D	Total Recoverable
Calcium	91000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Chloride	26		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.075		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		2.0	0.70	mg/L	2		300.0	Total/NA
Total Dissolved Solids	440		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-18-F-20230412-01

Lab Sample ID: 240-183580-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1400		100	57	ug/L	1		6010D	Total Recoverable
Calcium	79000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1200		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	140		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	140		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	25		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.058		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		2.0	0.70	mg/L	2		300.0	Total/NA
Total Dissolved Solids	410		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-06-F-20230412-01

Lab Sample ID: 240-183580-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1800		100	57	ug/L	1		6010D	Total Recoverable
Calcium	110000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	26000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	110		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	110		5.0	2.6	mg/L	1		2320B-1997	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-06-F-20230412-01 (Continued)

Lab Sample ID: 240-183580-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	24		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.098		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	210		2.0	0.70	mg/L	2		300.0	Total/NA
Total Dissolved Solids	550		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-16-F-20230412-01

Lab Sample ID: 240-183580-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1500		100	57	ug/L	1		6010D	Total Recoverable
Calcium	100000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	27		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.060		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	200		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	470		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-001-F-20230412-01

Lab Sample ID: 240-183580-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity	170		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	170		5.0	2.6	mg/L	1		2320B-1997	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Canton

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-10-F-20230411-01

Lab Sample ID: 240-183580-1

Date Collected: 04/11/23 10:03

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	730		100	57	ug/L		04/18/23 14:00	04/20/23 04:26	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	120000		1000	250	ug/L		04/18/23 14:00	04/19/23 22:19	1
Magnesium	30000		1000	61	ug/L		04/18/23 14:00	04/19/23 22:19	1
Potassium	2700		1000	220	ug/L		04/18/23 14:00	04/19/23 22:19	1
Sodium	56000		1000	330	ug/L		04/18/23 14:00	04/19/23 22:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 16:29	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 16:29	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 16:29	1
Chloride (EPA 300.0)	51		1.0	0.13	mg/L			04/26/23 13:07	1
Fluoride (EPA 300.0)	0.21		0.050	0.024	mg/L			04/26/23 13:07	1
Sulfate (EPA 300.0)	270		5.0	1.7	mg/L			04/26/23 13:27	5
Total Dissolved Solids (SM 2540C)	700		10	7.8	mg/L			04/17/23 10:04	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: DUP-001-BAC-10-F-20230411-01

Lab Sample ID: 240-183580-2

Date Collected: 04/11/23 10:03

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	730		100	57	ug/L		04/18/23 14:00	04/20/23 05:30	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	120000		1000	250	ug/L		04/18/23 14:00	04/19/23 23:08	1
Magnesium	29000		1000	61	ug/L		04/18/23 14:00	04/19/23 23:08	1
Potassium	2600		1000	220	ug/L		04/18/23 14:00	04/19/23 23:08	1
Sodium	55000		1000	330	ug/L		04/18/23 14:00	04/19/23 23:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			04/24/23 16:33	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			04/24/23 16:33	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 16:33	1
Chloride (EPA 300.0)	52		1.0	0.13	mg/L			04/26/23 12:26	1
Fluoride (EPA 300.0)	0.22		0.050	0.024	mg/L			04/26/23 12:26	1
Sulfate (EPA 300.0)	270		5.0	1.7	mg/L			04/26/23 12:47	5
Total Dissolved Solids (SM 2540C)	690		10	7.8	mg/L			04/17/23 10:04	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-23-F-20230411-01

Lab Sample ID: 240-183580-3

Date Collected: 04/11/23 11:22

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	280		100	57	ug/L		04/18/23 14:00	04/20/23 05:35	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130000		1000	250	ug/L		04/18/23 14:00	04/19/23 23:11	1
Magnesium	15000		1000	61	ug/L		04/18/23 14:00	04/19/23 23:11	1
Potassium	1900		1000	220	ug/L		04/18/23 14:00	04/19/23 23:11	1
Sodium	19000		1000	330	ug/L		04/18/23 14:00	04/19/23 23:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			04/24/23 16:37	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			04/24/23 16:37	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 16:37	1
Chloride (EPA 300.0)	44		1.0	0.13	mg/L			04/26/23 12:06	1
Fluoride (EPA 300.0)	0.14		0.050	0.024	mg/L			04/26/23 12:06	1
Sulfate (EPA 300.0)	150		1.0	0.35	mg/L			04/26/23 12:06	1
Total Dissolved Solids (SM 2540C)	500		10	7.8	mg/L			04/17/23 10:04	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-08-F-20230411-01

Lab Sample ID: 240-183580-4

Date Collected: 04/11/23 12:27

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	110		100	57	ug/L		04/18/23 14:00	04/20/23 05:39	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		04/18/23 14:00	04/19/23 23:19	1
Magnesium	12000		1000	61	ug/L		04/18/23 14:00	04/19/23 23:19	1
Potassium	1300		1000	220	ug/L		04/18/23 14:00	04/19/23 23:19	1
Sodium	12000		1000	330	ug/L		04/18/23 14:00	04/19/23 23:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			04/24/23 16:42	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			04/24/23 16:42	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 16:42	1
Chloride (EPA 300.0)	22		1.0	0.13	mg/L			04/26/23 11:06	1
Fluoride (EPA 300.0)	0.13		0.050	0.024	mg/L			04/26/23 11:06	1
Sulfate (EPA 300.0)	86		1.0	0.35	mg/L			04/26/23 11:06	1
Total Dissolved Solids (SM 2540C)	350		10	7.8	mg/L			04/17/23 10:04	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-14-F-20230411-01

Lab Sample ID: 240-183580-5

Date Collected: 04/11/23 14:00

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2700		100	57	ug/L		04/18/23 14:00	04/20/23 05:43	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	74000		1000	250	ug/L		04/18/23 14:00	04/19/23 23:22	1
Magnesium	20000		1000	61	ug/L		04/18/23 14:00	04/19/23 23:22	1
Potassium	1600		1000	220	ug/L		04/18/23 14:00	04/19/23 23:22	1
Sodium	22000		1000	330	ug/L		04/18/23 14:00	04/19/23 23:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			04/24/23 16:48	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			04/24/23 16:48	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 16:48	1
Chloride (EPA 300.0)	34		1.0	0.13	mg/L			04/26/23 10:46	1
Fluoride (EPA 300.0)	0.066		0.050	0.024	mg/L			04/26/23 10:46	1
Sulfate (EPA 300.0)	220		2.0	0.70	mg/L			04/26/23 23:02	2
Total Dissolved Solids (SM 2540C)	470		10	7.8	mg/L			04/17/23 10:04	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-12-F-20230411-01

Lab Sample ID: 240-183580-6

Date Collected: 04/11/23 14:58

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2000		100	57	ug/L		04/18/23 14:00	04/20/23 05:48	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	78000		1000	250	ug/L		04/18/23 14:00	04/19/23 23:24	1
Magnesium	18000		1000	61	ug/L		04/18/23 14:00	04/19/23 23:24	1
Potassium	3200		1000	220	ug/L		04/18/23 14:00	04/19/23 23:24	1
Sodium	29000		1000	330	ug/L		04/18/23 14:00	04/19/23 23:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	110		5.0	2.6	mg/L			04/24/23 16:52	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	110		5.0	2.6	mg/L			04/24/23 16:52	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 16:52	1
Chloride (EPA 300.0)	59		1.0	0.13	mg/L			04/26/23 10:26	1
Fluoride (EPA 300.0)	0.082		0.050	0.024	mg/L			04/26/23 10:26	1
Sulfate (EPA 300.0)	200		1.0	0.35	mg/L			04/26/23 10:26	1
Total Dissolved Solids (SM 2540C)	460		10	7.8	mg/L			04/17/23 10:04	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: EB-001-F-20230411-01

Lab Sample ID: 240-183580-7

Date Collected: 04/11/23 15:30

Matrix: Water

Date Received: 04/14/23 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		04/18/23 14:00	04/20/23 05:52	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		04/18/23 14:00	04/19/23 23:27	1
Magnesium	ND		1000	61	ug/L		04/18/23 14:00	04/19/23 23:27	1
Potassium	ND		1000	220	ug/L		04/18/23 14:00	04/19/23 23:27	1
Sodium	ND		1000	330	ug/L		04/18/23 14:00	04/19/23 23:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	81		5.0	2.6	mg/L			04/24/23 17:04	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	81		5.0	2.6	mg/L			04/24/23 17:04	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 17:04	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			04/26/23 09:25	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			04/26/23 09:25	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			04/26/23 09:25	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			04/17/23 10:04	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-07-F-20230412-01

Lab Sample ID: 240-183580-8

Date Collected: 04/12/23 10:34

Matrix: Water

Date Received: 04/14/23 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		04/18/23 14:00	04/20/23 06:04	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	91000		1000	250	ug/L		04/18/23 14:00	04/19/23 23:30	1
Magnesium	20000		1000	61	ug/L		04/18/23 14:00	04/19/23 23:30	1
Potassium	1300		1000	220	ug/L		04/18/23 14:00	04/19/23 23:30	1
Sodium	16000		1000	330	ug/L		04/18/23 14:00	04/19/23 23:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 17:12	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 17:12	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 17:12	1
Chloride (EPA 300.0)	26		1.0	0.13	mg/L			04/26/23 09:05	1
Fluoride (EPA 300.0)	0.075		0.050	0.024	mg/L			04/26/23 09:05	1
Sulfate (EPA 300.0)	190		2.0	0.70	mg/L			04/26/23 23:24	2
Total Dissolved Solids (SM 2540C)	440		10	7.8	mg/L			04/18/23 10:32	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-18-F-20230412-01

Lab Sample ID: 240-183580-9

Date Collected: 04/12/23 11:31

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1400		100	57	ug/L		04/18/23 14:00	04/20/23 06:09	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	79000		1000	250	ug/L		04/18/23 14:00	04/19/23 23:32	1
Magnesium	20000		1000	61	ug/L		04/18/23 14:00	04/19/23 23:32	1
Potassium	1200		1000	220	ug/L		04/18/23 14:00	04/19/23 23:32	1
Sodium	15000		1000	330	ug/L		04/18/23 14:00	04/19/23 23:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	140		5.0	2.6	mg/L			04/24/23 17:16	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	140		5.0	2.6	mg/L			04/24/23 17:16	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 17:16	1
Chloride (EPA 300.0)	25		1.0	0.13	mg/L			04/26/23 08:45	1
Fluoride (EPA 300.0)	0.058		0.050	0.024	mg/L			04/26/23 08:45	1
Sulfate (EPA 300.0)	190		2.0	0.70	mg/L			04/26/23 23:46	2
Total Dissolved Solids (SM 2540C)	410		10	7.8	mg/L			04/18/23 10:32	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-06-F-20230412-01

Lab Sample ID: 240-183580-10

Date Collected: 04/12/23 13:00

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1800		100	57	ug/L		04/18/23 14:00	04/20/23 06:13	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110000		1000	250	ug/L		04/18/23 14:00	04/19/23 23:35	1
Magnesium	26000		1000	61	ug/L		04/18/23 14:00	04/19/23 23:35	1
Potassium	1400		1000	220	ug/L		04/18/23 14:00	04/19/23 23:35	1
Sodium	16000		1000	330	ug/L		04/18/23 14:00	04/19/23 23:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	110		5.0	2.6	mg/L			04/24/23 17:19	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	110		5.0	2.6	mg/L			04/24/23 17:19	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 17:19	1
Chloride (EPA 300.0)	24		1.0	0.13	mg/L			04/26/23 08:25	1
Fluoride (EPA 300.0)	0.098		0.050	0.024	mg/L			04/26/23 08:25	1
Sulfate (EPA 300.0)	210		2.0	0.70	mg/L			04/27/23 00:07	2
Total Dissolved Solids (SM 2540C)	550		10	7.8	mg/L			04/18/23 11:58	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-16-F-20230412-01

Lab Sample ID: 240-183580-11

Date Collected: 04/12/23 14:29

Matrix: Water

Date Received: 04/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1500		100	57	ug/L		04/18/23 14:00	04/20/23 06:17	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	100000		1000	250	ug/L		04/18/23 14:00	04/19/23 23:38	1
Magnesium	21000		1000	61	ug/L		04/18/23 14:00	04/19/23 23:38	1
Potassium	1600		1000	220	ug/L		04/18/23 14:00	04/19/23 23:38	1
Sodium	15000		1000	330	ug/L		04/18/23 14:00	04/19/23 23:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	200		5.0	2.6	mg/L			04/24/23 17:23	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	200		5.0	2.6	mg/L			04/24/23 17:23	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 17:23	1
Chloride (EPA 300.0)	27		1.0	0.13	mg/L			04/26/23 07:24	1
Fluoride (EPA 300.0)	0.060		0.050	0.024	mg/L			04/26/23 07:24	1
Sulfate (EPA 300.0)	200		1.0	0.35	mg/L			04/26/23 07:24	1
Total Dissolved Solids (SM 2540C)	470		10	7.8	mg/L			04/18/23 11:58	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: EB-001-F-20230412-01

Lab Sample ID: 240-183580-12

Date Collected: 04/12/23 15:30

Matrix: Water

Date Received: 04/14/23 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		04/18/23 14:00	04/20/23 06:21	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		04/18/23 14:00	04/19/23 23:40	1
Magnesium	ND		1000	61	ug/L		04/18/23 14:00	04/19/23 23:40	1
Potassium	ND		1000	220	ug/L		04/18/23 14:00	04/19/23 23:40	1
Sodium	ND		1000	330	ug/L		04/18/23 14:00	04/19/23 23:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	170		5.0	2.6	mg/L			04/24/23 17:30	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	170		5.0	2.6	mg/L			04/24/23 17:30	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			04/24/23 17:30	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			04/26/23 07:04	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			04/26/23 07:04	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			04/26/23 07:04	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			04/18/23 11:58	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-569850/1-A
Matrix: Water
Analysis Batch: 570110

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 569850

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		04/18/23 14:00	04/20/23 04:09	1

Lab Sample ID: LCS 240-569850/2-A
Matrix: Water
Analysis Batch: 570110

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 569850

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1010		ug/L		101	80 - 120

Lab Sample ID: 240-183580-1 MS
Matrix: Water
Analysis Batch: 570110

Client Sample ID: BAC-10-F-20230411-01
Prep Type: Total Recoverable
Prep Batch: 569850

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	730		1000	1720		ug/L		99	75 - 125

Lab Sample ID: 240-183580-1 MSD
Matrix: Water
Analysis Batch: 570110

Client Sample ID: BAC-10-F-20230411-01
Prep Type: Total Recoverable
Prep Batch: 569850

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Boron	730		1000	1750		ug/L		101	75 - 125	1	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-569850/1-A
Matrix: Water
Analysis Batch: 570098

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 569850

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		04/18/23 14:00	04/19/23 22:08	1
Magnesium	ND		1000	61	ug/L		04/18/23 14:00	04/19/23 22:08	1
Potassium	ND		1000	220	ug/L		04/18/23 14:00	04/19/23 22:08	1
Sodium	ND		1000	330	ug/L		04/18/23 14:00	04/19/23 22:08	1

Lab Sample ID: LCS 240-569850/3-A
Matrix: Water
Analysis Batch: 570098

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 569850

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	23600		ug/L		94	80 - 120
Magnesium	25000	23500		ug/L		94	80 - 120
Potassium	25000	23700		ug/L		95	80 - 120
Sodium	25000	23400		ug/L		93	80 - 120

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-570651/30
Matrix: Water
Analysis Batch: 570651

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			04/24/23 13:02	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 13:02	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 13:02	1

Lab Sample ID: MB 240-570651/56
Matrix: Water
Analysis Batch: 570651

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			04/24/23 15:17	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 15:17	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 15:17	1

Lab Sample ID: MB 240-570651/83
Matrix: Water
Analysis Batch: 570651

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			04/24/23 17:00	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 17:00	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/24/23 17:00	1

Lab Sample ID: LCS 240-570651/55
Matrix: Water
Analysis Batch: 570651

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits

Lab Sample ID: LCS 240-570651/82
Matrix: Water
Analysis Batch: 570651

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits

Lab Sample ID: 240-183580-7 DU
Matrix: Water
Analysis Batch: 570651

Client Sample ID: EB-001-F-20230411-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
	Total Alkalinity	81		ND				
Bicarbonate Alkalinity as CaCO3	81		ND		mg/L		NC	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-570831/3
Matrix: Water
Analysis Batch: 570831

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			04/26/23 06:24	1
Fluoride	ND		0.050	0.024	mg/L			04/26/23 06:24	1
Sulfate	ND		1.0	0.35	mg/L			04/26/23 06:24	1

Lab Sample ID: LCS 240-570831/4
Matrix: Water
Analysis Batch: 570831

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.1		mg/L		102	90 - 110
Fluoride	2.50	2.58		mg/L		103	90 - 110
Sulfate	50.0	51.9		mg/L		104	90 - 110

Lab Sample ID: 240-183580-4 MS
Matrix: Water
Analysis Batch: 570831

Client Sample ID: BAC-08-F-20230411-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	22		50.0	77.0		mg/L		109	80 - 120
Fluoride	0.13		2.50	2.96		mg/L		113	80 - 120
Sulfate	86		50.0	139		mg/L		106	80 - 120

Lab Sample ID: 240-183580-4 MSD
Matrix: Water
Analysis Batch: 570831

Client Sample ID: BAC-08-F-20230411-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	22		50.0	77.7		mg/L		111	80 - 120	1	15
Fluoride	0.13		2.50	3.01		mg/L		115	80 - 120	2	15
Sulfate	86		50.0	140		mg/L		107	80 - 120	0	15

Lab Sample ID: 240-183580-11 MS
Matrix: Water
Analysis Batch: 570831

Client Sample ID: BAC-16-F-20230412-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	27		50.0	81.9		mg/L		110	80 - 120
Fluoride	0.060		2.50	2.87		mg/L		112	80 - 120
Sulfate	200		50.0	245	E	mg/L		99	80 - 120

Lab Sample ID: 240-183580-11 MSD
Matrix: Water
Analysis Batch: 570831

Client Sample ID: BAC-16-F-20230412-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	27		50.0	82.1		mg/L		110	80 - 120	0	15
Fluoride	0.060		2.50	2.89		mg/L		113	80 - 120	1	15
Sulfate	200		50.0	245	E	mg/L		98	80 - 120	0	15

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 240-571000/3
Matrix: Water
Analysis Batch: 571000

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			04/26/23 18:20	1
Fluoride	ND		0.050	0.024	mg/L			04/26/23 18:20	1
Sulfate	ND		1.0	0.35	mg/L			04/26/23 18:20	1

Lab Sample ID: LCS 240-571000/4
Matrix: Water
Analysis Batch: 571000

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	49.0		mg/L		98	90 - 110
Fluoride	2.50	2.59		mg/L		104	90 - 110
Sulfate	50.0	50.3		mg/L		101	90 - 110

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

Lab Sample ID: MB 240-569585/1
Matrix: Water
Analysis Batch: 569585

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			04/17/23 10:04	1

Lab Sample ID: LCS 240-569585/2
Matrix: Water
Analysis Batch: 569585

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	580	554		mg/L		96	80 - 120

Lab Sample ID: MB 240-569762/1
Matrix: Water
Analysis Batch: 569762

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			04/18/23 10:32	1

Lab Sample ID: LCS 240-569762/2
Matrix: Water
Analysis Batch: 569762

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	580	543		mg/L		94	80 - 120

Lab Sample ID: MB 240-569791/1
Matrix: Water
Analysis Batch: 569791

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			04/18/23 11:58	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

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

Lab Sample ID: LCS 240-569791/2

Matrix: Water

Analysis Batch: 569791

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	580	550		mg/L		95	80 - 120

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Metals

Prep Batch: 569850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183580-1	BAC-10-F-20230411-01	Total Recoverable	Water	3005A	
240-183580-2	DUP-001-BAC-10-F-20230411-01	Total Recoverable	Water	3005A	
240-183580-3	BAC-23-F-20230411-01	Total Recoverable	Water	3005A	
240-183580-4	BAC-08-F-20230411-01	Total Recoverable	Water	3005A	
240-183580-5	BAC-14-F-20230411-01	Total Recoverable	Water	3005A	
240-183580-6	BAC-12-F-20230411-01	Total Recoverable	Water	3005A	
240-183580-7	EB-001-F-20230411-01	Total Recoverable	Water	3005A	
240-183580-8	BAC-07-F-20230412-01	Total Recoverable	Water	3005A	
240-183580-9	BAC-18-F-20230412-01	Total Recoverable	Water	3005A	
240-183580-10	BAC-06-F-20230412-01	Total Recoverable	Water	3005A	
240-183580-11	BAC-16-F-20230412-01	Total Recoverable	Water	3005A	
240-183580-12	EB-001-F-20230412-01	Total Recoverable	Water	3005A	
MB 240-569850/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-569850/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-569850/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-183580-1 MS	BAC-10-F-20230411-01	Total Recoverable	Water	3005A	
240-183580-1 MSD	BAC-10-F-20230411-01	Total Recoverable	Water	3005A	

Analysis Batch: 570098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183580-1	BAC-10-F-20230411-01	Total Recoverable	Water	6020B	569850
240-183580-2	DUP-001-BAC-10-F-20230411-01	Total Recoverable	Water	6020B	569850
240-183580-3	BAC-23-F-20230411-01	Total Recoverable	Water	6020B	569850
240-183580-4	BAC-08-F-20230411-01	Total Recoverable	Water	6020B	569850
240-183580-5	BAC-14-F-20230411-01	Total Recoverable	Water	6020B	569850
240-183580-6	BAC-12-F-20230411-01	Total Recoverable	Water	6020B	569850
240-183580-7	EB-001-F-20230411-01	Total Recoverable	Water	6020B	569850
240-183580-8	BAC-07-F-20230412-01	Total Recoverable	Water	6020B	569850
240-183580-9	BAC-18-F-20230412-01	Total Recoverable	Water	6020B	569850
240-183580-10	BAC-06-F-20230412-01	Total Recoverable	Water	6020B	569850
240-183580-11	BAC-16-F-20230412-01	Total Recoverable	Water	6020B	569850
240-183580-12	EB-001-F-20230412-01	Total Recoverable	Water	6020B	569850
MB 240-569850/1-A	Method Blank	Total Recoverable	Water	6020B	569850
LCS 240-569850/3-A	Lab Control Sample	Total Recoverable	Water	6020B	569850

Analysis Batch: 570110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183580-1	BAC-10-F-20230411-01	Total Recoverable	Water	6010D	569850
240-183580-2	DUP-001-BAC-10-F-20230411-01	Total Recoverable	Water	6010D	569850
240-183580-3	BAC-23-F-20230411-01	Total Recoverable	Water	6010D	569850
240-183580-4	BAC-08-F-20230411-01	Total Recoverable	Water	6010D	569850
240-183580-5	BAC-14-F-20230411-01	Total Recoverable	Water	6010D	569850
240-183580-6	BAC-12-F-20230411-01	Total Recoverable	Water	6010D	569850
240-183580-7	EB-001-F-20230411-01	Total Recoverable	Water	6010D	569850
240-183580-8	BAC-07-F-20230412-01	Total Recoverable	Water	6010D	569850
240-183580-9	BAC-18-F-20230412-01	Total Recoverable	Water	6010D	569850
240-183580-10	BAC-06-F-20230412-01	Total Recoverable	Water	6010D	569850
240-183580-11	BAC-16-F-20230412-01	Total Recoverable	Water	6010D	569850
240-183580-12	EB-001-F-20230412-01	Total Recoverable	Water	6010D	569850
MB 240-569850/1-A	Method Blank	Total Recoverable	Water	6010D	569850
LCS 240-569850/2-A	Lab Control Sample	Total Recoverable	Water	6010D	569850

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Metals (Continued)

Analysis Batch: 570110 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183580-1 MS	BAC-10-F-20230411-01	Total Recoverable	Water	6010D	569850
240-183580-1 MSD	BAC-10-F-20230411-01	Total Recoverable	Water	6010D	569850

General Chemistry

Analysis Batch: 569585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183580-1	BAC-10-F-20230411-01	Total/NA	Water	SM 2540C	
240-183580-2	DUP-001-BAC-10-F-20230411-01	Total/NA	Water	SM 2540C	
240-183580-3	BAC-23-F-20230411-01	Total/NA	Water	SM 2540C	
240-183580-4	BAC-08-F-20230411-01	Total/NA	Water	SM 2540C	
240-183580-5	BAC-14-F-20230411-01	Total/NA	Water	SM 2540C	
240-183580-6	BAC-12-F-20230411-01	Total/NA	Water	SM 2540C	
240-183580-7	EB-001-F-20230411-01	Total/NA	Water	SM 2540C	
MB 240-569585/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-569585/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 569762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183580-8	BAC-07-F-20230412-01	Total/NA	Water	SM 2540C	
240-183580-9	BAC-18-F-20230412-01	Total/NA	Water	SM 2540C	
MB 240-569762/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-569762/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 569791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183580-10	BAC-06-F-20230412-01	Total/NA	Water	SM 2540C	
240-183580-11	BAC-16-F-20230412-01	Total/NA	Water	SM 2540C	
240-183580-12	EB-001-F-20230412-01	Total/NA	Water	SM 2540C	
MB 240-569791/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-569791/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 570651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183580-1	BAC-10-F-20230411-01	Total/NA	Water	2320B-1997	
240-183580-2	DUP-001-BAC-10-F-20230411-01	Total/NA	Water	2320B-1997	
240-183580-3	BAC-23-F-20230411-01	Total/NA	Water	2320B-1997	
240-183580-4	BAC-08-F-20230411-01	Total/NA	Water	2320B-1997	
240-183580-5	BAC-14-F-20230411-01	Total/NA	Water	2320B-1997	
240-183580-6	BAC-12-F-20230411-01	Total/NA	Water	2320B-1997	
240-183580-7	EB-001-F-20230411-01	Total/NA	Water	2320B-1997	
240-183580-8	BAC-07-F-20230412-01	Total/NA	Water	2320B-1997	
240-183580-9	BAC-18-F-20230412-01	Total/NA	Water	2320B-1997	
240-183580-10	BAC-06-F-20230412-01	Total/NA	Water	2320B-1997	
240-183580-11	BAC-16-F-20230412-01	Total/NA	Water	2320B-1997	
240-183580-12	EB-001-F-20230412-01	Total/NA	Water	2320B-1997	
MB 240-570651/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-570651/56	Method Blank	Total/NA	Water	2320B-1997	
MB 240-570651/83	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-570651/55	Lab Control Sample	Total/NA	Water	2320B-1997	
LCS 240-570651/82	Lab Control Sample	Total/NA	Water	2320B-1997	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

General Chemistry (Continued)

Analysis Batch: 570651 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183580-7 DU	EB-001-F-20230411-01	Total/NA	Water	2320B-1997	

Analysis Batch: 570831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183580-1	BAC-10-F-20230411-01	Total/NA	Water	300.0	
240-183580-1	BAC-10-F-20230411-01	Total/NA	Water	300.0	
240-183580-2	DUP-001-BAC-10-F-20230411-01	Total/NA	Water	300.0	
240-183580-2	DUP-001-BAC-10-F-20230411-01	Total/NA	Water	300.0	
240-183580-3	BAC-23-F-20230411-01	Total/NA	Water	300.0	
240-183580-4	BAC-08-F-20230411-01	Total/NA	Water	300.0	
240-183580-5	BAC-14-F-20230411-01	Total/NA	Water	300.0	
240-183580-6	BAC-12-F-20230411-01	Total/NA	Water	300.0	
240-183580-7	EB-001-F-20230411-01	Total/NA	Water	300.0	
240-183580-8	BAC-07-F-20230412-01	Total/NA	Water	300.0	
240-183580-9	BAC-18-F-20230412-01	Total/NA	Water	300.0	
240-183580-10	BAC-06-F-20230412-01	Total/NA	Water	300.0	
240-183580-11	BAC-16-F-20230412-01	Total/NA	Water	300.0	
240-183580-12	EB-001-F-20230412-01	Total/NA	Water	300.0	
MB 240-570831/3	Method Blank	Total/NA	Water	300.0	
LCS 240-570831/4	Lab Control Sample	Total/NA	Water	300.0	
240-183580-4 MS	BAC-08-F-20230411-01	Total/NA	Water	300.0	
240-183580-4 MSD	BAC-08-F-20230411-01	Total/NA	Water	300.0	
240-183580-11 MS	BAC-16-F-20230412-01	Total/NA	Water	300.0	
240-183580-11 MSD	BAC-16-F-20230412-01	Total/NA	Water	300.0	

Analysis Batch: 571000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-183580-5	BAC-14-F-20230411-01	Total/NA	Water	300.0	
240-183580-8	BAC-07-F-20230412-01	Total/NA	Water	300.0	
240-183580-9	BAC-18-F-20230412-01	Total/NA	Water	300.0	
240-183580-10	BAC-06-F-20230412-01	Total/NA	Water	300.0	
MB 240-571000/3	Method Blank	Total/NA	Water	300.0	
LCS 240-571000/4	Lab Control Sample	Total/NA	Water	300.0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-10-F-20230411-01

Lab Sample ID: 240-183580-1

Date Collected: 04/11/23 10:03

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CAN	04/20/23 04:26
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CAN	04/19/23 22:19
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 16:29
Total/NA	Analysis	300.0		1	570831	JMB	EET CAN	04/26/23 13:07
Total/NA	Analysis	300.0		5	570831	JMB	EET CAN	04/26/23 13:27
Total/NA	Analysis	SM 2540C		1	569585	GH	EET CAN	04/17/23 10:04

Client Sample ID: DUP-001-BAC-10-F-20230411-01

Lab Sample ID: 240-183580-2

Date Collected: 04/11/23 10:03

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CAN	04/20/23 05:30
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CAN	04/19/23 23:08
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 16:33
Total/NA	Analysis	300.0		1	570831	JMB	EET CAN	04/26/23 12:26
Total/NA	Analysis	300.0		5	570831	JMB	EET CAN	04/26/23 12:47
Total/NA	Analysis	SM 2540C		1	569585	GH	EET CAN	04/17/23 10:04

Client Sample ID: BAC-23-F-20230411-01

Lab Sample ID: 240-183580-3

Date Collected: 04/11/23 11:22

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CAN	04/20/23 05:35
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CAN	04/19/23 23:11
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 16:37
Total/NA	Analysis	300.0		1	570831	JMB	EET CAN	04/26/23 12:06
Total/NA	Analysis	SM 2540C		1	569585	GH	EET CAN	04/17/23 10:04

Client Sample ID: BAC-08-F-20230411-01

Lab Sample ID: 240-183580-4

Date Collected: 04/11/23 12:27

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CAN	04/20/23 05:39

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-08-F-20230411-01

Lab Sample ID: 240-183580-4

Date Collected: 04/11/23 12:27

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CAN	04/19/23 23:19
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 16:42
Total/NA	Analysis	300.0		1	570831	JMB	EET CAN	04/26/23 11:06
Total/NA	Analysis	SM 2540C		1	569585	GH	EET CAN	04/17/23 10:04

Client Sample ID: BAC-14-F-20230411-01

Lab Sample ID: 240-183580-5

Date Collected: 04/11/23 14:00

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CAN	04/20/23 05:43
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CAN	04/19/23 23:22
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 16:48
Total/NA	Analysis	300.0		2	571000	JMB	EET CAN	04/26/23 23:02
Total/NA	Analysis	300.0		1	570831	JMB	EET CAN	04/26/23 10:46
Total/NA	Analysis	SM 2540C		1	569585	GH	EET CAN	04/17/23 10:04

Client Sample ID: BAC-12-F-20230411-01

Lab Sample ID: 240-183580-6

Date Collected: 04/11/23 14:58

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CAN	04/20/23 05:48
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CAN	04/19/23 23:24
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 16:52
Total/NA	Analysis	300.0		1	570831	JMB	EET CAN	04/26/23 10:26
Total/NA	Analysis	SM 2540C		1	569585	GH	EET CAN	04/17/23 10:04

Client Sample ID: EB-001-F-20230411-01

Lab Sample ID: 240-183580-7

Date Collected: 04/11/23 15:30

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CAN	04/20/23 05:52
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CAN	04/19/23 23:27
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 17:04
Total/NA	Analysis	300.0		1	570831	JMB	EET CAN	04/26/23 09:25

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Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: EB-001-F-20230411-01

Lab Sample ID: 240-183580-7

Date Collected: 04/11/23 15:30

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2540C		1	569585	GH	EET CAN	04/17/23 10:04

Client Sample ID: BAC-07-F-20230412-01

Lab Sample ID: 240-183580-8

Date Collected: 04/12/23 10:34

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CAN	04/20/23 06:04
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CAN	04/19/23 23:30
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 17:12
Total/NA	Analysis	300.0		2	571000	JMB	EET CAN	04/26/23 23:24
Total/NA	Analysis	300.0		1	570831	JMB	EET CAN	04/26/23 09:05
Total/NA	Analysis	SM 2540C		1	569762	GH	EET CAN	04/18/23 10:32

Client Sample ID: BAC-18-F-20230412-01

Lab Sample ID: 240-183580-9

Date Collected: 04/12/23 11:31

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CAN	04/20/23 06:09
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CAN	04/19/23 23:32
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 17:16
Total/NA	Analysis	300.0		2	571000	JMB	EET CAN	04/26/23 23:46
Total/NA	Analysis	300.0		1	570831	JMB	EET CAN	04/26/23 08:45
Total/NA	Analysis	SM 2540C		1	569762	GH	EET CAN	04/18/23 10:32

Client Sample ID: BAC-06-F-20230412-01

Lab Sample ID: 240-183580-10

Date Collected: 04/12/23 13:00

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CAN	04/20/23 06:13
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CAN	04/19/23 23:35
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 17:19
Total/NA	Analysis	300.0		2	571000	JMB	EET CAN	04/27/23 00:07
Total/NA	Analysis	300.0		1	570831	JMB	EET CAN	04/26/23 08:25
Total/NA	Analysis	SM 2540C		1	569791	GH	EET CAN	04/18/23 11:58

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Client Sample ID: BAC-16-F-20230412-01

Lab Sample ID: 240-183580-11

Date Collected: 04/12/23 14:29

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CAN	04/20/23 06:17
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CAN	04/19/23 23:38
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 17:23
Total/NA	Analysis	300.0		1	570831	JMB	EET CAN	04/26/23 07:24
Total/NA	Analysis	SM 2540C		1	569791	GH	EET CAN	04/18/23 11:58

Client Sample ID: EB-001-F-20230412-01

Lab Sample ID: 240-183580-12

Date Collected: 04/12/23 15:30

Matrix: Water

Date Received: 04/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6010D		1	570110	KLC	EET CAN	04/20/23 06:21
Total Recoverable	Prep	3005A			569850	AJC	EET CAN	04/18/23 14:00
Total Recoverable	Analysis	6020B		1	570098	DSH	EET CAN	04/19/23 23:40
Total/NA	Analysis	2320B-1997		1	570651	JMR	EET CAN	04/24/23 17:30
Total/NA	Analysis	300.0		1	570831	JMB	EET CAN	04/26/23 07:04
Total/NA	Analysis	SM 2540C		1	569791	GH	EET CAN	04/18/23 11:58

Laboratory References:

EET CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-183580-1

Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23 *
Connecticut	State	PH-0590	06-29-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-28-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23 *
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-23 *
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-28-24
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Client Information		Sampler: <u>Bobby Cashe</u>		Lab PM: Cisneros, Roxanne		Carrier Tracking No(s):		COC No: 240-93465-34577.1	
Client Contact: Taylor Huffman		Phone: 746-373-4308		E-Mail: roxanne.cisneros@Eurofins.com		State of Origin:		Page: <u>Page 1 of 2</u>	
Company: Lightstone Generation Gavin Power LLC		PWSID:		Due Date Requested:		Analysis Requested		Job #: <u>Pg 1 of 2</u>	
Address: 7397 OH-7		City: Cheshire		TAT Requested (days):		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		Preservation Codes:	
State, Zip: OH, 45620		PO #: 2935505		Project #: 24019633		Project Name: Federal CCR Wells - App III		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)	
Email: taylor.huffman@lightstonegen.com		SSOW#:		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
Matrix (W=water, S=solid, O=other)		Preservation Code:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of Containers	
Special Instructions/Note:		60108 6020		2540C_Calcd, 300.0, 28D		2320B_Alkalinity			
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=other)	
BAC-10-F-20230411-01		4-11-23		1003		G		W	
DUP-001-BAC-10-F-20230411-01		4-11-23		1003		G		W	
BAC-23-F-20230411-01		4-11-23		1122		G		W	
BAC-08-F-20230411-01		4-11-23		1227		G		W	
BAC-14-F-20230411-01		4-11-23		1400		G		W	
BAC-12-F-20230411-01		4-11-23		1458		G		W	
EB-001-F-20230411-01		4-11-23		1530		G		W	
BAC-07-F-20230412-01		4-12-23		1034		G		W	
BAC-18-F-20230412-01		4-12-23		1131		G		W	
BAC-06-F-20230412-01		4-12-23		1300		G		W	
BAC-10-F-20230412-01		4-12-23		1429		G		W	
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Date:		Time:		Special Instructions/IOC Requirements:	
Deliverable Requested: I, II, III, IV, Other (specify)		Empty Kit Relinquished by:		Date:		Time:		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Relinquished by: <u>Bobby Cashe</u>		Date/Time: 4-13-23/0840		Company: <u>Kemura</u>		Date/Time: 4-13-23/1120		Company: <u>ETA</u>	
Relinquished by: <u>Bobby Cashe</u>		Date/Time: 4-13-23/1200		Company: <u>ETA</u>		Date/Time: 4-13-23/1423		Company: <u>ETA</u>	
Relinquished by: <u>Bobby Cashe</u>		Date/Time:		Company:		Date/Time:		Company:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:					

Client Information		Sampler: <i>Bebby Castle</i>		Lab PM: Cisneros, Roxanne		Carrier Tracking No(s):		COC No: 240-93465-34577.1	
Client Contact: Taylor Huffman		Phone: 740-373-4308		E-Mail: roxanne.cisneros@Eurofinsnet.com		State of Origin:		Page: Page 1 of 1	
Company: Lightstone Generation Gavin Power LLC		Address: 7397 OH-7		City: Cheshire		State, Zip: OH, 45620		Job #: <i>Py 2012</i>	
Phone: 740-925-3171(Tel)		PO #: 2935505		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		TAT Requested (days):		Preservation Codes:	
Email: taylor.huffman@lightstonegen.com		Project #: 24019633		SSOW#:		Due Date Requested:		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 Other:	
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (Water, Specific, Composite, BT-Tissue, Analy)	
<i>LB-001-F-10030412-01</i>		<i>4-12-23</i>		<i>1530</i>		<i>G</i>		<i>W</i>	
Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		240C, Calcd, 300.0, 28D		6010B, 6020		2320B - Alkalinity	
Total Number of Containers		Special Instructions/Note:							
Possible Hazard Identification		Deliverable Requested: <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For <input type="checkbox"/> Months			
Empty Kit Relinquished by:		Date:		Relinquished by:		Date/Time:		Company:	
<i>Bebby Castle</i>		<i>4-13-23 / 0840</i>		<i>KEARON</i>		<i>4-13-23 1130</i>		<i>279</i>	
Relinquished by:		Date/Time:		Relinquished by:		Date/Time:		Company:	
<i>Py 2012</i>		<i>4-13-23 1700</i>		<i>Rochelle Grubbs</i>		<i>4-13-23 800</i>		<i>ESTAK</i>	
Custody Seal No.: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:					


Eurofins - Canton Sample Receipt Form/Narrative
Barberton Facility

Login # : _____

Client Lightstone Site Name _____ Cooler unpacked by: Rachelle Haide
 Cooler Received on 4 14 23 Opened on 4 14 23
 FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off Eurofins Courier Other _____

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

Eurofins Cooler # E C 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 # 22 (CF +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 1
 - 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 NA
 - 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# HC203864
14. Were VOAs on the COC? Yes No NA
15. Were air bubbles >6 mm in any VOA vials? Yes No NA  ← Larger than this.
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No NA
17. Was a LL Hg or Me Hg trip blank present? _____ Yes No NA

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: _____



Temperature readings:

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-10-F-20230411-01	240-183580-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-001-BAC-10-F-20230411-01	240-183580-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-23-F-20230411-01	240-183580-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-08-F-20230411-01	240-183580-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-14-F-20230411-01	240-183580-C-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-12-F-20230411-01	240-183580-C-6	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230411-01	240-183580-C-7	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-07-F-20230412-01	240-183580-C-8	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-18-F-20230412-01	240-183580-C-9	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-06-F-20230412-01	240-183580-C-10	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-16-F-20230412-01	240-183580-C-11	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-20230412-01	240-183580-C-12	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____



ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 7/17/2023 1:24:36 PM

JOB DESCRIPTION

Federal CCR Wells - App III & App IV

JOB NUMBER

240-187232-1

Eurofins Cleveland

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
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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

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.

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.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Job ID: 240-187232-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-187232-1

Comments

No additional comments.

Receipt

The samples were received on 6/17/2023 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 9 coolers at receipt time were 0.8° C, 1.4° C, 1.6° C, 1.6° C, 1.8° C, 2.4° C, 2.6° C, 2.6° C and 2.6° C.

RAD

Methods 9315: Radium-226 prep batch 160-616969: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-21-F-A4-20230612-01 (240-187232-1), DUP-001-BAC-21-F-A4-20230612-01 (240-187232-2), BAC-22-F-A4-20230612-01 (240-187232-3), BAC-23-F-A4-20230612-01 (240-187232-4), BAC-08-F-A4-20230612-01 (240-187232-5), EB-001-F-A4-20230612-01 (240-187232-6), BAC-07-F-A4-20230613-01 (240-187232-7), BAC-07-F-A4-20230613-01 (240-187232-7[MSJ]), BAC-07-F-A4-20230613-01 (240-187232-7[MSD]), BAC-18-F-A4-20230613-01 (240-187232-8), BAC-06-F-A4-20230613-01 (240-187232-9), (LCS 160-616969/2-A) and (MB 160-616969/1-A)

Method 9320: Radium-228 prep batch 160-616970: The following sample(s) did not meet the requested limit (RL) due to the reduced sample volume attributed to the presence of matrix interference. During preparation the analyst visually noted matrix effects. The data have been reported with this narrative. BAC-21-F-A4-20230612-01 (240-187232-1), DUP-001-BAC-21-F-A4-20230612-01 (240-187232-2) and BAC-18-F-A4-20230613-01 (240-187232-8)

Methods 9320: Radium-228 prep batch 160-616970: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-21-F-A4-20230612-01 (240-187232-1), DUP-001-BAC-21-F-A4-20230612-01 (240-187232-2), BAC-22-F-A4-20230612-01 (240-187232-3), BAC-23-F-A4-20230612-01 (240-187232-4), BAC-08-F-A4-20230612-01 (240-187232-5), EB-001-F-A4-20230612-01 (240-187232-6), BAC-07-F-A4-20230613-01 (240-187232-7), BAC-07-F-A4-20230613-01 (240-187232-7[MSJ]), BAC-07-F-A4-20230613-01 (240-187232-7[MSD]), BAC-18-F-A4-20230613-01 (240-187232-8), BAC-06-F-A4-20230613-01 (240-187232-9), (LCS 160-616970/2-A) and (MB 160-616970/1-A)

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

Metals

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

General Chemistry

Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for the following sample associated with analytical batch 240-579935 were outside control limits: (240-187232-A-1 MS). The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for the following sample associated with analytical batch 240-579935 were outside control limits: BAC-21-F-A4-20230612-01 (240-187232-1). The associated laboratory control sample (LCS) recovery met acceptance criteria.

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 - App III & App IV

Job ID: 240-187232-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CLE
SM 2540C	Solids, Total Dissolved (TDS)	SM	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 - App III & App IV

Job ID: 240-187232-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-187232-1	BAC-21-F-A4-20230612-01	Water	06/12/23 10:53	06/17/23 08:00
240-187232-2	DUP-001-BAC-21-F-A4-20230612-01	Water	06/12/23 10:53	06/17/23 08:00
240-187232-3	BAC-22-F-A4-20230612-01	Water	06/12/23 12:34	06/17/23 08:00
240-187232-4	BAC-23-F-A4-20230612-01	Water	06/12/23 13:26	06/17/23 08:00
240-187232-5	BAC-08-F-A4-20230612-01	Water	06/12/23 14:23	06/17/23 08:00
240-187232-6	EB-001-F-A4-20230612-01	Water	06/12/23 15:00	06/17/23 08:00
240-187232-7	BAC-07-F-A4-20230613-01	Water	06/13/23 11:35	06/17/23 08:00
240-187232-8	BAC-18-F-A4-20230613-01	Water	06/13/23 13:18	06/17/23 08:00
240-187232-9	BAC-06-F-A4-20230613-01	Water	06/13/23 14:06	06/17/23 08:00
240-187232-10	BAC-12-F-A3-20230614-01	Water	06/14/23 12:10	06/17/23 08:00
240-187232-11	BAC-116-F-A3-20230614-01	Water	06/14/23 13:03	06/17/23 08:00
240-187232-12	EB-001-F-A3-20230614-01	Water	06/14/23 15:20	06/17/23 08:00



Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-21-F-A4-20230612-01

Lab Sample ID: 240-187232-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.7		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	180		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	4.7	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.2		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	3.3		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	5.9	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	15000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	2.3	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	28000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	250		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	250		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.087	F1	0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: DUP-001-BAC-21-F-A4-20230612-01

Lab Sample ID: 240-187232-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.5		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	190		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	5.7		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.5		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	4.2		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	5.9	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	16000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.2	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	29000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.079		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-22-F-A4-20230612-01

Lab Sample ID: 240-187232-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.5	J	5.0	0.75	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 - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-22-F-A4-20230612-01 (Continued)

Lab Sample ID: 240-187232-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	140		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	1.9	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.3		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.4		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	3.6	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	3000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	21000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.081		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-23-F-A4-20230612-01

Lab Sample ID: 240-187232-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.4	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	120		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.90	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Magnesium	14000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	17000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.13		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-08-F-A4-20230612-01

Lab Sample ID: 240-187232-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.2	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	140		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	2.2	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	12000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	2.1	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	1500		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 - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-08-F-A4-20230612-01 (Continued)

Lab Sample ID: 240-187232-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	13000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	210		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	210		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.12		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: EB-001-F-A4-20230612-01

Lab Sample ID: 240-187232-6

No Detections.

Client Sample ID: BAC-07-F-A4-20230613-01

Lab Sample ID: 240-187232-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.79	J ^2	2.0	0.57	ug/L	1		6020B	Total Recoverable
Barium	37		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.5		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	4.4	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	18000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.5	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	1200		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	14000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.42	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	120		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	120		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.11		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-18-F-A4-20230613-01

Lab Sample ID: 240-187232-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	29		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.9		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.57	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	4.1	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	19000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	94		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	94		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.053		0.050	0.024	mg/L	1		300.0-1993 R2.1	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 - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-06-F-A4-20230613-01

Lab Sample ID: 240-187232-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	72		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	3.2		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	3.4	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1200		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	13000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.091		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-12-F-A3-20230614-01

Lab Sample ID: 240-187232-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1900		100	57	ug/L	1		6010D	Total Recoverable
Calcium	84000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	3100		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	32000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	96		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	96		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	66		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.068		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	490		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-116-F-A3-20230614-01

Lab Sample ID: 240-187232-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1600		100	57	ug/L	1		6010D	Total Recoverable
Calcium	120000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	25000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	17000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	26		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.054		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	180		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	480		10	7.8	mg/L	1		SM 2540C	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 - App III & App IV

Job ID: 240-187232-1

Client Sample ID: EB-001-F-A3-20230614-01

Lab Sample ID: 240-187232-12

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-21-F-A4-20230612-01

Lab Sample ID: 240-187232-1

Date Collected: 06/12/23 10:53

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 18:39	1
Arsenic	5.7		5.0	0.75	ug/L		06/19/23 14:00	06/20/23 18:39	1
Barium	180		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 18:39	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 18:39	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:39	1
Chromium	4.7 J		5.0	1.2	ug/L		06/19/23 14:00	06/20/23 18:39	1
Cobalt	2.2		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 18:39	1
Lead	3.3		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 18:39	1
Lithium	5.9 J		8.0	1.7	ug/L		06/19/23 14:00	06/20/23 18:39	1
Magnesium	15000		1000	61	ug/L		06/19/23 14:00	06/20/23 18:39	1
Molybdenum	2.3 J		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 18:39	1
Potassium	2600		1000	220	ug/L		06/19/23 14:00	06/20/23 18:39	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 18:39	1
Sodium	28000		1000	330	ug/L		06/19/23 14:00	06/20/23 18:39	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:39	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		06/19/23 14:00	06/20/23 16:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	250		5.0	2.6	mg/L			06/20/23 17:27	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	250		5.0	2.6	mg/L			06/20/23 17:27	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 17:27	1
Fluoride (EPA 300.0-1993 R2.1)	0.087 F1		0.050	0.024	mg/L			07/07/23 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	0.650		0.300	0.306	1.00	0.358	pCi/L	06/21/23 10:14	07/14/23 14:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	47.1		30 - 110					06/21/23 10:14	07/14/23 14:16	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	1.67 G		0.984	0.996	1.00	1.43	pCi/L	06/21/23 10:17	07/10/23 16:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	47.1		30 - 110					06/21/23 10:17	07/10/23 16:00	1
Y Carrier	84.9		30 - 110					06/21/23 10:17	07/10/23 16:00	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-21-F-A4-20230612-01

Lab Sample ID: 240-187232-1

Date Collected: 06/12/23 10:53

Matrix: Water

Date Received: 06/17/23 08:00

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	2.32		1.03	1.04	5.00	1.43	pCi/L		07/17/23 12:05	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: DUP-001-BAC-21-F-A4-20230612-01

Lab Sample ID: 240-187232-2

Date Collected: 06/12/23 10:53

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 18:42	1
Arsenic	7.5		5.0	0.75	ug/L		06/19/23 14:00	06/20/23 18:42	1
Barium	190		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 18:42	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 18:42	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:42	1
Chromium	5.7		5.0	1.2	ug/L		06/19/23 14:00	06/20/23 18:42	1
Cobalt	2.5		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 18:42	1
Lead	4.2		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 18:42	1
Lithium	5.9 J		8.0	1.7	ug/L		06/19/23 14:00	06/20/23 18:42	1
Magnesium	16000		1000	61	ug/L		06/19/23 14:00	06/20/23 18:42	1
Molybdenum	1.2 J		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 18:42	1
Potassium	2700		1000	220	ug/L		06/19/23 14:00	06/20/23 18:42	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 18:42	1
Sodium	29000		1000	330	ug/L		06/19/23 14:00	06/20/23 18:42	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:42	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		06/19/23 14:00	06/20/23 16:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			06/20/23 17:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			06/20/23 17:31	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 17:31	1
Fluoride (EPA 300.0-1993 R2.1)	0.079		0.050	0.024	mg/L			07/07/23 20:41	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.419	U	0.463	0.465	1.00	0.750	pCi/L	06/21/23 10:14	07/14/23 14:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	37.2		30 - 110					06/21/23 10:14	07/14/23 14:16	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	1.47	U G	1.68	1.69	1.00	2.76	pCi/L	06/21/23 10:17	07/10/23 16:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	37.2		30 - 110					06/21/23 10:17	07/10/23 16:01	1
Y Carrier	84.5		30 - 110					06/21/23 10:17	07/10/23 16:01	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: DUP-001-BAC-21-F-A4-20230612-01

Lab Sample ID: 240-187232-2

Date Collected: 06/12/23 10:53

Matrix: Water

Date Received: 06/17/23 08:00

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	1.89	U	1.74	1.75	5.00	2.76	pCi/L		07/17/23 12:05	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-22-F-A4-20230612-01

Lab Sample ID: 240-187232-3

Date Collected: 06/12/23 12:34

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 18:45	1
Arsenic	2.5	J	5.0	0.75	ug/L		06/19/23 14:00	06/20/23 18:45	1
Barium	140		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 18:45	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 18:45	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:45	1
Chromium	1.9	J	5.0	1.2	ug/L		06/19/23 14:00	06/20/23 18:45	1
Cobalt	1.3		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 18:45	1
Lead	1.4		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 18:45	1
Lithium	3.6	J	8.0	1.7	ug/L		06/19/23 14:00	06/20/23 18:45	1
Magnesium	20000		1000	61	ug/L		06/19/23 14:00	06/20/23 18:45	1
Molybdenum	ND		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 18:45	1
Potassium	3000		1000	220	ug/L		06/19/23 14:00	06/20/23 18:45	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 18:45	1
Sodium	21000		1000	330	ug/L		06/19/23 14:00	06/20/23 18:45	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:45	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		06/19/23 14:00	06/20/23 16:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230		5.0	2.6	mg/L			06/20/23 17:35	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230		5.0	2.6	mg/L			06/20/23 17:35	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 17:35	1
Fluoride (EPA 300.0-1993 R2.1)	0.081		0.050	0.024	mg/L			07/07/23 21:03	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	0.345		0.172	0.174	1.00	0.213	pCi/L	06/21/23 10:14	07/14/23 14:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.6		30 - 110					06/21/23 10:14	07/14/23 14:16	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	0.470	U	0.544	0.545	1.00	0.894	pCi/L	06/21/23 10:17	07/10/23 16:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.6		30 - 110					06/21/23 10:17	07/10/23 16:01	1
Y Carrier	81.1		30 - 110					06/21/23 10:17	07/10/23 16:01	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-22-F-A4-20230612-01

Lab Sample ID: 240-187232-3

Date Collected: 06/12/23 12:34

Matrix: Water

Date Received: 06/17/23 08:00

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	0.815	U	0.571	0.572	5.00	0.894	pCi/L		07/17/23 12:05	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-23-F-A4-20230612-01

Lab Sample ID: 240-187232-4

Date Collected: 06/12/23 13:26

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 18:47	1
Arsenic	1.4	J	5.0	0.75	ug/L		06/19/23 14:00	06/20/23 18:47	1
Barium	120		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 18:47	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 18:47	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:47	1
Chromium	ND		5.0	1.2	ug/L		06/19/23 14:00	06/20/23 18:47	1
Cobalt	0.90	J	1.0	0.19	ug/L		06/19/23 14:00	06/20/23 18:47	1
Lead	ND		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 18:47	1
Lithium	ND		8.0	1.7	ug/L		06/19/23 14:00	06/20/23 18:47	1
Magnesium	14000		1000	61	ug/L		06/19/23 14:00	06/20/23 18:47	1
Molybdenum	ND		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 18:47	1
Potassium	1800		1000	220	ug/L		06/19/23 14:00	06/20/23 18:47	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 18:47	1
Sodium	17000		1000	330	ug/L		06/19/23 14:00	06/20/23 18:47	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:47	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		06/19/23 14:00	06/20/23 16:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230		5.0	2.6	mg/L			06/20/23 17:39	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230		5.0	2.6	mg/L			06/20/23 17:39	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 17:39	1
Fluoride (EPA 300.0-1993 R2.1)	0.13		0.050	0.024	mg/L			07/07/23 21:24	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	0.227		0.128	0.130	1.00	0.167	pCi/L	06/21/23 10:14	07/14/23 14:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.0		30 - 110					06/21/23 10:14	07/14/23 14:16	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	0.339	U	0.347	0.348	1.00	0.559	pCi/L	06/21/23 10:17	07/10/23 16:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.0		30 - 110					06/21/23 10:17	07/10/23 16:01	1
Y Carrier	86.4		30 - 110					06/21/23 10:17	07/10/23 16:01	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-23-F-A4-20230612-01

Lab Sample ID: 240-187232-4

Date Collected: 06/12/23 13:26

Matrix: Water

Date Received: 06/17/23 08:00

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	0.566		0.370	0.371	5.00	0.559	pCi/L		07/17/23 12:05	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-08-F-A4-20230612-01

Lab Sample ID: 240-187232-5

Date Collected: 06/12/23 14:23

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 18:55	1
Arsenic	2.2	J	5.0	0.75	ug/L		06/19/23 14:00	06/20/23 18:55	1
Barium	140		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 18:55	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 18:55	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:55	1
Chromium	ND		5.0	1.2	ug/L		06/19/23 14:00	06/20/23 18:55	1
Cobalt	2.1		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 18:55	1
Lead	ND		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 18:55	1
Lithium	2.2	J	8.0	1.7	ug/L		06/19/23 14:00	06/20/23 18:55	1
Magnesium	12000		1000	61	ug/L		06/19/23 14:00	06/20/23 18:55	1
Molybdenum	2.1	J	5.0	1.1	ug/L		06/19/23 14:00	06/20/23 18:55	1
Potassium	1500		1000	220	ug/L		06/19/23 14:00	06/20/23 18:55	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 18:55	1
Sodium	13000		1000	330	ug/L		06/19/23 14:00	06/20/23 18:55	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:55	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		06/19/23 14:00	06/20/23 16:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	210		5.0	2.6	mg/L			06/20/23 17:43	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	210		5.0	2.6	mg/L			06/20/23 17:43	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 17:43	1
Fluoride (EPA 300.0-1993 R2.1)	0.12		0.050	0.024	mg/L			07/07/23 21:46	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0425	U	0.0977	0.0978	1.00	0.179	pCi/L	06/21/23 10:14	07/17/23 09:29	1
Carrier	%Yield	Qualifier	Limits							
Ba Carrier	78.6		30 - 110							
								06/21/23 10:14	07/17/23 09:29	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.296	U	0.480	0.481	1.00	0.821	pCi/L	06/21/23 10:17	07/10/23 16:01	1
Carrier	%Yield	Qualifier	Limits							
Ba Carrier	78.6		30 - 110							
Y Carrier	84.5		30 - 110							
								06/21/23 10:17	07/10/23 16:01	1
								06/21/23 10:17	07/10/23 16:01	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-08-F-A4-20230612-01

Lab Sample ID: 240-187232-5

Date Collected: 06/12/23 14:23

Matrix: Water

Date Received: 06/17/23 08:00

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	0.338	U	0.490	0.491	5.00	0.821	pCi/L		07/17/23 12:05	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: EB-001-F-A4-20230612-01

Lab Sample ID: 240-187232-6

Date Collected: 06/12/23 15:00

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 18:58	1
Arsenic	ND		5.0	0.75	ug/L		06/19/23 14:00	06/20/23 18:58	1
Barium	ND		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 18:58	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 18:58	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:58	1
Chromium	ND		5.0	1.2	ug/L		06/19/23 14:00	06/20/23 18:58	1
Cobalt	ND		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 18:58	1
Lead	ND		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 18:58	1
Lithium	ND		8.0	1.7	ug/L		06/19/23 14:00	06/20/23 18:58	1
Magnesium	ND		1000	61	ug/L		06/19/23 14:00	06/20/23 18:58	1
Molybdenum	ND		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 18:58	1
Potassium	ND		1000	220	ug/L		06/19/23 14:00	06/20/23 18:58	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 18:58	1
Sodium	ND		1000	330	ug/L		06/19/23 14:00	06/20/23 18:58	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:58	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		06/19/23 14:00	06/20/23 16:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 17:47	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 17:47	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 17:47	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			07/07/23 22:08	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.00889	U	0.0560	0.0560	1.00	0.112	pCi/L	06/21/23 10:14	07/17/23 09:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.1		30 - 110					06/21/23 10:14	07/17/23 09:29	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.378	U	0.333	0.335	1.00	0.523	pCi/L	06/21/23 10:17	07/10/23 16:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.1		30 - 110					06/21/23 10:17	07/10/23 16:03	1
Y Carrier	84.5		30 - 110					06/21/23 10:17	07/10/23 16:03	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: EB-001-F-A4-20230612-01

Lab Sample ID: 240-187232-6

Date Collected: 06/12/23 15:00

Matrix: Water

Date Received: 06/17/23 08:00

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	0.386	U	0.338	0.340	5.00	0.523	pCi/L		07/17/23 12:05	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-07-F-A4-20230613-01

Lab Sample ID: 240-187232-7

Date Collected: 06/13/23 11:35

Matrix: Water

Date Received: 06/17/23 08:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.79	J ^2	2.0	0.57	ug/L		06/19/23 14:00	06/20/23 18:10	1
Arsenic	ND		5.0	0.75	ug/L		06/19/23 14:00	06/20/23 18:10	1
Barium	37		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 18:10	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 18:10	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:10	1
Chromium	ND		5.0	1.2	ug/L		06/19/23 14:00	06/20/23 18:10	1
Cobalt	1.5		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 18:10	1
Lead	ND		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 18:10	1
Lithium	4.4	J	8.0	1.7	ug/L		06/19/23 14:00	06/20/23 18:10	1
Magnesium	18000		1000	61	ug/L		06/19/23 14:00	06/20/23 18:10	1
Molybdenum	1.5	J	5.0	1.1	ug/L		06/19/23 14:00	06/20/23 18:10	1
Potassium	1200		1000	220	ug/L		06/19/23 14:00	06/20/23 18:10	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 18:10	1
Sodium	14000		1000	330	ug/L		06/19/23 14:00	06/20/23 18:10	1
Thallium	0.42	J	1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:10	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		06/19/23 14:00	06/20/23 16:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	120		5.0	2.6	mg/L			06/23/23 19:52	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	120		5.0	2.6	mg/L			06/23/23 19:52	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/23/23 19:52	1
Fluoride (EPA 300.0-1993 R2.1)	0.11		0.050	0.024	mg/L			07/07/23 23:13	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.00868	U	0.0512	0.0512	1.00	0.105	pCi/L	06/21/23 10:14	07/17/23 09:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.0		30 - 110					06/21/23 10:14	07/17/23 09:30	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	1.58		0.555	0.574	1.00	0.679	pCi/L	06/21/23 10:17	07/10/23 16:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.0		30 - 110					06/21/23 10:17	07/10/23 16:03	1
Y Carrier	75.9		30 - 110					06/21/23 10:17	07/10/23 16:03	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-07-F-A4-20230613-01

Lab Sample ID: 240-187232-7

Date Collected: 06/13/23 11:35

Matrix: Water

Date Received: 06/17/23 08:00

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	1.59		0.557	0.576	5.00	0.679	pCi/L		07/17/23 12:05	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-18-F-A4-20230613-01

Lab Sample ID: 240-187232-8

Date Collected: 06/13/23 13:18

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 19:01	1
Arsenic	ND		5.0	0.75	ug/L		06/19/23 14:00	06/20/23 19:01	1
Barium	29		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 19:01	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 19:01	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:01	1
Chromium	ND		5.0	1.2	ug/L		06/19/23 14:00	06/20/23 19:01	1
Cobalt	1.9		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 19:01	1
Lead	0.57 J		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 19:01	1
Lithium	4.1 J		8.0	1.7	ug/L		06/19/23 14:00	06/20/23 19:01	1
Magnesium	19000		1000	61	ug/L		06/19/23 14:00	06/20/23 19:01	1
Molybdenum	ND		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 19:01	1
Potassium	1300		1000	220	ug/L		06/19/23 14:00	06/20/23 19:01	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 19:01	1
Sodium	15000		1000	330	ug/L		06/19/23 14:00	06/20/23 19:01	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:01	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		06/19/23 14:00	06/20/23 17:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	94		5.0	2.6	mg/L			06/23/23 20:00	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	94		5.0	2.6	mg/L			06/23/23 20:00	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/23/23 20:00	1
Fluoride (EPA 300.0-1993 R2.1)	0.053		0.050	0.024	mg/L			07/11/23 02:18	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	0.178		0.122	0.123	1.00	0.160	pCi/L	06/21/23 10:14	07/17/23 09:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	69.5		30 - 110					06/21/23 10:14	07/17/23 09:31	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	-0.331	U G	0.613	0.613	1.00	1.20	pCi/L	06/21/23 10:17	07/10/23 16:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	69.5		30 - 110					06/21/23 10:17	07/10/23 16:04	1
Y Carrier	83.7		30 - 110					06/21/23 10:17	07/10/23 16:04	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-18-F-A4-20230613-01

Lab Sample ID: 240-187232-8

Date Collected: 06/13/23 13:18

Matrix: Water

Date Received: 06/17/23 08:00

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	-0.153	U	0.625	0.625	5.00	1.20	pCi/L		07/17/23 12:05	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-06-F-A4-20230613-01

Lab Sample ID: 240-187232-9

Date Collected: 06/13/23 14:06

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 19:03	1
Arsenic	ND		5.0	0.75	ug/L		06/19/23 14:00	06/20/23 19:03	1
Barium	72		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 19:03	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 19:03	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:03	1
Chromium	ND		5.0	1.2	ug/L		06/19/23 14:00	06/20/23 19:03	1
Cobalt	3.2		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 19:03	1
Lead	ND		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 19:03	1
Lithium	3.4 J		8.0	1.7	ug/L		06/19/23 14:00	06/20/23 19:03	1
Magnesium	22000		1000	61	ug/L		06/19/23 14:00	06/20/23 19:03	1
Molybdenum	ND		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 19:03	1
Potassium	1200		1000	220	ug/L		06/19/23 14:00	06/20/23 19:03	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 19:03	1
Sodium	13000		1000	330	ug/L		06/19/23 14:00	06/20/23 19:03	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:03	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		06/19/23 14:00	06/20/23 17:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	200		5.0	2.6	mg/L			06/23/23 20:04	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	200		5.0	2.6	mg/L			06/23/23 20:04	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/23/23 20:04	1
Fluoride (EPA 300.0-1993 R2.1)	0.091		0.050	0.024	mg/L			07/11/23 03:23	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	0.177		0.0960	0.0973	1.00	0.112	pCi/L	06/21/23 10:14	07/17/23 09:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.6		30 - 110					06/21/23 10:14	07/17/23 09:31	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	7.36		0.960	1.17	1.00	0.750	pCi/L	06/21/23 10:17	07/10/23 16:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.6		30 - 110					06/21/23 10:17	07/10/23 16:06	1
Y Carrier	86.0		30 - 110					06/21/23 10:17	07/10/23 16:06	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-06-F-A4-20230613-01

Lab Sample ID: 240-187232-9

Date Collected: 06/13/23 14:06

Matrix: Water

Date Received: 06/17/23 08:00

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	7.53		0.965	1.17	5.00	0.750	pCi/L		07/17/23 12:05	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-12-F-A3-20230614-01

Lab Sample ID: 240-187232-10

Date Collected: 06/14/23 12:10

Matrix: Water

Date Received: 06/17/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1900		100	57	ug/L		06/20/23 14:00	06/21/23 21:24	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	84000		1000	250	ug/L		06/20/23 14:00	06/21/23 13:35	1
Magnesium	20000		1000	61	ug/L		06/20/23 14:00	06/21/23 13:35	1
Potassium	3100		1000	220	ug/L		06/20/23 14:00	06/21/23 13:35	1
Sodium	32000		1000	330	ug/L		06/20/23 14:00	06/21/23 13:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	96		5.0	2.6	mg/L			06/23/23 20:07	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	96		5.0	2.6	mg/L			06/23/23 20:07	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/23/23 20:07	1
Chloride (EPA 300.0)	66		1.0	0.13	mg/L			07/11/23 04:49	1
Fluoride (EPA 300.0)	0.068		0.050	0.024	mg/L			07/11/23 04:49	1
Sulfate (EPA 300.0)	190		1.0	0.35	mg/L			07/11/23 04:49	1
Total Dissolved Solids (SM 2540C)	490		10	7.8	mg/L			06/21/23 15:44	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-116-F-A3-20230614-01

Lab Sample ID: 240-187232-11

Date Collected: 06/14/23 13:03

Matrix: Water

Date Received: 06/17/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1600		100	57	ug/L		06/20/23 14:00	06/21/23 21:28	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	120000		1000	250	ug/L		06/20/23 14:00	06/21/23 13:39	1
Magnesium	25000		1000	61	ug/L		06/20/23 14:00	06/21/23 13:39	1
Potassium	1900		1000	220	ug/L		06/20/23 14:00	06/21/23 13:39	1
Sodium	17000		1000	330	ug/L		06/20/23 14:00	06/21/23 13:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	160		5.0	2.6	mg/L			06/23/23 20:11	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	160		5.0	2.6	mg/L			06/23/23 20:11	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/23/23 20:11	1
Chloride (EPA 300.0)	26		1.0	0.13	mg/L			07/11/23 05:55	1
Fluoride (EPA 300.0)	0.054		0.050	0.024	mg/L			07/11/23 05:55	1
Sulfate (EPA 300.0)	180		1.0	0.35	mg/L			07/11/23 05:55	1
Total Dissolved Solids (SM 2540C)	480		10	7.8	mg/L			06/21/23 15:44	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: EB-001-F-A3-20230614-01

Lab Sample ID: 240-187232-12

Date Collected: 06/14/23 15:20

Matrix: Water

Date Received: 06/17/23 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		06/20/23 14:00	06/21/23 21:32	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		06/20/23 14:00	06/21/23 13:44	1
Magnesium	ND		1000	61	ug/L		06/20/23 14:00	06/21/23 13:44	1
Potassium	ND		1000	220	ug/L		06/20/23 14:00	06/21/23 13:44	1
Sodium	ND		1000	330	ug/L		06/20/23 14:00	06/21/23 13:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/23/23 20:15	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/23/23 20:15	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/23/23 20:15	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			07/11/23 06:16	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			07/11/23 06:16	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			07/11/23 06:16	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			06/21/23 15:44	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (30-110)	
240-187232-1	BAC-21-F-A4-20230612-01	47.1	
240-187232-2	DUP-001-BAC-21-F-A4-20230612-01	37.2	
240-187232-3	BAC-22-F-A4-20230612-01	91.6	
240-187232-4	BAC-23-F-A4-20230612-01	83.0	
240-187232-5	BAC-08-F-A4-20230612-01	78.6	
240-187232-6	EB-001-F-A4-20230612-01	92.1	
240-187232-7	BAC-07-F-A4-20230613-01	84.0	
240-187232-7 MS	BAC-07-F-A4-20230613-01	80.9	
240-187232-7 MSD	BAC-07-F-A4-20230613-01	84.0	
240-187232-8	BAC-18-F-A4-20230613-01	69.5	
240-187232-9	BAC-06-F-A4-20230613-01	79.6	
LCS 160-616969/2-A	Lab Control Sample	97.2	
MB 160-616969/1-A	Method Blank	89.8	

Tracer/Carrier Legend
Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (30-110)	Y (30-110)
240-187232-1	BAC-21-F-A4-20230612-01	47.1	84.9
240-187232-2	DUP-001-BAC-21-F-A4-20230612-01	37.2	84.5
240-187232-3	BAC-22-F-A4-20230612-01	91.6	81.1
240-187232-4	BAC-23-F-A4-20230612-01	83.0	86.4
240-187232-5	BAC-08-F-A4-20230612-01	78.6	84.5
240-187232-6	EB-001-F-A4-20230612-01	92.1	84.5
240-187232-7	BAC-07-F-A4-20230613-01	84.0	75.9
240-187232-7 MS	BAC-07-F-A4-20230613-01	80.9	77.8
240-187232-7 MSD	BAC-07-F-A4-20230613-01	84.0	80.0
240-187232-8	BAC-18-F-A4-20230613-01	69.5	83.7
240-187232-9	BAC-06-F-A4-20230613-01	79.6	86.0
LCS 160-616970/2-A	Lab Control Sample	97.2	81.1
MB 160-616970/1-A	Method Blank	89.8	80.0

Tracer/Carrier Legend
Ba = Ba Carrier
Y = Y Carrier

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-577826/1-A
Matrix: Water
Analysis Batch: 578108

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 577826

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		06/20/23 14:00	06/21/23 20:24	1

Lab Sample ID: LCS 240-577826/2-A
Matrix: Water
Analysis Batch: 578108

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 577826

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 240-577692/1-A
Matrix: Water
Analysis Batch: 577918

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 577692

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		06/19/23 14:00	06/20/23 18:05	1
Arsenic	ND		5.0	0.75	ug/L		06/19/23 14:00	06/20/23 18:05	1
Barium	ND		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 18:05	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 18:05	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:05	1
Chromium	ND		5.0	1.2	ug/L		06/19/23 14:00	06/20/23 18:05	1
Cobalt	ND		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 18:05	1
Lead	ND		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 18:05	1
Lithium	ND		8.0	1.7	ug/L		06/19/23 14:00	06/20/23 18:05	1
Magnesium	ND		1000	61	ug/L		06/19/23 14:00	06/20/23 18:05	1
Molybdenum	ND		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 18:05	1
Potassium	ND		1000	220	ug/L		06/19/23 14:00	06/20/23 18:05	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 18:05	1
Sodium	ND		1000	330	ug/L		06/19/23 14:00	06/20/23 18:05	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 18:05	1

Lab Sample ID: LCS 240-577692/2-A
Matrix: Water
Analysis Batch: 577918

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 577692

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	105		ug/L		105	80 - 120
Arsenic	1000	959		ug/L		96	80 - 120
Barium	1000	922		ug/L		92	80 - 120
Beryllium	500	483		ug/L		97	80 - 120
Cadmium	500	469		ug/L		94	80 - 120
Chromium	500	481		ug/L		96	80 - 120
Cobalt	500	476		ug/L		95	80 - 120
Lead	500	476		ug/L		95	80 - 120
Lithium	500	466		ug/L		93	80 - 120
Magnesium	25000	24600		ug/L		98	80 - 120
Molybdenum	500	479		ug/L		96	80 - 120
Potassium	25000	24600		ug/L		98	80 - 120

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

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

Lab Sample ID: LCS 240-577692/2-A
Matrix: Water
Analysis Batch: 577918

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 577692

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Selenium	1000	920		ug/L		92	80 - 120
Sodium	25000	24700		ug/L		99	80 - 120
Thallium	1000	938		ug/L		94	80 - 120

Lab Sample ID: 240-187232-7 MS
Matrix: Water
Analysis Batch: 577918

Client Sample ID: BAC-07-F-A4-20230613-01
Prep Type: Total Recoverable
Prep Batch: 577692

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.79	J ^2	100	101		ug/L		100	80 - 120
Arsenic	ND		1000	919		ug/L		92	80 - 120
Barium	37		1000	918		ug/L		88	80 - 120
Beryllium	ND		500	437		ug/L		87	80 - 120
Cadmium	ND		500	442		ug/L		88	80 - 120
Chromium	ND		500	462		ug/L		92	80 - 120
Cobalt	1.5		500	451		ug/L		90	80 - 120
Lead	ND		500	457		ug/L		91	80 - 120
Lithium	4.4	J	500	432		ug/L		85	80 - 120
Magnesium	18000		25000	42300		ug/L		97	80 - 120
Molybdenum	1.5	J	500	463		ug/L		92	80 - 120
Potassium	1200		25000	24800		ug/L		94	80 - 120
Selenium	ND		1000	874		ug/L		87	80 - 120
Sodium	14000		25000	38300		ug/L		97	80 - 120
Thallium	0.42	J	1000	898		ug/L		90	80 - 120

Lab Sample ID: 240-187232-7 MSD
Matrix: Water
Analysis Batch: 577918

Client Sample ID: BAC-07-F-A4-20230613-01
Prep Type: Total Recoverable
Prep Batch: 577692

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Antimony	0.79	J ^2	100	91.8		ug/L		91	80 - 120	9	20
Arsenic	ND		1000	834		ug/L		83	80 - 120	10	20
Barium	37		1000	838		ug/L		80	80 - 120	9	20
Beryllium	ND		500	407		ug/L		81	80 - 120	7	20
Cadmium	ND		500	404		ug/L		81	80 - 120	9	20
Chromium	ND		500	418		ug/L		84	80 - 120	10	20
Cobalt	1.5		500	408		ug/L		81	80 - 120	10	20
Lead	ND		500	413		ug/L		83	80 - 120	10	20
Lithium	4.4	J	500	403		ug/L		80	80 - 120	7	20
Magnesium	18000		25000	39000		ug/L		83	80 - 120	8	20
Molybdenum	1.5	J	500	421		ug/L		84	80 - 120	9	20
Potassium	1200		25000	22800		ug/L		86	80 - 120	9	20
Selenium	ND		1000	796		ug/L		80	80 - 120	9	20
Sodium	14000		25000	35200		ug/L		85	80 - 120	8	20
Thallium	0.42	J	1000	811		ug/L		81	80 - 120	10	20

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

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

Lab Sample ID: MB 240-577826/1-A
Matrix: Water
Analysis Batch: 578100

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 577826

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Calcium	ND		1000	250	ug/L		06/20/23 14:00	06/21/23 12:22	1
Magnesium	ND		1000	61	ug/L		06/20/23 14:00	06/21/23 12:22	1
Potassium	ND		1000	220	ug/L		06/20/23 14:00	06/21/23 12:22	1
Sodium	ND		1000	330	ug/L		06/20/23 14:00	06/21/23 12:22	1

Lab Sample ID: LCS 240-577826/3-A
Matrix: Water
Analysis Batch: 578100

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 577826

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Magnesium	25000	25400		ug/L		102	80 - 120
Potassium	25000	25300		ug/L		101	80 - 120
Sodium	25000	25100		ug/L		100	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-577694/1-A
Matrix: Water
Analysis Batch: 577919

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 577694

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.20	0.13	ug/L		06/19/23 14:00	06/20/23 16:24	1

Lab Sample ID: LCS 240-577694/2-A
Matrix: Water
Analysis Batch: 577919

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 577694

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits

Lab Sample ID: 240-187232-7 MS
Matrix: Water
Analysis Batch: 577919

Client Sample ID: BAC-07-F-A4-20230613-01
Prep Type: Total/NA
Prep Batch: 577694

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits

Lab Sample ID: 240-187232-7 MSD
Matrix: Water
Analysis Batch: 577919

Client Sample ID: BAC-07-F-A4-20230613-01
Prep Type: Total/NA
Prep Batch: 577694

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-578219/30
Matrix: Water
Analysis Batch: 578219

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			06/20/23 16:17	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			06/20/23 16:17	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			06/20/23 16:17	1

Lab Sample ID: LCS 240-578219/29
Matrix: Water
Analysis Batch: 578219

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	86.3		mg/L		107	86 - 123

Lab Sample ID: MB 240-578607/4
Matrix: Water
Analysis Batch: 578607

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			06/23/23 19:49	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			06/23/23 19:49	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			06/23/23 19:49	1

Lab Sample ID: LCS 240-578607/3
Matrix: Water
Analysis Batch: 578607

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	80.2		mg/L		99	86 - 123

Lab Sample ID: 240-187232-7 DU
Matrix: Water
Analysis Batch: 578607

Client Sample ID: BAC-07-F-A4-20230613-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	120		121		mg/L		0.6	20
Bicarbonate Alkalinity as CaCO3	120		121		mg/L		0.6	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-580125/3
Matrix: Water
Analysis Batch: 580125

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			07/11/23 01:34	1
Fluoride	ND		0.050	0.024	mg/L			07/11/23 01:34	1
Sulfate	ND		1.0	0.35	mg/L			07/11/23 01:34	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 240-580125/4
 Matrix: Water
 Analysis Batch: 580125

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	48.7		mg/L		97	90 - 110
Fluoride	2.50	2.51		mg/L		100	90 - 110
Sulfate	50.0	49.2		mg/L		98	90 - 110

Lab Sample ID: 240-187232-8 MS
 Matrix: Water
 Analysis Batch: 580125

Client Sample ID: BAC-18-F-A4-20230613-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25		50.0	77.7		mg/L		106	80 - 120
Fluoride	0.053		2.50	2.88		mg/L		113	80 - 120

Lab Sample ID: 240-187232-8 MSD
 Matrix: Water
 Analysis Batch: 580125

Client Sample ID: BAC-18-F-A4-20230613-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	25		50.0	77.9		mg/L		107	80 - 120	0	15
Fluoride	0.053		2.50	2.91		mg/L		114	80 - 120	1	15

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-579935/3
 Matrix: Water
 Analysis Batch: 579935

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			07/07/23 18:53	1

Lab Sample ID: LCS 240-579935/4
 Matrix: Water
 Analysis Batch: 579935

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.56		mg/L		102	90 - 110

Lab Sample ID: 240-187232-1 MS
 Matrix: Water
 Analysis Batch: 579935

Client Sample ID: BAC-21-F-A4-20230612-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.087	F1	2.50	3.36	F1	mg/L		131	80 - 120

Lab Sample ID: 240-187232-1 MSD
 Matrix: Water
 Analysis Batch: 579935

Client Sample ID: BAC-21-F-A4-20230612-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.087	F1	2.50	3.37	F1	mg/L		131	80 - 120	0	15

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-187232-7 MS
 Matrix: Water
 Analysis Batch: 579935

Client Sample ID: BAC-07-F-A4-20230613-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.11		2.50	2.97		mg/L		115	80 - 120

Lab Sample ID: 240-187232-7 MSD
 Matrix: Water
 Analysis Batch: 579935

Client Sample ID: BAC-07-F-A4-20230613-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.11		2.50	2.99		mg/L		116	80 - 120	1	15

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

Lab Sample ID: MB 240-578050/1
 Matrix: Water
 Analysis Batch: 578050

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			06/21/23 15:44	1

Lab Sample ID: LCS 240-578050/2
 Matrix: Water
 Analysis Batch: 578050

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	518	488		mg/L		94	80 - 120

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-616969/1-A
 Matrix: Water
 Analysis Batch: 620350

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 616969

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.04601	U	0.0784	0.0785	1.00	0.138	pCi/L	06/21/23 10:14	07/14/23 14:16	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.8		30 - 110					06/21/23 10:14	07/14/23 14:16	1

Lab Sample ID: LCS 160-616969/2-A
 Matrix: Water
 Analysis Batch: 620350

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 616969

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	11.3	9.997		1.09	1.00	0.145	pCi/L	88	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	97.2		30 - 110						

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: 240-187232-7 MS
Matrix: Water
Analysis Batch: 620395

Client Sample ID: BAC-07-F-A4-20230613-01
Prep Type: Total/NA
Prep Batch: 616969

Analyte	Sample	Sample	Spike	MS	MS	Total	RL	MDC	Unit	%Rec	%Rec	Limits
	Result	Qual		Result	Qual							
Radium-226	0.00868	U	11.3	10.43		1.12	1.00	0.143	pCi/L	92	60 - 140	
MS MS												
Carrier	%Yield	Qualifier	Limits									
Ba Carrier	80.9		30 - 110									

Lab Sample ID: 240-187232-7 MSD
Matrix: Water
Analysis Batch: 620395

Client Sample ID: BAC-07-F-A4-20230613-01
Prep Type: Total/NA
Prep Batch: 616969

Analyte	Sample	Sample	Spike	MSD	MSD	Total	RL	MDC	Unit	%Rec	%Rec	RER	Limit
	Result	Qual		Result	Qual								
Radium-226	0.00868	U	11.3	10.62		1.14	1.00	0.0981	pCi/L	94	60 - 140	0.08	1
MSD MSD													
Carrier	%Yield	Qualifier	Limits										
Ba Carrier	84.0		30 - 110										

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-616970/1-A
Matrix: Water
Analysis Batch: 619638

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 616970

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-228	-0.04969	U	0.305	0.305	1.00	0.589	pCi/L	06/21/23 10:17	07/10/23 16:00	1
MB MB										
Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac				
Ba Carrier	89.8		30 - 110	06/21/23 10:17	07/10/23 16:00	1				
Y Carrier	80.0		30 - 110	06/21/23 10:17	07/10/23 16:00	1				

Lab Sample ID: LCS 160-616970/2-A
Matrix: Water
Analysis Batch: 619638

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 616970

Analyte	Spike	LCS	LCS	Total	RL	MDC	Unit	%Rec	%Rec	Limits
		Result	Qual							
Radium-228	8.05	9.804		1.34	1.00	0.608	pCi/L	122	75 - 125	
LCS LCS										
Carrier	%Yield	Qualifier	Limits							
Ba Carrier	97.2		30 - 110							
Y Carrier	81.1		30 - 110							

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

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

Lab Sample ID: 240-187232-7 MS

Matrix: Water

Analysis Batch: 619619

Client Sample ID: BAC-07-F-A4-20230613-01

Prep Type: Total/NA

Prep Batch: 616970

Analyte	Sample	Sample	Spike Added	MS	MS	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
	Result	Qual		Result	Qual						
Radium-228	1.58		8.06	9.099		1.36	1.00	0.686	pCi/L	93	60 - 140
MS MS											
Carrier	%Yield	Qualifier	Limits								
Ba Carrier	80.9		30 - 110								
Y Carrier	77.8		30 - 110								

Lab Sample ID: 240-187232-7 MSD

Matrix: Water

Analysis Batch: 619619

Client Sample ID: BAC-07-F-A4-20230613-01

Prep Type: Total/NA

Prep Batch: 616970

Analyte	Sample	Sample	Spike Added	MSD	MSD	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
	Result	Qual		Result	Qual								
Radium-228	1.58		8.01	8.935		1.30	1.00	0.536	pCi/L	92	60 - 140	0.06	1
MSD MSD													
Carrier	%Yield	Qualifier	Limits										
Ba Carrier	84.0		30 - 110										
Y Carrier	80.0		30 - 110										

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Metals

Prep Batch: 577692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-1	BAC-21-F-A4-20230612-01	Total Recoverable	Water	3005A	
240-187232-2	DUP-001-BAC-21-F-A4-20230612-01	Total Recoverable	Water	3005A	
240-187232-3	BAC-22-F-A4-20230612-01	Total Recoverable	Water	3005A	
240-187232-4	BAC-23-F-A4-20230612-01	Total Recoverable	Water	3005A	
240-187232-5	BAC-08-F-A4-20230612-01	Total Recoverable	Water	3005A	
240-187232-6	EB-001-F-A4-20230612-01	Total Recoverable	Water	3005A	
240-187232-7	BAC-07-F-A4-20230613-01	Total Recoverable	Water	3005A	
240-187232-8	BAC-18-F-A4-20230613-01	Total Recoverable	Water	3005A	
240-187232-9	BAC-06-F-A4-20230613-01	Total Recoverable	Water	3005A	
MB 240-577692/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-577692/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-187232-7 MS	BAC-07-F-A4-20230613-01	Total Recoverable	Water	3005A	
240-187232-7 MSD	BAC-07-F-A4-20230613-01	Total Recoverable	Water	3005A	

Prep Batch: 577694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-1	BAC-21-F-A4-20230612-01	Total/NA	Water	7470A	
240-187232-2	DUP-001-BAC-21-F-A4-20230612-01	Total/NA	Water	7470A	
240-187232-3	BAC-22-F-A4-20230612-01	Total/NA	Water	7470A	
240-187232-4	BAC-23-F-A4-20230612-01	Total/NA	Water	7470A	
240-187232-5	BAC-08-F-A4-20230612-01	Total/NA	Water	7470A	
240-187232-6	EB-001-F-A4-20230612-01	Total/NA	Water	7470A	
240-187232-7	BAC-07-F-A4-20230613-01	Total/NA	Water	7470A	
240-187232-8	BAC-18-F-A4-20230613-01	Total/NA	Water	7470A	
240-187232-9	BAC-06-F-A4-20230613-01	Total/NA	Water	7470A	
MB 240-577694/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-577694/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-187232-7 MS	BAC-07-F-A4-20230613-01	Total/NA	Water	7470A	
240-187232-7 MSD	BAC-07-F-A4-20230613-01	Total/NA	Water	7470A	

Prep Batch: 577826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-10	BAC-12-F-A3-20230614-01	Total Recoverable	Water	3005A	
240-187232-11	BAC-116-F-A3-20230614-01	Total Recoverable	Water	3005A	
240-187232-12	EB-001-F-A3-20230614-01	Total Recoverable	Water	3005A	
MB 240-577826/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-577826/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-577826/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 577918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-1	BAC-21-F-A4-20230612-01	Total Recoverable	Water	6020B	577692
240-187232-2	DUP-001-BAC-21-F-A4-20230612-01	Total Recoverable	Water	6020B	577692
240-187232-3	BAC-22-F-A4-20230612-01	Total Recoverable	Water	6020B	577692
240-187232-4	BAC-23-F-A4-20230612-01	Total Recoverable	Water	6020B	577692
240-187232-5	BAC-08-F-A4-20230612-01	Total Recoverable	Water	6020B	577692
240-187232-6	EB-001-F-A4-20230612-01	Total Recoverable	Water	6020B	577692
240-187232-7	BAC-07-F-A4-20230613-01	Total Recoverable	Water	6020B	577692
240-187232-8	BAC-18-F-A4-20230613-01	Total Recoverable	Water	6020B	577692
240-187232-9	BAC-06-F-A4-20230613-01	Total Recoverable	Water	6020B	577692
MB 240-577692/1-A	Method Blank	Total Recoverable	Water	6020B	577692

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Metals (Continued)

Analysis Batch: 577918 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-577692/2-A	Lab Control Sample	Total Recoverable	Water	6020B	577692
240-187232-7 MS	BAC-07-F-A4-20230613-01	Total Recoverable	Water	6020B	577692
240-187232-7 MSD	BAC-07-F-A4-20230613-01	Total Recoverable	Water	6020B	577692

Analysis Batch: 577919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-1	BAC-21-F-A4-20230612-01	Total/NA	Water	7470A	577694
240-187232-2	DUP-001-BAC-21-F-A4-20230612-01	Total/NA	Water	7470A	577694
240-187232-3	BAC-22-F-A4-20230612-01	Total/NA	Water	7470A	577694
240-187232-4	BAC-23-F-A4-20230612-01	Total/NA	Water	7470A	577694
240-187232-5	BAC-08-F-A4-20230612-01	Total/NA	Water	7470A	577694
240-187232-6	EB-001-F-A4-20230612-01	Total/NA	Water	7470A	577694
240-187232-7	BAC-07-F-A4-20230613-01	Total/NA	Water	7470A	577694
240-187232-8	BAC-18-F-A4-20230613-01	Total/NA	Water	7470A	577694
240-187232-9	BAC-06-F-A4-20230613-01	Total/NA	Water	7470A	577694
MB 240-577694/1-A	Method Blank	Total/NA	Water	7470A	577694
LCS 240-577694/2-A	Lab Control Sample	Total/NA	Water	7470A	577694
240-187232-7 MS	BAC-07-F-A4-20230613-01	Total/NA	Water	7470A	577694
240-187232-7 MSD	BAC-07-F-A4-20230613-01	Total/NA	Water	7470A	577694

Analysis Batch: 578100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-10	BAC-12-F-A3-20230614-01	Total Recoverable	Water	6020B	577826
240-187232-11	BAC-116-F-A3-20230614-01	Total Recoverable	Water	6020B	577826
240-187232-12	EB-001-F-A3-20230614-01	Total Recoverable	Water	6020B	577826
MB 240-577826/1-A	Method Blank	Total Recoverable	Water	6020B	577826
LCS 240-577826/3-A	Lab Control Sample	Total Recoverable	Water	6020B	577826

Analysis Batch: 578108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-10	BAC-12-F-A3-20230614-01	Total Recoverable	Water	6010D	577826
240-187232-11	BAC-116-F-A3-20230614-01	Total Recoverable	Water	6010D	577826
240-187232-12	EB-001-F-A3-20230614-01	Total Recoverable	Water	6010D	577826
MB 240-577826/1-A	Method Blank	Total Recoverable	Water	6010D	577826
LCS 240-577826/2-A	Lab Control Sample	Total Recoverable	Water	6010D	577826

General Chemistry

Analysis Batch: 578050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-10	BAC-12-F-A3-20230614-01	Total/NA	Water	SM 2540C	
240-187232-11	BAC-116-F-A3-20230614-01	Total/NA	Water	SM 2540C	
240-187232-12	EB-001-F-A3-20230614-01	Total/NA	Water	SM 2540C	
MB 240-578050/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-578050/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 578219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-1	BAC-21-F-A4-20230612-01	Total/NA	Water	2320B-1997	
240-187232-2	DUP-001-BAC-21-F-A4-20230612-01	Total/NA	Water	2320B-1997	
240-187232-3	BAC-22-F-A4-20230612-01	Total/NA	Water	2320B-1997	

Eurofins Cleveland

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

General Chemistry (Continued)

Analysis Batch: 578219 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-4	BAC-23-F-A4-20230612-01	Total/NA	Water	2320B-1997	
240-187232-5	BAC-08-F-A4-20230612-01	Total/NA	Water	2320B-1997	
240-187232-6	EB-001-F-A4-20230612-01	Total/NA	Water	2320B-1997	
MB 240-578219/30	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-578219/29	Lab Control Sample	Total/NA	Water	2320B-1997	

Analysis Batch: 578607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-7	BAC-07-F-A4-20230613-01	Total/NA	Water	2320B-1997	
240-187232-8	BAC-18-F-A4-20230613-01	Total/NA	Water	2320B-1997	
240-187232-9	BAC-06-F-A4-20230613-01	Total/NA	Water	2320B-1997	
240-187232-10	BAC-12-F-A3-20230614-01	Total/NA	Water	2320B-1997	
240-187232-11	BAC-116-F-A3-20230614-01	Total/NA	Water	2320B-1997	
240-187232-12	EB-001-F-A3-20230614-01	Total/NA	Water	2320B-1997	
MB 240-578607/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-578607/3	Lab Control Sample	Total/NA	Water	2320B-1997	
240-187232-7 DU	BAC-07-F-A4-20230613-01	Total/NA	Water	2320B-1997	

Analysis Batch: 579935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-1	BAC-21-F-A4-20230612-01	Total/NA	Water	300.0-1993 R2.1	
240-187232-2	DUP-001-BAC-21-F-A4-20230612-01	Total/NA	Water	300.0-1993 R2.1	
240-187232-3	BAC-22-F-A4-20230612-01	Total/NA	Water	300.0-1993 R2.1	
240-187232-4	BAC-23-F-A4-20230612-01	Total/NA	Water	300.0-1993 R2.1	
240-187232-5	BAC-08-F-A4-20230612-01	Total/NA	Water	300.0-1993 R2.1	
240-187232-6	EB-001-F-A4-20230612-01	Total/NA	Water	300.0-1993 R2.1	
240-187232-7	BAC-07-F-A4-20230613-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-579935/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-579935/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-187232-1 MS	BAC-21-F-A4-20230612-01	Total/NA	Water	300.0-1993 R2.1	
240-187232-1 MSD	BAC-21-F-A4-20230612-01	Total/NA	Water	300.0-1993 R2.1	
240-187232-7 MS	BAC-07-F-A4-20230613-01	Total/NA	Water	300.0-1993 R2.1	
240-187232-7 MSD	BAC-07-F-A4-20230613-01	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 580125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-8	BAC-18-F-A4-20230613-01	Total/NA	Water	300.0-1993 R2.1	
240-187232-9	BAC-06-F-A4-20230613-01	Total/NA	Water	300.0-1993 R2.1	
240-187232-10	BAC-12-F-A3-20230614-01	Total/NA	Water	300.0	
240-187232-11	BAC-116-F-A3-20230614-01	Total/NA	Water	300.0	
240-187232-12	EB-001-F-A3-20230614-01	Total/NA	Water	300.0	
MB 240-580125/3	Method Blank	Total/NA	Water	300.0	
LCS 240-580125/4	Lab Control Sample	Total/NA	Water	300.0	
240-187232-8 MS	BAC-18-F-A4-20230613-01	Total/NA	Water	300.0	
240-187232-8 MSD	BAC-18-F-A4-20230613-01	Total/NA	Water	300.0	

Rad

Prep Batch: 616969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-1	BAC-21-F-A4-20230612-01	Total/NA	Water	PrecSep-21	

Eurofins Cleveland

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Rad (Continued)

Prep Batch: 616969 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-2	DUP-001-BAC-21-F-A4-20230612-01	Total/NA	Water	PrecSep-21	
240-187232-3	BAC-22-F-A4-20230612-01	Total/NA	Water	PrecSep-21	
240-187232-4	BAC-23-F-A4-20230612-01	Total/NA	Water	PrecSep-21	
240-187232-5	BAC-08-F-A4-20230612-01	Total/NA	Water	PrecSep-21	
240-187232-6	EB-001-F-A4-20230612-01	Total/NA	Water	PrecSep-21	
240-187232-7	BAC-07-F-A4-20230613-01	Total/NA	Water	PrecSep-21	
240-187232-8	BAC-18-F-A4-20230613-01	Total/NA	Water	PrecSep-21	
240-187232-9	BAC-06-F-A4-20230613-01	Total/NA	Water	PrecSep-21	
MB 160-616969/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-616969/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
240-187232-7 MS	BAC-07-F-A4-20230613-01	Total/NA	Water	PrecSep-21	
240-187232-7 MSD	BAC-07-F-A4-20230613-01	Total/NA	Water	PrecSep-21	

Prep Batch: 616970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187232-1	BAC-21-F-A4-20230612-01	Total/NA	Water	PrecSep_0	
240-187232-2	DUP-001-BAC-21-F-A4-20230612-01	Total/NA	Water	PrecSep_0	
240-187232-3	BAC-22-F-A4-20230612-01	Total/NA	Water	PrecSep_0	
240-187232-4	BAC-23-F-A4-20230612-01	Total/NA	Water	PrecSep_0	
240-187232-5	BAC-08-F-A4-20230612-01	Total/NA	Water	PrecSep_0	
240-187232-6	EB-001-F-A4-20230612-01	Total/NA	Water	PrecSep_0	
240-187232-7	BAC-07-F-A4-20230613-01	Total/NA	Water	PrecSep_0	
240-187232-8	BAC-18-F-A4-20230613-01	Total/NA	Water	PrecSep_0	
240-187232-9	BAC-06-F-A4-20230613-01	Total/NA	Water	PrecSep_0	
MB 160-616970/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-616970/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
240-187232-7 MS	BAC-07-F-A4-20230613-01	Total/NA	Water	PrecSep_0	
240-187232-7 MSD	BAC-07-F-A4-20230613-01	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-21-F-A4-20230612-01

Lab Sample ID: 240-187232-1

Date Collected: 06/12/23 10:53

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577692	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 18:39
Total/NA	Prep	7470A			577694	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 16:49
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 17:27
Total/NA	Analysis	300.0-1993 R2.1		1	579935	ALT	EET CLE	07/07/23 19:36
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620350	SCB	EET SL	07/14/23 14:16
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619638	SCB	EET SL	07/10/23 16:00
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 12:05

Client Sample ID: DUP-001-BAC-21-F-A4-20230612-01

Lab Sample ID: 240-187232-2

Date Collected: 06/12/23 10:53

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577692	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 18:42
Total/NA	Prep	7470A			577694	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 16:51
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 17:31
Total/NA	Analysis	300.0-1993 R2.1		1	579935	ALT	EET CLE	07/07/23 20:41
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620350	SCB	EET SL	07/14/23 14:16
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619638	SCB	EET SL	07/10/23 16:01
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 12:05

Client Sample ID: BAC-22-F-A4-20230612-01

Lab Sample ID: 240-187232-3

Date Collected: 06/12/23 12:34

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577692	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 18:45
Total/NA	Prep	7470A			577694	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 16:53
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 17:35
Total/NA	Analysis	300.0-1993 R2.1		1	579935	ALT	EET CLE	07/07/23 21:03
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620350	SCB	EET SL	07/14/23 14:16
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619638	SCB	EET SL	07/10/23 16:01

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-22-F-A4-20230612-01

Lab Sample ID: 240-187232-3

Date Collected: 06/12/23 12:34

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 12:05

Client Sample ID: BAC-23-F-A4-20230612-01

Lab Sample ID: 240-187232-4

Date Collected: 06/12/23 13:26

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577692	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 18:47
Total/NA	Prep	7470A			577694	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 16:55
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 17:39
Total/NA	Analysis	300.0-1993 R2.1		1	579935	ALT	EET CLE	07/07/23 21:24
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620350	SCB	EET SL	07/14/23 14:16
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619638	SCB	EET SL	07/10/23 16:01
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 12:05

Client Sample ID: BAC-08-F-A4-20230612-01

Lab Sample ID: 240-187232-5

Date Collected: 06/12/23 14:23

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577692	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 18:55
Total/NA	Prep	7470A			577694	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 16:57
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 17:43
Total/NA	Analysis	300.0-1993 R2.1		1	579935	ALT	EET CLE	07/07/23 21:46
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620395	SCB	EET SL	07/17/23 09:29
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619638	SCB	EET SL	07/10/23 16:01
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 12:05

Client Sample ID: EB-001-F-A4-20230612-01

Lab Sample ID: 240-187232-6

Date Collected: 06/12/23 15:00

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577692	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 18:58
Total/NA	Prep	7470A			577694	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 16:59

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: EB-001-F-A4-20230612-01

Lab Sample ID: 240-187232-6

Date Collected: 06/12/23 15:00

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 17:47
Total/NA	Analysis	300.0-1993 R2.1		1	579935	ALT	EET CLE	07/07/23 22:08
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620395	SCB	EET SL	07/17/23 09:29
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619619	SCB	EET SL	07/10/23 16:03
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 12:05

Client Sample ID: BAC-07-F-A4-20230613-01

Lab Sample ID: 240-187232-7

Date Collected: 06/13/23 11:35

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577692	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 18:10
Total/NA	Prep	7470A			577694	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 16:28
Total/NA	Analysis	2320B-1997		1	578607	JWW	EET CLE	06/23/23 19:52
Total/NA	Analysis	300.0-1993 R2.1		1	579935	ALT	EET CLE	07/07/23 23:13
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620395	SCB	EET SL	07/17/23 09:30
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619619	SCB	EET SL	07/10/23 16:03
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 12:05

Client Sample ID: BAC-18-F-A4-20230613-01

Lab Sample ID: 240-187232-8

Date Collected: 06/13/23 13:18

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577692	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 19:01
Total/NA	Prep	7470A			577694	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 17:01
Total/NA	Analysis	2320B-1997		1	578607	JWW	EET CLE	06/23/23 20:00
Total/NA	Analysis	300.0-1993 R2.1		1	580125	ALT	EET CLE	07/11/23 02:18
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620395	SCB	EET SL	07/17/23 09:31
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619619	SCB	EET SL	07/10/23 16:04
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 12:05

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: BAC-06-F-A4-20230613-01

Lab Sample ID: 240-187232-9

Date Collected: 06/13/23 14:06

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577692	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 19:03
Total/NA	Prep	7470A			577694	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 17:03
Total/NA	Analysis	2320B-1997		1	578607	JWW	EET CLE	06/23/23 20:04
Total/NA	Analysis	300.0-1993 R2.1		1	580125	ALT	EET CLE	07/11/23 03:23
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620395	SCB	EET SL	07/17/23 09:31
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619620	FLC	EET SL	07/10/23 16:06
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 12:05

Client Sample ID: BAC-12-F-A3-20230614-01

Lab Sample ID: 240-187232-10

Date Collected: 06/14/23 12:10

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 21:24
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 13:35
Total/NA	Analysis	2320B-1997		1	578607	JWW	EET CLE	06/23/23 20:07
Total/NA	Analysis	300.0		1	580125	ALT	EET CLE	07/11/23 04:49
Total/NA	Analysis	SM 2540C		1	578050	GH	EET CLE	06/21/23 15:44

Client Sample ID: BAC-116-F-A3-20230614-01

Lab Sample ID: 240-187232-11

Date Collected: 06/14/23 13:03

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 21:28
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 13:39
Total/NA	Analysis	2320B-1997		1	578607	JWW	EET CLE	06/23/23 20:11
Total/NA	Analysis	300.0		1	580125	ALT	EET CLE	07/11/23 05:55
Total/NA	Analysis	SM 2540C		1	578050	GH	EET CLE	06/21/23 15:44

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

Client Sample ID: EB-001-F-A3-20230614-01

Lab Sample ID: 240-187232-12

Date Collected: 06/14/23 15:20

Matrix: Water

Date Received: 06/17/23 08:00

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 21:32
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 13:44
Total/NA	Analysis	2320B-1997		1	578607	JWW	EET CLE	06/23/23 20:15
Total/NA	Analysis	300.0		1	580125	ALT	EET CLE	07/11/23 06:16
Total/NA	Analysis	SM 2540C		1	578050	GH	EET CLE	06/21/23 15:44

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
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

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
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-23 *
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-23 *
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-24
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-23
MI - RadChem Recognition	State	9005	06-30-23 *
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-23
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187232-1

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 Dakota	State	R-207	06-30-23 *
Oklahoma	NELAP	9997	08-31-23
Oregon	NELAP	4157	09-01-23
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23 *
Texas	NELAP	T104704193	07-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO000542021-14	07-31-23
Virginia	NELAP	10310	06-15-25
Washington	State	C592	08-30-23
West Virginia DEP	State	381	10-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Client Information		Sampler: Bobby Cssto		Lab PM: Cisneros, Roxanne		Carrier Tracking No(s): 240-93466-34578.1	
Client Contact: Taylor Huffman		Phone: 740-373-4308		E-Mail: roxanne.cisneros@eurofins.com		Page: Pg 1 of 2	
Company: Lightstone Generation Gavin Power LLC		PWSID:		State of Origin:		COC No: 240-93466-34578.1	
Address: 7397 OH-7		Due Date Requested:		Analysis Requested		Job #:	
City: Cheshire		TAT Requested (days):		Perform HEMSD (Yes or No)		Preservation Codes:	
State, Zip: OH, 45620		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		300.0 28D - Fluoride		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)	
Phone: 740-925-3171(Tel)		PO #: 2935505		6020, 7470A		Other:	
Email: taylor.huffman@lightstonegen.com		WO #: 24019633		Field Filtered Sample (Yes or No)		Special Instructions/Note:	
Project Name: Federal CCR Wells - App IV		Project #: 24019633		D N N D		Total Number of Containers: 1	
Site: Grain Plant		SSOW#:		9315_Ra226, 9320_Ra228, Ra226Ra228, GPC			
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
BAC-21-F-A4-20230612-01		6-12-23		1053		6 Water	
DUP-001-BAC-21-F-A4-20230612-01		6-12-23		1053		6 Water	
BAC-22-F-A4-20230612-01		6-12-23		1234		6 Water	
BAC-23-F-A4-20230612-01		6-12-23		1326		6 Water	
BAC-08-F-A4-20230612-01		6-12-23		1423		6 Water	
EB-001-F-A4-20230612-01		6-12-23		1500		6 W	
BAC-07-F-A4-20230613-01		6-13-23		1135		6 W	
BAC-07-F-A4-20230613-01		6-13-23		1135		6 W	
BAC-07-F-A4-20230613-01		6-13-23		1135		6 W	
BAC-18-F-A4-20230613-01		6-13-23		1318		6 W	
BAC-06-F-A4-20230613-01		6-13-23		1406		6 W	
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Deliverable Requested: <input type="checkbox"/> I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
<input type="checkbox"/> Empty Kit Relinquished by:		Date:		Time:		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months	
Relinquished by: Bobby Cssto		Date/Time: 6-16-23/0915		Company: Lightstone		Received by: Roxanne Cisneros	
Relinquished by: Bobby Cssto		Date/Time: 6-16-23/1200		Company: ETA		Received by: Leah M. Smith	
Relinquished by:		Date/Time:		Company:		Received by:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Date/Time: 06-17-23 800	



Client Information		Lab PM: Cisneros, Roxanne		Carrier Tracking No(s): 240-93465-34577.1	
Client Contact: Taylor Huffman		E-Mail: roxanne.cisneros@Eurofinsel.com		State of Origin: <i>Pg 2 of 2</i>	
Company: Lightstone Generation Gavin Power LLC		PWSID:		COC No: 240-93465-34577.1	
Address: 7397 OH-7		City: Cheshire		Page: <i>Pg 2 of 2</i>	
State/Zip: OH, 45620		Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Job #:	
Phone: 740-925-3171(Tel)		PO #: 2935505		Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify) Other:	
Email: taylor.huffman@lightstonegen.com		Project #: 24019633		Total Number of Containers: <input checked="" type="checkbox"/>	
Project Name: Federal CCR Wells - App III		SSOW#:		Special Instructions/Note:	
Site:					

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Solid, Other)	Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		2540C Calcd. 300.0_28D	2320B - Alkalinity	Analysis Requested	Special Instructions/Note
					D	N	D	N				
BAC-12-F-A3-20230614-01	6-14-23	1210	G	W								
BAC-16-F-A3-20230614-01	6-14-23	1303	G	W								
EB-001-F-A3-20230614-01	6-14-23	1520	G	W								

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological
 Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by: _____ Date: _____
 Relinquished by: *Taylor Huffman* Date: *6-16-23* / *0915*
 Relinquished by: *Paul Carter* Date: *6-16-23* / *1700*
 Relinquished by: _____ Date: _____

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
 Special Instructions/QC Requirements:

Received by: *Paul Carter* Date/Time: *6-16-23 1050* Company: *ETI*
 Received by: *Zach M. Smith* Date/Time: *06-17-23 800* Company: *ETI NC*
 Received by: _____ Date/Time: _____ Company: _____

Cooler Temperature(s) °C and Other Remarks:

Eurofins - Canton Sample Receipt Form/Narrative Login # : _____
Barberton Facility

Client Lightstone Generation Gasin Panel Site Name _____ Cooler unpacked by: Leah M. Smith
Cooler Received on 06-17-23 Opened on 06-17-23
FedEx: 1st Grd Exp UPS FAS Clipper 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 # 22 (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 NA
-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# 10BDH4321
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: _____

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container		Preservative	
			pH	Temp	Added (mls)	Lot #
BAC-21-F-A4-20230612-01	240-187232-C-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-21-F-A4-20230612-01	240-187232-D-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-21-F-A4-20230612-01	240-187232-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-001-BAC-21-F-A4-20230612-01	240-187232-C-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-001-BAC-21-F-A4-20230612-01	240-187232-D-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-001-BAC-21-F-A4-20230612-01	240-187232-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-22-F-A4-20230612-01	240-187232-C-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-22-F-A4-20230612-01	240-187232-D-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-22-F-A4-20230612-01	240-187232-E-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-23-F-A4-20230612-01	240-187232-C-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-23-F-A4-20230612-01	240-187232-D-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-23-F-A4-20230612-01	240-187232-E-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-08-F-A4-20230612-01	240-187232-C-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-08-F-A4-20230612-01	240-187232-D-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-08-F-A4-20230612-01	240-187232-E-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230612-01	240-187232-C-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230612-01	240-187232-D-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230612-01	240-187232-E-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-A4-20230613-01	240-187232-G-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-A4-20230613-01	240-187232-H-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-A4-20230613-01	240-187232-I-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-A4-20230613-01	240-187232-J-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-A4-20230613-01	240-187232-K-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-A4-20230613-01	240-187232-L-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-A4-20230613-01	240-187232-M-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-A4-20230613-01	240-187232-N-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-A4-20230613-01	240-187232-O-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-18-F-A4-20230613-01	240-187232-C-8	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-18-F-A4-20230613-01	240-187232-D-8	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-18-F-A4-20230613-01	240-187232-E-8	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-A4-20230613-01	240-187232-C-9	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-A4-20230613-01	240-187232-D-9	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-A4-20230613-01	240-187232-E-9	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

Client Sample ID

Lab ID

Container Type

Container
pH Temp

Preservative
Added (mls) Lot #

BAC-12-F-A3-20230614-01	240-187232-C-10	Plastic 1 liter - Nitric Acid
BAC-116-F-A3-20230614-01	240-187232-C-11	Plastic 1 liter - Nitric Acid
EB-001-F-A3-20230614-01	240-187232-C-12	Plastic 1 liter - Nitric Acid

<2	_____	_____	_____
<2	_____	_____	_____
<2	_____	_____	_____

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-187232-1

Login Number: 187232

List Number: 2

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

List Creation: 06/20/23 01:36 PM

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





ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 7/17/2023 2:08:41 PM

JOB DESCRIPTION

Federal CCR Wells - App III & App IV

JOB NUMBER

240-187259-1

Eurofins Cleveland

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
7/17/2023 2:08:41 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

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
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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Job ID: 240-187259-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-187259-1

Receipt

The samples were received on 6/17/2023 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 9 coolers at receipt time were 0.8°C, 1.4°C, 1.6°C, 1.6°C, 1.8°C, 2.4°C, 2.6°C, 2.6°C and 2.6°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 9315_Ra226: Radium-226 prep batch 160-616969: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. EB-001-F-A4-20230613-01 (240-187259-12), BAC-10-F-A4-20230614-01 (240-187259-13), BAC-14-F-A4-20230614-01 (240-187259-14), DUP-002-BAC-14-F-A4-20230614-01 (240-187259-15), BAC-12-F-A4-20230614-01 (240-187259-16), BAC-16-F-A4-20230614-01 (240-187259-17), EB-001-F-A4-20230614-01 (240-187259-18), (LCS 160-616969/2-A), (MB 160-616969/1-A)

Method 9320_Ra228: Radium-228 prep batch 160-616970: The following sample(s) did not meet the requested limit (RL) due to the reduced sample volume attributed to the presence of matrix interference. During preparation the analyst visually noted matrix effects. The data have been reported with this narrative. BAC-10-F-A4-20230614-01 (240-187259-13), BAC-14-F-A4-20230614-01 (240-187259-14) and BAC-12-F-A4-20230614-01 (240-187259-16)

Method 9320_Ra228: Radium-228 prep batch 160-616970: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. EB-001-F-A4-20230613-01 (240-187259-12), BAC-10-F-A4-20230614-01 (240-187259-13), BAC-14-F-A4-20230614-01 (240-187259-14), DUP-002-BAC-14-F-A4-20230614-01 (240-187259-15), BAC-12-F-A4-20230614-01 (240-187259-16), BAC-16-F-A4-20230614-01 (240-187259-17), EB-001-F-A4-20230614-01 (240-187259-18), (LCS 160-616970/2-A), (MB 160-616970/1-A)

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 - App III & App IV

Job ID: 240-187259-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CLE
SM 2540C	Solids, Total Dissolved (TDS)	SM	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 - App III & App IV

Job ID: 240-187259-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-187259-1	BAC-21-F-A3-20230612-01	Water	06/12/23 10:53	06/17/23 08:00
240-187259-2	DUP-001-BAC-21-F-A3-20230612-01	Water	06/12/23 10:53	06/17/23 08:00
240-187259-3	BAC-22-F-A3-20230612-01	Water	06/12/23 12:34	06/17/23 08:00
240-187259-4	BAC-23-F-A3-20230612-01	Water	06/12/23 13:26	06/17/23 08:00
240-187259-5	BAC-08-F-A3-20230612-01	Water	06/12/23 14:23	06/17/23 08:00
240-187259-6	EB-001-F-A3-20230612-01	Water	06/12/23 15:00	06/17/23 08:00
240-187259-7	BAC-18-F-A3-20230613-01	Water	06/13/23 13:18	06/17/23 08:00
240-187259-8	EB-001-F-A3-20230613-01	Water	06/13/23 16:00	06/17/23 08:00
240-187259-9	BAC-10-F-A3-20230614-01	Water	06/14/23 09:49	06/17/23 08:00
240-187259-10	BAC-14-F-A3-20230614-01	Water	06/14/23 10:55	06/17/23 08:00
240-187259-11	DUP-002-BAC-14-F-A3-20230614-01	Water	06/14/23 10:55	06/17/23 08:00
240-187259-12	EB-001-F-A4-20230613-01	Water	06/13/23 16:00	06/17/23 08:00
240-187259-13	BAC-10-F-A4-20230614-01	Water	06/14/23 09:49	06/17/23 08:00
240-187259-14	BAC-14-F-A4-20230614-01	Water	06/14/23 10:55	06/17/23 08:00
240-187259-15	DUP-002-BAC-14-F-A4-20230614-01	Water	06/14/23 10:55	06/17/23 08:00
240-187259-16	BAC-12-F-A4-20230614-01	Water	06/14/23 12:10	06/17/23 08:00
240-187259-17	BAC-16-F-A4-20230614-01	Water	06/14/23 13:03	06/17/23 08:00
240-187259-18	EB-001-F-A4-20230614-01	Water	06/14/23 15:20	06/17/23 08:00



Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-21-F-A3-20230612-01

Lab Sample ID: 240-187259-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	420		100	57	ug/L	1		6010D	Total Recoverable
Calcium	140000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	16000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	30000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	250		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	250		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	73		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.075		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	130		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	550		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-001-BAC-21-F-A3-20230612-01

Lab Sample ID: 240-187259-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	420		100	57	ug/L	1		6010D	Total Recoverable
Calcium	140000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	16000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	31000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	68		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.078		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	120		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	540		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-22-F-A3-20230612-01

Lab Sample ID: 240-187259-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	230		100	57	ug/L	1		6010D	Total Recoverable
Calcium	160000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	19000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	3100		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	21000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	33		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.082		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	230		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	600		10	7.8	mg/L	1		SM 2540C	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 - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-23-F-A3-20230612-01

Lab Sample ID: 240-187259-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	270		100	57	ug/L	1		6010D	Total Recoverable
Calcium	130000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	15000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	19000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	43		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	140		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	500		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-08-F-A3-20230612-01

Lab Sample ID: 240-187259-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	110		100	57	ug/L	1		6010D	Total Recoverable
Calcium	96000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	13000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	13000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	210		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	210		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	23		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	80		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	350		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-001-F-A3-20230612-01

Lab Sample ID: 240-187259-6

No Detections.

Client Sample ID: BAC-18-F-A3-20230613-01

Lab Sample ID: 240-187259-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1500		100	57	ug/L	1		6010D	Total Recoverable
Calcium	83000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	17000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	95		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	95		5.0	2.6	mg/L	1		2320B-1997	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 - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-18-F-A3-20230613-01 (Continued)

Lab Sample ID: 240-187259-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	25		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.051		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	180		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	400		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-001-F-A3-20230613-01

Lab Sample ID: 240-187259-8

No Detections.

Client Sample ID: BAC-10-F-A3-20230614-01

Lab Sample ID: 240-187259-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	450		100	57	ug/L	1		6010D	Total Recoverable
Calcium	100000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	25000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	43000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	41		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.15		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	170		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	510		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-14-F-A3-20230614-01

Lab Sample ID: 240-187259-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2800		100	57	ug/L	1		6010D	Total Recoverable
Calcium	76000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	23000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	97		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	97		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	31		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.057		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	230		10	3.5	mg/L	10		300.0	Total/NA
Total Dissolved Solids	450		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-002-BAC-14-F-A3-20230614-01

Lab Sample ID: 240-187259-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2900		100	57	ug/L	1		6010D	Total Recoverable
Calcium	77000		1000	250	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 - App III & App IV

Job ID: 240-187259-1

Client Sample ID: DUP-002-BAC-14-F-A3-20230614-01
 (Continued)

Lab Sample ID: 240-187259-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	22000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	23000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	97		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	97		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	31		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.057		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	230		10	3.5	mg/L	10		300.0	Total/NA
Total Dissolved Solids	450		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-001-F-A4-20230613-01

Lab Sample ID: 240-187259-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.86	J ^2	2.0	0.57	ug/L	1		6020B	Total Recoverable
Thallium	0.46	J	1.0	0.20	ug/L	1		6020B	Total Recoverable

Client Sample ID: BAC-10-F-A4-20230614-01

Lab Sample ID: 240-187259-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.0	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	41		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	2.8	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.8		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	3.1	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	24000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	41000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.22	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	210		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	210		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.15		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-14-F-A4-20230614-01

Lab Sample ID: 240-187259-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.3	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	100		5.0	2.2	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 - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-14-F-A4-20230614-01 (Continued)

Lab Sample ID: 240-187259-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	1.4	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.0		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.0		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	4.4	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	23000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	97		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	97		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.057		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: DUP-002-BAC-14-F-A4-20230614-01

Lab Sample ID: 240-187259-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.2	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	100		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	1.4	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.1		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	4.6	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	23000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	88		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	88		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.058		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-12-F-A4-20230614-01

Lab Sample ID: 240-187259-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	10		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	150		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.22	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Chromium	5.8		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	11		1.0	0.19	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 - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-12-F-A4-20230614-01 (Continued)

Lab Sample ID: 240-187259-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	9.2		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	9.3		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.5	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	3300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	33000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	98		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	98		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.069		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-16-F-A4-20230614-01

Lab Sample ID: 240-187259-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	51		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	1.3	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.8		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.83	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	3.8	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	23000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	170		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	170		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.054		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: EB-001-F-A4-20230614-01

Lab Sample ID: 240-187259-18

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-21-F-A3-20230612-01

Lab Sample ID: 240-187259-1

Date Collected: 06/12/23 10:53

Matrix: Water

Date Received: 06/17/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	420		100	57	ug/L		06/20/23 14:00	06/21/23 21:45	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	140000		1000	250	ug/L		06/20/23 14:00	06/21/23 13:48	1
Magnesium	16000		1000	61	ug/L		06/20/23 14:00	06/21/23 13:48	1
Potassium	2700		1000	220	ug/L		06/20/23 14:00	06/21/23 13:48	1
Sodium	30000		1000	330	ug/L		06/20/23 14:00	06/21/23 13:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	250		5.0	2.6	mg/L			06/20/23 17:51	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	250		5.0	2.6	mg/L			06/20/23 17:51	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 17:51	1
Chloride (EPA 300.0)	73		1.0	0.13	mg/L			07/08/23 00:18	1
Fluoride (EPA 300.0)	0.075		0.050	0.024	mg/L			07/08/23 00:18	1
Sulfate (EPA 300.0)	130		1.0	0.35	mg/L			07/08/23 00:18	1
Total Dissolved Solids (SM 2540C)	550		10	7.8	mg/L			06/19/23 14:54	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: DUP-001-BAC-21-F-A3-20230612-01

Lab Sample ID: 240-187259-2

Date Collected: 06/12/23 10:53

Matrix: Water

Date Received: 06/17/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	420		100	57	ug/L		06/20/23 14:00	06/21/23 21:49	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	140000		1000	250	ug/L		06/20/23 14:00	06/21/23 13:53	1
Magnesium	16000		1000	61	ug/L		06/20/23 14:00	06/21/23 13:53	1
Potassium	2900		1000	220	ug/L		06/20/23 14:00	06/21/23 13:53	1
Sodium	31000		1000	330	ug/L		06/20/23 14:00	06/21/23 13:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			06/20/23 17:55	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			06/20/23 17:55	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 17:55	1
Chloride (EPA 300.0)	68		1.0	0.13	mg/L			07/08/23 01:01	1
Fluoride (EPA 300.0)	0.078		0.050	0.024	mg/L			07/08/23 01:01	1
Sulfate (EPA 300.0)	120		1.0	0.35	mg/L			07/08/23 01:01	1
Total Dissolved Solids (SM 2540C)	540		10	7.8	mg/L			06/19/23 14:54	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-22-F-A3-20230612-01

Lab Sample ID: 240-187259-3

Date Collected: 06/12/23 12:34

Matrix: Water

Date Received: 06/17/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	230		100	57	ug/L		06/20/23 14:00	06/21/23 21:54	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	160000		1000	250	ug/L		06/20/23 14:00	06/21/23 13:57	1
Magnesium	19000		1000	61	ug/L		06/20/23 14:00	06/21/23 13:57	1
Potassium	3100		1000	220	ug/L		06/20/23 14:00	06/21/23 13:57	1
Sodium	21000		1000	330	ug/L		06/20/23 14:00	06/21/23 13:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230		5.0	2.6	mg/L			06/20/23 18:18	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230		5.0	2.6	mg/L			06/20/23 18:18	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:18	1
Chloride (EPA 300.0)	33		1.0	0.13	mg/L			07/08/23 01:44	1
Fluoride (EPA 300.0)	0.082		0.050	0.024	mg/L			07/08/23 01:44	1
Sulfate (EPA 300.0)	230		5.0	1.7	mg/L			07/08/23 02:06	5
Total Dissolved Solids (SM 2540C)	600		10	7.8	mg/L			06/19/23 14:54	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-23-F-A3-20230612-01

Lab Sample ID: 240-187259-4

Date Collected: 06/12/23 13:26

Matrix: Water

Date Received: 06/17/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	270		100	57	ug/L		06/20/23 14:00	06/21/23 21:58	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130000		1000	250	ug/L		06/20/23 14:00	06/21/23 14:11	1
Magnesium	15000		1000	61	ug/L		06/20/23 14:00	06/21/23 14:11	1
Potassium	2000		1000	220	ug/L		06/20/23 14:00	06/21/23 14:11	1
Sodium	19000		1000	330	ug/L		06/20/23 14:00	06/21/23 14:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			06/20/23 18:10	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			06/20/23 18:10	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:10	1
Chloride (EPA 300.0)	43		1.0	0.13	mg/L			07/08/23 02:28	1
Fluoride (EPA 300.0)	0.13		0.050	0.024	mg/L			07/08/23 02:28	1
Sulfate (EPA 300.0)	140		1.0	0.35	mg/L			07/08/23 02:28	1
Total Dissolved Solids (SM 2540C)	500		10	7.8	mg/L			06/19/23 14:54	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-08-F-A3-20230612-01

Lab Sample ID: 240-187259-5

Date Collected: 06/12/23 14:23

Matrix: Water

Date Received: 06/17/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	110		100	57	ug/L		06/20/23 14:00	06/21/23 22:02	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	96000		1000	250	ug/L		06/20/23 14:00	06/21/23 14:15	1
Magnesium	13000		1000	61	ug/L		06/20/23 14:00	06/21/23 14:15	1
Potassium	1600		1000	220	ug/L		06/20/23 14:00	06/21/23 14:15	1
Sodium	13000		1000	330	ug/L		06/20/23 14:00	06/21/23 14:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	210		5.0	2.6	mg/L			06/20/23 18:22	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	210		5.0	2.6	mg/L			06/20/23 18:22	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:22	1
Chloride (EPA 300.0)	23		1.0	0.13	mg/L			07/08/23 03:54	1
Fluoride (EPA 300.0)	0.12		0.050	0.024	mg/L			07/08/23 03:54	1
Sulfate (EPA 300.0)	80		1.0	0.35	mg/L			07/08/23 03:54	1
Total Dissolved Solids (SM 2540C)	350		10	7.8	mg/L			06/19/23 14:54	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: EB-001-F-A3-20230612-01

Lab Sample ID: 240-187259-6

Date Collected: 06/12/23 15:00

Matrix: Water

Date Received: 06/17/23 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		06/20/23 14:00	06/21/23 22:07	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		06/20/23 14:00	06/21/23 14:20	1
Magnesium	ND		1000	61	ug/L		06/20/23 14:00	06/21/23 14:20	1
Potassium	ND		1000	220	ug/L		06/20/23 14:00	06/21/23 14:20	1
Sodium	ND		1000	330	ug/L		06/20/23 14:00	06/21/23 14:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:26	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:26	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:26	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			07/08/23 04:16	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			07/08/23 04:16	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			07/08/23 04:16	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			06/19/23 14:54	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-18-F-A3-20230613-01

Lab Sample ID: 240-187259-7

Date Collected: 06/13/23 13:18

Matrix: Water

Date Received: 06/17/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1500		100	57	ug/L		06/20/23 14:00	06/21/23 22:11	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	83000		1000	250	ug/L		06/20/23 14:00	06/21/23 14:25	1
Magnesium	21000		1000	61	ug/L		06/20/23 14:00	06/21/23 14:25	1
Potassium	1400		1000	220	ug/L		06/20/23 14:00	06/21/23 14:25	1
Sodium	17000		1000	330	ug/L		06/20/23 14:00	06/21/23 14:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	95		5.0	2.6	mg/L			06/20/23 18:29	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	95		5.0	2.6	mg/L			06/20/23 18:29	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:29	1
Chloride (EPA 300.0)	25		1.0	0.13	mg/L			07/11/23 03:45	1
Fluoride (EPA 300.0)	0.051		0.050	0.024	mg/L			07/11/23 03:45	1
Sulfate (EPA 300.0)	180		1.0	0.35	mg/L			07/11/23 03:45	1
Total Dissolved Solids (SM 2540C)	400		10	7.8	mg/L			06/20/23 14:55	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: EB-001-F-A3-20230613-01

Lab Sample ID: 240-187259-8

Date Collected: 06/13/23 16:00

Matrix: Water

Date Received: 06/17/23 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		06/20/23 14:00	06/21/23 22:15	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		06/20/23 14:00	06/21/23 14:29	1
Magnesium	ND		1000	61	ug/L		06/20/23 14:00	06/21/23 14:29	1
Potassium	ND		1000	220	ug/L		06/20/23 14:00	06/21/23 14:29	1
Sodium	ND		1000	330	ug/L		06/20/23 14:00	06/21/23 14:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:33	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:33	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:33	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			07/11/23 04:06	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			07/11/23 04:06	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			07/11/23 04:06	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			06/20/23 14:55	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-10-F-A3-20230614-01

Lab Sample ID: 240-187259-9

Date Collected: 06/14/23 09:49

Matrix: Water

Date Received: 06/17/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	450		100	57	ug/L		06/20/23 14:00	06/21/23 22:20	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	100000		1000	250	ug/L		06/20/23 14:00	06/21/23 14:34	1
Magnesium	25000		1000	61	ug/L		06/20/23 14:00	06/21/23 14:34	1
Potassium	1800		1000	220	ug/L		06/20/23 14:00	06/21/23 14:34	1
Sodium	43000		1000	330	ug/L		06/20/23 14:00	06/21/23 14:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	200		5.0	2.6	mg/L			06/20/23 18:37	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	200		5.0	2.6	mg/L			06/20/23 18:37	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:37	1
Chloride (EPA 300.0)	41		1.0	0.13	mg/L			07/11/23 08:26	1
Fluoride (EPA 300.0)	0.15		0.050	0.024	mg/L			07/11/23 08:26	1
Sulfate (EPA 300.0)	170		1.0	0.35	mg/L			07/11/23 08:26	1
Total Dissolved Solids (SM 2540C)	510		10	7.8	mg/L			06/21/23 15:44	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-14-F-A3-20230614-01

Lab Sample ID: 240-187259-10

Date Collected: 06/14/23 10:55

Matrix: Water

Date Received: 06/17/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2800		100	57	ug/L		06/20/23 14:00	06/21/23 22:24	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	76000		1000	250	ug/L		06/20/23 14:00	06/21/23 14:38	1
Magnesium	22000		1000	61	ug/L		06/20/23 14:00	06/21/23 14:38	1
Potassium	1700		1000	220	ug/L		06/20/23 14:00	06/21/23 14:38	1
Sodium	23000		1000	330	ug/L		06/20/23 14:00	06/21/23 14:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	97		5.0	2.6	mg/L			06/20/23 18:41	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	97		5.0	2.6	mg/L			06/20/23 18:41	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:41	1
Chloride (EPA 300.0)	31		1.0	0.13	mg/L			07/11/23 09:09	1
Fluoride (EPA 300.0)	0.057		0.050	0.024	mg/L			07/11/23 09:09	1
Sulfate (EPA 300.0)	230		10	3.5	mg/L			07/12/23 15:04	10
Total Dissolved Solids (SM 2540C)	450		10	7.8	mg/L			06/21/23 15:44	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: DUP-002-BAC-14-F-A3-20230614-01

Lab Sample ID: 240-187259-11

Date Collected: 06/14/23 10:55

Matrix: Water

Date Received: 06/17/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2900		100	57	ug/L		06/20/23 14:00	06/21/23 22:37	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	77000		1000	250	ug/L		06/20/23 14:00	06/21/23 14:43	1
Magnesium	22000		1000	61	ug/L		06/20/23 14:00	06/21/23 14:43	1
Potassium	1700		1000	220	ug/L		06/20/23 14:00	06/21/23 14:43	1
Sodium	23000		1000	330	ug/L		06/20/23 14:00	06/21/23 14:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	97		5.0	2.6	mg/L			06/20/23 18:44	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	97		5.0	2.6	mg/L			06/20/23 18:44	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:44	1
Chloride (EPA 300.0)	31		1.0	0.13	mg/L			07/11/23 10:15	1
Fluoride (EPA 300.0)	0.057		0.050	0.024	mg/L			07/11/23 10:15	1
Sulfate (EPA 300.0)	230		10	3.5	mg/L			07/12/23 15:24	10
Total Dissolved Solids (SM 2540C)	450		10	7.8	mg/L			06/21/23 15:44	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: EB-001-F-A4-20230613-01

Lab Sample ID: 240-187259-12

Date Collected: 06/13/23 16:00

Matrix: Water

Date Received: 06/17/23 08:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.86	J ^2	2.0	0.57	ug/L		06/19/23 14:00	06/20/23 19:11	1
Arsenic	ND		5.0	0.75	ug/L		06/19/23 14:00	06/20/23 19:11	1
Barium	ND		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 19:11	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 19:11	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:11	1
Chromium	ND		5.0	1.2	ug/L		06/19/23 14:00	06/20/23 19:11	1
Cobalt	ND		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 19:11	1
Lead	ND		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 19:11	1
Lithium	ND		8.0	1.7	ug/L		06/19/23 14:00	06/20/23 19:11	1
Magnesium	ND		1000	61	ug/L		06/19/23 14:00	06/20/23 19:11	1
Molybdenum	ND		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 19:11	1
Potassium	ND		1000	220	ug/L		06/19/23 14:00	06/20/23 19:11	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 19:11	1
Sodium	ND		1000	330	ug/L		06/19/23 14:00	06/20/23 19:11	1
Thallium	0.46	J	1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:11	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		06/19/23 14:00	06/20/23 17:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:50	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:50	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:50	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			07/11/23 04:28	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	0.0484	U	0.0678	0.0680	1.00	0.115	pCi/L	06/21/23 10:14	07/17/23 09:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.5		30 - 110					06/21/23 10:14	07/17/23 09:31	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	0.120	U	0.340	0.340	1.00	0.604	pCi/L	06/21/23 10:17	07/10/23 16:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.5		30 - 110					06/21/23 10:17	07/10/23 16:06	1
Y Carrier	84.5		30 - 110					06/21/23 10:17	07/10/23 16:06	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: EB-001-F-A4-20230613-01

Lab Sample ID: 240-187259-12

Date Collected: 06/13/23 16:00

Matrix: Water

Date Received: 06/17/23 08:00

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	0.169	U	0.347	0.347	5.00	0.604	pCi/L		07/17/23 12:05	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-10-F-A4-20230614-01

Lab Sample ID: 240-187259-13

Date Collected: 06/14/23 09:49

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 19:32	1
Arsenic	2.0	J	5.0	0.75	ug/L		06/19/23 14:00	06/20/23 19:32	1
Barium	41		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 19:32	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 19:32	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:32	1
Chromium	2.8	J	5.0	1.2	ug/L		06/19/23 14:00	06/20/23 19:32	1
Cobalt	2.1		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 19:32	1
Lead	1.8		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 19:32	1
Lithium	3.1	J	8.0	1.7	ug/L		06/19/23 14:00	06/20/23 19:32	1
Magnesium	24000		1000	61	ug/L		06/19/23 14:00	06/20/23 19:32	1
Molybdenum	ND		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 19:32	1
Potassium	1700		1000	220	ug/L		06/19/23 14:00	06/20/23 19:32	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 19:32	1
Sodium	41000		1000	330	ug/L		06/19/23 14:00	06/20/23 19:32	1
Thallium	0.22	J	1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:32	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		06/19/23 14:00	06/20/23 17:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	210		5.0	2.6	mg/L			06/20/23 19:01	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	210		5.0	2.6	mg/L			06/20/23 19:01	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 19:01	1
Fluoride (EPA 300.0-1993 R2.1)	0.15		0.050	0.024	mg/L			07/11/23 10:36	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0864	U	0.188	0.188	1.00	0.345	pCi/L	06/21/23 10:14	07/17/23 09:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	52.7		30 - 110					06/21/23 10:14	07/17/23 09:32	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.866	U G	1.22	1.23	1.00	2.06	pCi/L	06/21/23 10:17	07/10/23 16:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	52.7		30 - 110					06/21/23 10:17	07/10/23 16:07	1
Y Carrier	82.6		30 - 110					06/21/23 10:17	07/10/23 16:07	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-10-F-A4-20230614-01

Lab Sample ID: 240-187259-13

Date Collected: 06/14/23 09:49

Matrix: Water

Date Received: 06/17/23 08:00

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	0.952	U	1.23	1.24	5.00	2.06	pCi/L		07/17/23 12:05	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-14-F-A4-20230614-01

Lab Sample ID: 240-187259-14

Date Collected: 06/14/23 10:55

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 19:35	1
Arsenic	3.3	J	5.0	0.75	ug/L		06/19/23 14:00	06/20/23 19:35	1
Barium	100		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 19:35	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 19:35	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:35	1
Chromium	1.4	J	5.0	1.2	ug/L		06/19/23 14:00	06/20/23 19:35	1
Cobalt	2.0		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 19:35	1
Lead	1.0		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 19:35	1
Lithium	4.4	J	8.0	1.7	ug/L		06/19/23 14:00	06/20/23 19:35	1
Magnesium	21000		1000	61	ug/L		06/19/23 14:00	06/20/23 19:35	1
Molybdenum	ND		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 19:35	1
Potassium	1600		1000	220	ug/L		06/19/23 14:00	06/20/23 19:35	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 19:35	1
Sodium	23000		1000	330	ug/L		06/19/23 14:00	06/20/23 19:35	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:35	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		06/19/23 14:00	06/20/23 17:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	97		5.0	2.6	mg/L			06/20/23 18:54	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	97		5.0	2.6	mg/L			06/20/23 18:54	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 18:54	1
Fluoride (EPA 300.0-1993 R2.1)	0.057		0.050	0.024	mg/L			07/11/23 10:58	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.199	U	0.163	0.164	1.00	0.242	pCi/L	06/21/23 10:14	07/17/23 09:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	59.5		30 - 110					06/21/23 10:14	07/17/23 09:34	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.341	U G	0.665	0.666	1.00	1.15	pCi/L	06/21/23 10:17	07/10/23 16:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	59.5		30 - 110					06/21/23 10:17	07/10/23 16:07	1
Y Carrier	87.1		30 - 110					06/21/23 10:17	07/10/23 16:07	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-14-F-A4-20230614-01

Lab Sample ID: 240-187259-14

Date Collected: 06/14/23 10:55

Matrix: Water

Date Received: 06/17/23 08:00

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	U	0.685	0.686	5.00	1.15	pCi/L		07/17/23 12:05	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: DUP-002-BAC-14-F-A4-20230614-01

Lab Sample ID: 240-187259-15

Date Collected: 06/14/23 10:55

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 19:38	1
Arsenic	3.2	J	5.0	0.75	ug/L		06/19/23 14:00	06/20/23 19:38	1
Barium	100		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 19:38	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 19:38	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:38	1
Chromium	1.4	J	5.0	1.2	ug/L		06/19/23 14:00	06/20/23 19:38	1
Cobalt	2.1		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 19:38	1
Lead	1.1		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 19:38	1
Lithium	4.6	J	8.0	1.7	ug/L		06/19/23 14:00	06/20/23 19:38	1
Magnesium	22000		1000	61	ug/L		06/19/23 14:00	06/20/23 19:38	1
Molybdenum	ND		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 19:38	1
Potassium	1600		1000	220	ug/L		06/19/23 14:00	06/20/23 19:38	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 19:38	1
Sodium	23000		1000	330	ug/L		06/19/23 14:00	06/20/23 19:38	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:38	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		06/19/23 14:00	06/20/23 17:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	88		5.0	2.6	mg/L			06/20/23 19:05	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	88		5.0	2.6	mg/L			06/20/23 19:05	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 19:05	1
Fluoride (EPA 300.0-1993 R2.1)	0.058		0.050	0.024	mg/L			07/11/23 11:20	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	0.196		0.136	0.138	1.00	0.195	pCi/L	06/21/23 10:14	07/17/23 09:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		30 - 110					06/21/23 10:14	07/17/23 09:34	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	0.506	U	0.464	0.466	1.00	0.732	pCi/L	06/21/23 10:17	07/10/23 16:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		30 - 110					06/21/23 10:17	07/10/23 16:07	1
Y Carrier	85.2		30 - 110					06/21/23 10:17	07/10/23 16:07	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: DUP-002-BAC-14-F-A4-20230614-01

Lab Sample ID: 240-187259-15

Date Collected: 06/14/23 10:55

Matrix: Water

Date Received: 06/17/23 08:00

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	0.702	U	0.484	0.486	5.00	0.732	pCi/L		07/17/23 13:20	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-12-F-A4-20230614-01

Lab Sample ID: 240-187259-16

Date Collected: 06/14/23 12:10

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 19:40	1
Arsenic	10		5.0	0.75	ug/L		06/19/23 14:00	06/20/23 19:40	1
Barium	150		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 19:40	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 19:40	1
Cadmium	0.22	J	1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:40	1
Chromium	5.8		5.0	1.2	ug/L		06/19/23 14:00	06/20/23 19:40	1
Cobalt	11		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 19:40	1
Lead	9.2		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 19:40	1
Lithium	9.3		8.0	1.7	ug/L		06/19/23 14:00	06/20/23 19:40	1
Magnesium	20000		1000	61	ug/L		06/19/23 14:00	06/20/23 19:40	1
Molybdenum	1.5	J	5.0	1.1	ug/L		06/19/23 14:00	06/20/23 19:40	1
Potassium	3300		1000	220	ug/L		06/19/23 14:00	06/20/23 19:40	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 19:40	1
Sodium	33000		1000	330	ug/L		06/19/23 14:00	06/20/23 19:40	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:40	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		06/19/23 14:00	06/20/23 17:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	98		5.0	2.6	mg/L			06/20/23 19:09	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	98		5.0	2.6	mg/L			06/20/23 19:09	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 19:09	1
Fluoride (EPA 300.0-1993 R2.1)	0.069		0.050	0.024	mg/L			07/11/23 11:41	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	0.363		0.222	0.224	1.00	0.301	pCi/L	06/21/23 10:14	07/17/23 09:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.7		30 - 110					06/21/23 10:14	07/17/23 09:34	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	0.729	U G	0.755	0.758	1.00	1.22	pCi/L	06/21/23 10:17	07/10/23 16:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.7		30 - 110					06/21/23 10:17	07/10/23 16:07	1
Y Carrier	81.9		30 - 110					06/21/23 10:17	07/10/23 16:07	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-12-F-A4-20230614-01

Lab Sample ID: 240-187259-16

Date Collected: 06/14/23 12:10

Matrix: Water

Date Received: 06/17/23 08:00

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	U	0.787	0.790	5.00	1.22	pCi/L		07/17/23 13:20	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-16-F-A4-20230614-01

Lab Sample ID: 240-187259-17

Date Collected: 06/14/23 13:03

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 19:43	1
Arsenic	ND		5.0	0.75	ug/L		06/19/23 14:00	06/20/23 19:43	1
Barium	51		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 19:43	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 19:43	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:43	1
Chromium	1.3	J	5.0	1.2	ug/L		06/19/23 14:00	06/20/23 19:43	1
Cobalt	1.8		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 19:43	1
Lead	0.83	J	1.0	0.45	ug/L		06/19/23 14:00	06/20/23 19:43	1
Lithium	3.8	J	8.0	1.7	ug/L		06/19/23 14:00	06/20/23 19:43	1
Magnesium	23000		1000	61	ug/L		06/19/23 14:00	06/20/23 19:43	1
Molybdenum	ND		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 19:43	1
Potassium	1700		1000	220	ug/L		06/19/23 14:00	06/20/23 19:43	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 19:43	1
Sodium	16000		1000	330	ug/L		06/19/23 14:00	06/20/23 19:43	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:43	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		06/19/23 14:00	06/20/23 17:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	170		5.0	2.6	mg/L			06/20/23 19:12	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	170		5.0	2.6	mg/L			06/20/23 19:12	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 19:12	1
Fluoride (EPA 300.0-1993 R2.1)	0.054		0.050	0.024	mg/L			07/11/23 12:03	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0532	U	0.0821	0.0822	1.00	0.142	pCi/L	06/21/23 10:14	07/17/23 09:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		30 - 110					06/21/23 10:14	07/17/23 09:38	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.420	U	0.476	0.477	1.00	0.780	pCi/L	06/21/23 10:17	07/10/23 16:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		30 - 110					06/21/23 10:17	07/10/23 16:07	1
Y Carrier	85.6		30 - 110					06/21/23 10:17	07/10/23 16:07	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-16-F-A4-20230614-01

Lab Sample ID: 240-187259-17

Date Collected: 06/14/23 13:03

Matrix: Water

Date Received: 06/17/23 08:00

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	0.473	U	0.483	0.484	5.00	0.780	pCi/L		07/17/23 13:20	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: EB-001-F-A4-20230614-01

Lab Sample ID: 240-187259-18

Date Collected: 06/14/23 15:20

Matrix: Water

Date Received: 06/17/23 08:00

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		06/19/23 14:00	06/20/23 19:46	1
Arsenic	ND		5.0	0.75	ug/L		06/19/23 14:00	06/20/23 19:46	1
Barium	ND		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 19:46	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 19:46	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:46	1
Chromium	ND		5.0	1.2	ug/L		06/19/23 14:00	06/20/23 19:46	1
Cobalt	ND		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 19:46	1
Lead	ND		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 19:46	1
Lithium	ND		8.0	1.7	ug/L		06/19/23 14:00	06/20/23 19:46	1
Magnesium	ND		1000	61	ug/L		06/19/23 14:00	06/20/23 19:46	1
Molybdenum	ND		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 19:46	1
Potassium	ND		1000	220	ug/L		06/19/23 14:00	06/20/23 19:46	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 19:46	1
Sodium	ND		1000	330	ug/L		06/19/23 14:00	06/20/23 19:46	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:46	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		06/19/23 14:00	06/20/23 17:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 19:16	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 19:16	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			06/20/23 19:16	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			07/11/23 12:25	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0322	U	0.0804	0.0804	1.00	0.145	pCi/L	06/21/23 10:14	07/17/23 09:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.4		30 - 110					06/21/23 10:14	07/17/23 09:35	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.0584	U	0.319	0.319	1.00	0.578	pCi/L	06/21/23 10:17	07/10/23 16:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.4		30 - 110					06/21/23 10:17	07/10/23 16:07	1
Y Carrier	81.9		30 - 110					06/21/23 10:17	07/10/23 16:07	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: EB-001-F-A4-20230614-01

Lab Sample ID: 240-187259-18

Date Collected: 06/14/23 15:20

Matrix: Water

Date Received: 06/17/23 08:00

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	0.0907	U	0.329	0.329	5.00	0.578	pCi/L		07/17/23 13:20	1

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Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
240-187259-12	EB-001-F-A4-20230613-01	88.5	
240-187259-13	BAC-10-F-A4-20230614-01	52.7	
240-187259-14	BAC-14-F-A4-20230614-01	59.5	
240-187259-15	DUP-002-BAC-14-F-A4-20230614-01	88.0	
240-187259-16	BAC-12-F-A4-20230614-01	80.7	
240-187259-17	BAC-16-F-A4-20230614-01	94.1	
240-187259-18	EB-001-F-A4-20230614-01	95.4	
LCS 160-616969/2-A	Lab Control Sample	97.2	
MB 160-616969/1-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)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-187259-12	EB-001-F-A4-20230613-01	88.5	84.5
240-187259-13	BAC-10-F-A4-20230614-01	52.7	82.6
240-187259-14	BAC-14-F-A4-20230614-01	59.5	87.1
240-187259-15	DUP-002-BAC-14-F-A4-20230614-01	88.0	85.2
240-187259-16	BAC-12-F-A4-20230614-01	80.7	81.9
240-187259-17	BAC-16-F-A4-20230614-01	94.1	85.6
240-187259-18	EB-001-F-A4-20230614-01	95.4	81.9
LCS 160-616970/2-A	Lab Control Sample	97.2	81.1
MB 160-616970/1-A	Method Blank	89.8	80.0

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-577826/1-A
Matrix: Water
Analysis Batch: 578108

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 577826

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		06/20/23 14:00	06/21/23 20:24	1

Lab Sample ID: LCS 240-577826/2-A
Matrix: Water
Analysis Batch: 578108

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 577826

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 240-577687/1-A
Matrix: Water
Analysis Batch: 577918

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 577687

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		06/19/23 14:00	06/20/23 19:06	1
Arsenic	ND		5.0	0.75	ug/L		06/19/23 14:00	06/20/23 19:06	1
Barium	ND		5.0	2.2	ug/L		06/19/23 14:00	06/20/23 19:06	1
Beryllium	ND		1.0	0.62	ug/L		06/19/23 14:00	06/20/23 19:06	1
Cadmium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:06	1
Chromium	ND		5.0	1.2	ug/L		06/19/23 14:00	06/20/23 19:06	1
Cobalt	ND		1.0	0.19	ug/L		06/19/23 14:00	06/20/23 19:06	1
Lead	ND		1.0	0.45	ug/L		06/19/23 14:00	06/20/23 19:06	1
Lithium	ND		8.0	1.7	ug/L		06/19/23 14:00	06/20/23 19:06	1
Magnesium	ND		1000	61	ug/L		06/19/23 14:00	06/20/23 19:06	1
Molybdenum	ND		5.0	1.1	ug/L		06/19/23 14:00	06/20/23 19:06	1
Potassium	ND		1000	220	ug/L		06/19/23 14:00	06/20/23 19:06	1
Selenium	ND		5.0	0.89	ug/L		06/19/23 14:00	06/20/23 19:06	1
Sodium	ND		1000	330	ug/L		06/19/23 14:00	06/20/23 19:06	1
Thallium	ND		1.0	0.20	ug/L		06/19/23 14:00	06/20/23 19:06	1

Lab Sample ID: LCS 240-577687/2-A
Matrix: Water
Analysis Batch: 577918

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 577687

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	109		ug/L		109	80 - 120
Arsenic	1000	990		ug/L		99	80 - 120
Barium	1000	958		ug/L		96	80 - 120
Beryllium	500	494		ug/L		99	80 - 120
Cadmium	500	487		ug/L		97	80 - 120
Chromium	500	507		ug/L		101	80 - 120
Cobalt	500	494		ug/L		99	80 - 120
Lead	500	501		ug/L		100	80 - 120
Lithium	500	476		ug/L		95	80 - 120
Magnesium	25000	25800		ug/L		103	80 - 120
Molybdenum	500	501		ug/L		100	80 - 120
Potassium	25000	25900		ug/L		103	80 - 120

Eurofins Cleveland

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

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

Lab Sample ID: LCS 240-577687/2-A
Matrix: Water
Analysis Batch: 577918

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 577687

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Selenium	1000	964		ug/L		96	80 - 120
Sodium	25000	25800		ug/L		103	80 - 120
Thallium	1000	989		ug/L		99	80 - 120

Lab Sample ID: 240-187259-12 MS
Matrix: Water
Analysis Batch: 577918

Client Sample ID: EB-001-F-A4-20230613-01
Prep Type: Total Recoverable
Prep Batch: 577687

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.86	J ^2	100	110		ug/L		109	80 - 120
Arsenic	ND		1000	973		ug/L		97	80 - 120
Barium	ND		1000	938		ug/L		94	80 - 120
Beryllium	ND		500	489		ug/L		98	80 - 120
Cadmium	ND		500	479		ug/L		96	80 - 120
Chromium	ND		500	499		ug/L		100	80 - 120
Cobalt	ND		500	482		ug/L		96	80 - 120
Lead	ND		500	495		ug/L		99	80 - 120
Lithium	ND		500	474		ug/L		95	80 - 120
Magnesium	ND		25000	25500		ug/L		102	80 - 120
Molybdenum	ND		500	498		ug/L		100	80 - 120
Potassium	ND		25000	25200		ug/L		101	80 - 120
Selenium	ND		1000	949		ug/L		95	80 - 120
Sodium	ND		25000	25400		ug/L		102	80 - 120
Thallium	0.46	J	1000	975		ug/L		97	80 - 120

Lab Sample ID: 240-187259-12 MSD
Matrix: Water
Analysis Batch: 577918

Client Sample ID: EB-001-F-A4-20230613-01
Prep Type: Total Recoverable
Prep Batch: 577687

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Antimony	0.86	J ^2	100	109		ug/L		109	80 - 120	0	20
Arsenic	ND		1000	990		ug/L		99	80 - 120	2	20
Barium	ND		1000	959		ug/L		96	80 - 120	2	20
Beryllium	ND		500	496		ug/L		99	80 - 120	1	20
Cadmium	ND		500	485		ug/L		97	80 - 120	1	20
Chromium	ND		500	507		ug/L		101	80 - 120	2	20
Cobalt	ND		500	493		ug/L		99	80 - 120	2	20
Lead	ND		500	502		ug/L		100	80 - 120	1	20
Lithium	ND		500	477		ug/L		95	80 - 120	1	20
Magnesium	ND		25000	25700		ug/L		103	80 - 120	1	20
Molybdenum	ND		500	503		ug/L		101	80 - 120	1	20
Potassium	ND		25000	25600		ug/L		102	80 - 120	1	20
Selenium	ND		1000	963		ug/L		96	80 - 120	1	20
Sodium	ND		25000	25700		ug/L		103	80 - 120	1	20
Thallium	0.46	J	1000	989		ug/L		99	80 - 120	1	20

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

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

Lab Sample ID: MB 240-577826/1-A
Matrix: Water
Analysis Batch: 578100

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 577826

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Calcium	ND		1000	250	ug/L		06/20/23 14:00	06/21/23 12:22	1
Magnesium	ND		1000	61	ug/L		06/20/23 14:00	06/21/23 12:22	1
Potassium	ND		1000	220	ug/L		06/20/23 14:00	06/21/23 12:22	1
Sodium	ND		1000	330	ug/L		06/20/23 14:00	06/21/23 12:22	1

Lab Sample ID: LCS 240-577826/3-A
Matrix: Water
Analysis Batch: 578100

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 577826

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Magnesium	25000	25400		ug/L		102	80 - 120
Potassium	25000	25300		ug/L		101	80 - 120
Sodium	25000	25100		ug/L		100	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-577689/1-A
Matrix: Water
Analysis Batch: 577919

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 577689

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.20	0.13	ug/L		06/19/23 14:00	06/20/23 17:09	1

Lab Sample ID: LCS 240-577689/2-A
Matrix: Water
Analysis Batch: 577919

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 577689

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits

Lab Sample ID: 240-187259-12 MS
Matrix: Water
Analysis Batch: 577919

Client Sample ID: EB-001-F-A4-20230613-01
Prep Type: Total/NA
Prep Batch: 577689

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits

Lab Sample ID: 240-187259-12 MSD
Matrix: Water
Analysis Batch: 577919

Client Sample ID: EB-001-F-A4-20230613-01
Prep Type: Total/NA
Prep Batch: 577689

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	
										RPD	Limit
Mercury	ND		1.00	0.883		ug/L		88	80 - 120	8	20

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-578219/30
Matrix: Water
Analysis Batch: 578219

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			06/20/23 16:17	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			06/20/23 16:17	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			06/20/23 16:17	1

Lab Sample ID: MB 240-578219/56
Matrix: Water
Analysis Batch: 578219

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			06/20/23 18:03	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			06/20/23 18:03	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			06/20/23 18:03	1

Lab Sample ID: LCS 240-578219/29
Matrix: Water
Analysis Batch: 578219

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	86.3		mg/L		107	86 - 123

Lab Sample ID: LCS 240-578219/55
Matrix: Water
Analysis Batch: 578219

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	86.3		mg/L		107	86 - 123

Lab Sample ID: 240-187259-4 DU
Matrix: Water
Analysis Batch: 578219

Client Sample ID: BAC-23-F-A3-20230612-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Alkalinity	240		237		mg/L		0.1	20
Bicarbonate Alkalinity as CaCO3	240		237		mg/L		0.1	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Lab Sample ID: 240-187259-14 DU
Matrix: Water
Analysis Batch: 578219

Client Sample ID: BAC-14-F-A4-20230614-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Alkalinity	97		86.5		mg/L		12	20
Bicarbonate Alkalinity as CaCO3	97		86.5		mg/L		12	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-579935/3
Matrix: Water
Analysis Batch: 579935

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			07/07/23 18:53	1
Fluoride	ND		0.050	0.024	mg/L			07/07/23 18:53	1
Sulfate	ND		1.0	0.35	mg/L			07/07/23 18:53	1

Lab Sample ID: LCS 240-579935/4
Matrix: Water
Analysis Batch: 579935

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	2.56		mg/L		102	90 - 110
Sulfate	50.0	50.2		mg/L		100	90 - 110

Lab Sample ID: MB 240-580125/3
Matrix: Water
Analysis Batch: 580125

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			07/11/23 01:34	1
Fluoride	ND		0.050	0.024	mg/L			07/11/23 01:34	1
Sulfate	ND		1.0	0.35	mg/L			07/11/23 01:34	1

Lab Sample ID: LCS 240-580125/4
Matrix: Water
Analysis Batch: 580125

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	48.7		mg/L		97	90 - 110
Fluoride	2.50	2.51		mg/L		100	90 - 110
Sulfate	50.0	49.2		mg/L		98	90 - 110

Lab Sample ID: MB 240-580390/3
Matrix: Water
Analysis Batch: 580390

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			07/12/23 14:03	1
Fluoride	ND		0.050	0.024	mg/L			07/12/23 14:03	1
Sulfate	ND		1.0	0.35	mg/L			07/12/23 14:03	1

Lab Sample ID: LCS 240-580390/4
Matrix: Water
Analysis Batch: 580390

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	50.1		mg/L		100	90 - 110
Fluoride	2.50	2.60		mg/L		104	90 - 110
Sulfate	50.0	50.5		mg/L		101	90 - 110

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

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

Lab Sample ID: MB 240-577721/1
Matrix: Water
Analysis Batch: 577721

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			06/19/23 14:54	1

Lab Sample ID: LCS 240-577721/2
Matrix: Water
Analysis Batch: 577721

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	518	484		mg/L		93	80 - 120

Lab Sample ID: 240-187259-1 DU
Matrix: Water
Analysis Batch: 577721

Client Sample ID: BAC-21-F-A3-20230612-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	550		545		mg/L		1	20

Lab Sample ID: MB 240-577886/1
Matrix: Water
Analysis Batch: 577886

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			06/20/23 14:55	1

Lab Sample ID: LCS 240-577886/2
Matrix: Water
Analysis Batch: 577886

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	518	496		mg/L		96	80 - 120

Lab Sample ID: MB 240-578050/1
Matrix: Water
Analysis Batch: 578050

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			06/21/23 15:44	1

Lab Sample ID: LCS 240-578050/2
Matrix: Water
Analysis Batch: 578050

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	518	488		mg/L		94	80 - 120

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-616969/1-A
Matrix: Water
Analysis Batch: 620350

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 616969

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.04601	U	0.0784	0.0785	1.00	0.138	pCi/L	06/21/23 10:14	07/14/23 14:16	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
%Yield	Qualifier									
Ba Carrier	89.8		30 - 110			06/21/23 10:14	07/14/23 14:16	1		

Lab Sample ID: LCS 160-616969/2-A
Matrix: Water
Analysis Batch: 620350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 616969

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	9.997		1.09	1.00	0.145	pCi/L	88	75 - 125
Carrier	LCS LCS		Limits			Prepared	Analyzed	Dil Fac	
%Yield	Qualifier								
Ba Carrier	97.2		30 - 110						

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-616970/1-A
Matrix: Water
Analysis Batch: 619638

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 616970

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	-0.04969	U	0.305	0.305	1.00	0.589	pCi/L	06/21/23 10:17	07/10/23 16:00	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
%Yield	Qualifier									
Ba Carrier	89.8		30 - 110			06/21/23 10:17	07/10/23 16:00	1		
Y Carrier	80.0		30 - 110			06/21/23 10:17	07/10/23 16:00	1		

Lab Sample ID: LCS 160-616970/2-A
Matrix: Water
Analysis Batch: 619638

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 616970

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-228	8.05	9.804		1.34	1.00	0.608	pCi/L	122	75 - 125
Carrier	LCS LCS		Limits			Prepared	Analyzed	Dil Fac	
%Yield	Qualifier								
Ba Carrier	97.2		30 - 110						
Y Carrier	81.1		30 - 110						

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Metals

Prep Batch: 577687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-12	EB-001-F-A4-20230613-01	Total Recoverable	Water	3005A	
240-187259-13	BAC-10-F-A4-20230614-01	Total Recoverable	Water	3005A	
240-187259-14	BAC-14-F-A4-20230614-01	Total Recoverable	Water	3005A	
240-187259-15	DUP-002-BAC-14-F-A4-20230614-01	Total Recoverable	Water	3005A	
240-187259-16	BAC-12-F-A4-20230614-01	Total Recoverable	Water	3005A	
240-187259-17	BAC-16-F-A4-20230614-01	Total Recoverable	Water	3005A	
240-187259-18	EB-001-F-A4-20230614-01	Total Recoverable	Water	3005A	
MB 240-577687/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-577687/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-187259-12 MS	EB-001-F-A4-20230613-01	Total Recoverable	Water	3005A	
240-187259-12 MSD	EB-001-F-A4-20230613-01	Total Recoverable	Water	3005A	

Prep Batch: 577689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-12	EB-001-F-A4-20230613-01	Total/NA	Water	7470A	
240-187259-13	BAC-10-F-A4-20230614-01	Total/NA	Water	7470A	
240-187259-14	BAC-14-F-A4-20230614-01	Total/NA	Water	7470A	
240-187259-15	DUP-002-BAC-14-F-A4-20230614-01	Total/NA	Water	7470A	
240-187259-16	BAC-12-F-A4-20230614-01	Total/NA	Water	7470A	
240-187259-17	BAC-16-F-A4-20230614-01	Total/NA	Water	7470A	
240-187259-18	EB-001-F-A4-20230614-01	Total/NA	Water	7470A	
MB 240-577689/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-577689/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-187259-12 MS	EB-001-F-A4-20230613-01	Total/NA	Water	7470A	
240-187259-12 MSD	EB-001-F-A4-20230613-01	Total/NA	Water	7470A	

Prep Batch: 577826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-1	BAC-21-F-A3-20230612-01	Total Recoverable	Water	3005A	
240-187259-2	DUP-001-BAC-21-F-A3-20230612-01	Total Recoverable	Water	3005A	
240-187259-3	BAC-22-F-A3-20230612-01	Total Recoverable	Water	3005A	
240-187259-4	BAC-23-F-A3-20230612-01	Total Recoverable	Water	3005A	
240-187259-5	BAC-08-F-A3-20230612-01	Total Recoverable	Water	3005A	
240-187259-6	EB-001-F-A3-20230612-01	Total Recoverable	Water	3005A	
240-187259-7	BAC-18-F-A3-20230613-01	Total Recoverable	Water	3005A	
240-187259-8	EB-001-F-A3-20230613-01	Total Recoverable	Water	3005A	
240-187259-9	BAC-10-F-A3-20230614-01	Total Recoverable	Water	3005A	
240-187259-10	BAC-14-F-A3-20230614-01	Total Recoverable	Water	3005A	
240-187259-11	DUP-002-BAC-14-F-A3-20230614-01	Total Recoverable	Water	3005A	
MB 240-577826/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-577826/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-577826/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 577918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-12	EB-001-F-A4-20230613-01	Total Recoverable	Water	6020B	577687
240-187259-13	BAC-10-F-A4-20230614-01	Total Recoverable	Water	6020B	577687
240-187259-14	BAC-14-F-A4-20230614-01	Total Recoverable	Water	6020B	577687
240-187259-15	DUP-002-BAC-14-F-A4-20230614-01	Total Recoverable	Water	6020B	577687
240-187259-16	BAC-12-F-A4-20230614-01	Total Recoverable	Water	6020B	577687
240-187259-17	BAC-16-F-A4-20230614-01	Total Recoverable	Water	6020B	577687

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Metals (Continued)

Analysis Batch: 577918 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-18	EB-001-F-A4-20230614-01	Total Recoverable	Water	6020B	577687
MB 240-577687/1-A	Method Blank	Total Recoverable	Water	6020B	577687
LCS 240-577687/2-A	Lab Control Sample	Total Recoverable	Water	6020B	577687
240-187259-12 MS	EB-001-F-A4-20230613-01	Total Recoverable	Water	6020B	577687
240-187259-12 MSD	EB-001-F-A4-20230613-01	Total Recoverable	Water	6020B	577687

Analysis Batch: 577919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-12	EB-001-F-A4-20230613-01	Total/NA	Water	7470A	577689
240-187259-13	BAC-10-F-A4-20230614-01	Total/NA	Water	7470A	577689
240-187259-14	BAC-14-F-A4-20230614-01	Total/NA	Water	7470A	577689
240-187259-15	DUP-002-BAC-14-F-A4-20230614-01	Total/NA	Water	7470A	577689
240-187259-16	BAC-12-F-A4-20230614-01	Total/NA	Water	7470A	577689
240-187259-17	BAC-16-F-A4-20230614-01	Total/NA	Water	7470A	577689
240-187259-18	EB-001-F-A4-20230614-01	Total/NA	Water	7470A	577689
MB 240-577689/1-A	Method Blank	Total/NA	Water	7470A	577689
LCS 240-577689/2-A	Lab Control Sample	Total/NA	Water	7470A	577689
240-187259-12 MS	EB-001-F-A4-20230613-01	Total/NA	Water	7470A	577689
240-187259-12 MSD	EB-001-F-A4-20230613-01	Total/NA	Water	7470A	577689

Analysis Batch: 578100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-1	BAC-21-F-A3-20230612-01	Total Recoverable	Water	6020B	577826
240-187259-2	DUP-001-BAC-21-F-A3-20230612-01	Total Recoverable	Water	6020B	577826
240-187259-3	BAC-22-F-A3-20230612-01	Total Recoverable	Water	6020B	577826
240-187259-4	BAC-23-F-A3-20230612-01	Total Recoverable	Water	6020B	577826
240-187259-5	BAC-08-F-A3-20230612-01	Total Recoverable	Water	6020B	577826
240-187259-6	EB-001-F-A3-20230612-01	Total Recoverable	Water	6020B	577826
240-187259-7	BAC-18-F-A3-20230613-01	Total Recoverable	Water	6020B	577826
240-187259-8	EB-001-F-A3-20230613-01	Total Recoverable	Water	6020B	577826
240-187259-9	BAC-10-F-A3-20230614-01	Total Recoverable	Water	6020B	577826
240-187259-10	BAC-14-F-A3-20230614-01	Total Recoverable	Water	6020B	577826
240-187259-11	DUP-002-BAC-14-F-A3-20230614-01	Total Recoverable	Water	6020B	577826
MB 240-577826/1-A	Method Blank	Total Recoverable	Water	6020B	577826
LCS 240-577826/3-A	Lab Control Sample	Total Recoverable	Water	6020B	577826

Analysis Batch: 578108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-1	BAC-21-F-A3-20230612-01	Total Recoverable	Water	6010D	577826
240-187259-2	DUP-001-BAC-21-F-A3-20230612-01	Total Recoverable	Water	6010D	577826
240-187259-3	BAC-22-F-A3-20230612-01	Total Recoverable	Water	6010D	577826
240-187259-4	BAC-23-F-A3-20230612-01	Total Recoverable	Water	6010D	577826
240-187259-5	BAC-08-F-A3-20230612-01	Total Recoverable	Water	6010D	577826
240-187259-6	EB-001-F-A3-20230612-01	Total Recoverable	Water	6010D	577826
240-187259-7	BAC-18-F-A3-20230613-01	Total Recoverable	Water	6010D	577826
240-187259-8	EB-001-F-A3-20230613-01	Total Recoverable	Water	6010D	577826
240-187259-9	BAC-10-F-A3-20230614-01	Total Recoverable	Water	6010D	577826
240-187259-10	BAC-14-F-A3-20230614-01	Total Recoverable	Water	6010D	577826
240-187259-11	DUP-002-BAC-14-F-A3-20230614-01	Total Recoverable	Water	6010D	577826
MB 240-577826/1-A	Method Blank	Total Recoverable	Water	6010D	577826
LCS 240-577826/2-A	Lab Control Sample	Total Recoverable	Water	6010D	577826

Eurofins Cleveland

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

General Chemistry

Analysis Batch: 577721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-1	BAC-21-F-A3-20230612-01	Total/NA	Water	SM 2540C	
240-187259-2	DUP-001-BAC-21-F-A3-20230612-01	Total/NA	Water	SM 2540C	
240-187259-3	BAC-22-F-A3-20230612-01	Total/NA	Water	SM 2540C	
240-187259-4	BAC-23-F-A3-20230612-01	Total/NA	Water	SM 2540C	
240-187259-5	BAC-08-F-A3-20230612-01	Total/NA	Water	SM 2540C	
240-187259-6	EB-001-F-A3-20230612-01	Total/NA	Water	SM 2540C	
MB 240-577721/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-577721/2	Lab Control Sample	Total/NA	Water	SM 2540C	
240-187259-1 DU	BAC-21-F-A3-20230612-01	Total/NA	Water	SM 2540C	

Analysis Batch: 577886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-7	BAC-18-F-A3-20230613-01	Total/NA	Water	SM 2540C	
240-187259-8	EB-001-F-A3-20230613-01	Total/NA	Water	SM 2540C	
MB 240-577886/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-577886/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 578050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-9	BAC-10-F-A3-20230614-01	Total/NA	Water	SM 2540C	
240-187259-10	BAC-14-F-A3-20230614-01	Total/NA	Water	SM 2540C	
240-187259-11	DUP-002-BAC-14-F-A3-20230614-01	Total/NA	Water	SM 2540C	
MB 240-578050/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-578050/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 578219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-1	BAC-21-F-A3-20230612-01	Total/NA	Water	2320B-1997	
240-187259-2	DUP-001-BAC-21-F-A3-20230612-01	Total/NA	Water	2320B-1997	
240-187259-3	BAC-22-F-A3-20230612-01	Total/NA	Water	2320B-1997	
240-187259-4	BAC-23-F-A3-20230612-01	Total/NA	Water	2320B-1997	
240-187259-5	BAC-08-F-A3-20230612-01	Total/NA	Water	2320B-1997	
240-187259-6	EB-001-F-A3-20230612-01	Total/NA	Water	2320B-1997	
240-187259-7	BAC-18-F-A3-20230613-01	Total/NA	Water	2320B-1997	
240-187259-8	EB-001-F-A3-20230613-01	Total/NA	Water	2320B-1997	
240-187259-9	BAC-10-F-A3-20230614-01	Total/NA	Water	2320B-1997	
240-187259-10	BAC-14-F-A3-20230614-01	Total/NA	Water	2320B-1997	
240-187259-11	DUP-002-BAC-14-F-A3-20230614-01	Total/NA	Water	2320B-1997	
240-187259-12	EB-001-F-A4-20230613-01	Total/NA	Water	2320B-1997	
240-187259-13	BAC-10-F-A4-20230614-01	Total/NA	Water	2320B-1997	
240-187259-14	BAC-14-F-A4-20230614-01	Total/NA	Water	2320B-1997	
240-187259-15	DUP-002-BAC-14-F-A4-20230614-01	Total/NA	Water	2320B-1997	
240-187259-16	BAC-12-F-A4-20230614-01	Total/NA	Water	2320B-1997	
240-187259-17	BAC-16-F-A4-20230614-01	Total/NA	Water	2320B-1997	
240-187259-18	EB-001-F-A4-20230614-01	Total/NA	Water	2320B-1997	
MB 240-578219/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-578219/56	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-578219/29	Lab Control Sample	Total/NA	Water	2320B-1997	
LCS 240-578219/55	Lab Control Sample	Total/NA	Water	2320B-1997	
240-187259-4 DU	BAC-23-F-A3-20230612-01	Total/NA	Water	2320B-1997	
240-187259-14 DU	BAC-14-F-A4-20230614-01	Total/NA	Water	2320B-1997	

Eurofins Cleveland

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

General Chemistry

Analysis Batch: 579935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-1	BAC-21-F-A3-20230612-01	Total/NA	Water	300.0	
240-187259-2	DUP-001-BAC-21-F-A3-20230612-01	Total/NA	Water	300.0	
240-187259-3	BAC-22-F-A3-20230612-01	Total/NA	Water	300.0	
240-187259-3	BAC-22-F-A3-20230612-01	Total/NA	Water	300.0	
240-187259-4	BAC-23-F-A3-20230612-01	Total/NA	Water	300.0	
240-187259-5	BAC-08-F-A3-20230612-01	Total/NA	Water	300.0	
240-187259-6	EB-001-F-A3-20230612-01	Total/NA	Water	300.0	
MB 240-579935/3	Method Blank	Total/NA	Water	300.0	
LCS 240-579935/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 580125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-7	BAC-18-F-A3-20230613-01	Total/NA	Water	300.0	
240-187259-8	EB-001-F-A3-20230613-01	Total/NA	Water	300.0	
240-187259-9	BAC-10-F-A3-20230614-01	Total/NA	Water	300.0	
240-187259-10	BAC-14-F-A3-20230614-01	Total/NA	Water	300.0	
240-187259-11	DUP-002-BAC-14-F-A3-20230614-01	Total/NA	Water	300.0	
240-187259-12	EB-001-F-A4-20230613-01	Total/NA	Water	300.0-1993 R2.1	
240-187259-13	BAC-10-F-A4-20230614-01	Total/NA	Water	300.0-1993 R2.1	
240-187259-14	BAC-14-F-A4-20230614-01	Total/NA	Water	300.0-1993 R2.1	
240-187259-15	DUP-002-BAC-14-F-A4-20230614-01	Total/NA	Water	300.0-1993 R2.1	
240-187259-16	BAC-12-F-A4-20230614-01	Total/NA	Water	300.0-1993 R2.1	
240-187259-17	BAC-16-F-A4-20230614-01	Total/NA	Water	300.0-1993 R2.1	
240-187259-18	EB-001-F-A4-20230614-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-580125/3	Method Blank	Total/NA	Water	300.0	
LCS 240-580125/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 580390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-10	BAC-14-F-A3-20230614-01	Total/NA	Water	300.0	
240-187259-11	DUP-002-BAC-14-F-A3-20230614-01	Total/NA	Water	300.0	
MB 240-580390/3	Method Blank	Total/NA	Water	300.0	
LCS 240-580390/4	Lab Control Sample	Total/NA	Water	300.0	

Rad

Prep Batch: 616969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-12	EB-001-F-A4-20230613-01	Total/NA	Water	PrecSep-21	
240-187259-13	BAC-10-F-A4-20230614-01	Total/NA	Water	PrecSep-21	
240-187259-14	BAC-14-F-A4-20230614-01	Total/NA	Water	PrecSep-21	
240-187259-15	DUP-002-BAC-14-F-A4-20230614-01	Total/NA	Water	PrecSep-21	
240-187259-16	BAC-12-F-A4-20230614-01	Total/NA	Water	PrecSep-21	
240-187259-17	BAC-16-F-A4-20230614-01	Total/NA	Water	PrecSep-21	
240-187259-18	EB-001-F-A4-20230614-01	Total/NA	Water	PrecSep-21	
MB 160-616969/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-616969/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 616970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-12	EB-001-F-A4-20230613-01	Total/NA	Water	PrecSep_0	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Rad (Continued)

Prep Batch: 616970 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-187259-13	BAC-10-F-A4-20230614-01	Total/NA	Water	PrecSep_0	
240-187259-14	BAC-14-F-A4-20230614-01	Total/NA	Water	PrecSep_0	
240-187259-15	DUP-002-BAC-14-F-A4-20230614-01	Total/NA	Water	PrecSep_0	
240-187259-16	BAC-12-F-A4-20230614-01	Total/NA	Water	PrecSep_0	
240-187259-17	BAC-16-F-A4-20230614-01	Total/NA	Water	PrecSep_0	
240-187259-18	EB-001-F-A4-20230614-01	Total/NA	Water	PrecSep_0	
MB 160-616970/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-616970/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-21-F-A3-20230612-01

Lab Sample ID: 240-187259-1

Date Collected: 06/12/23 10:53

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 21:45
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 13:48
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 17:51
Total/NA	Analysis	300.0		1	579935	ALT	EET CLE	07/08/23 00:18
Total/NA	Analysis	SM 2540C		1	577721	GH	EET CLE	06/19/23 14:54

Client Sample ID: DUP-001-BAC-21-F-A3-20230612-01

Lab Sample ID: 240-187259-2

Date Collected: 06/12/23 10:53

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 21:49
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 13:53
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 17:55
Total/NA	Analysis	300.0		1	579935	ALT	EET CLE	07/08/23 01:01
Total/NA	Analysis	SM 2540C		1	577721	GH	EET CLE	06/19/23 14:54

Client Sample ID: BAC-22-F-A3-20230612-01

Lab Sample ID: 240-187259-3

Date Collected: 06/12/23 12:34

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 21:54
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 13:57
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 18:18
Total/NA	Analysis	300.0		1	579935	ALT	EET CLE	07/08/23 01:44
Total/NA	Analysis	300.0		5	579935	ALT	EET CLE	07/08/23 02:06
Total/NA	Analysis	SM 2540C		1	577721	GH	EET CLE	06/19/23 14:54

Client Sample ID: BAC-23-F-A3-20230612-01

Lab Sample ID: 240-187259-4

Date Collected: 06/12/23 13:26

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 21:58
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 14:11

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-23-F-A3-20230612-01

Lab Sample ID: 240-187259-4

Date Collected: 06/12/23 13:26

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 18:10
Total/NA	Analysis	300.0		1	579935	ALT	EET CLE	07/08/23 02:28
Total/NA	Analysis	SM 2540C		1	577721	GH	EET CLE	06/19/23 14:54

Client Sample ID: BAC-08-F-A3-20230612-01

Lab Sample ID: 240-187259-5

Date Collected: 06/12/23 14:23

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 22:02
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 14:15
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 18:22
Total/NA	Analysis	300.0		1	579935	ALT	EET CLE	07/08/23 03:54
Total/NA	Analysis	SM 2540C		1	577721	GH	EET CLE	06/19/23 14:54

Client Sample ID: EB-001-F-A3-20230612-01

Lab Sample ID: 240-187259-6

Date Collected: 06/12/23 15:00

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 22:07
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 14:20
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 18:26
Total/NA	Analysis	300.0		1	579935	ALT	EET CLE	07/08/23 04:16
Total/NA	Analysis	SM 2540C		1	577721	GH	EET CLE	06/19/23 14:54

Client Sample ID: BAC-18-F-A3-20230613-01

Lab Sample ID: 240-187259-7

Date Collected: 06/13/23 13:18

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 22:11
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 14:25
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 18:29
Total/NA	Analysis	300.0		1	580125	ALT	EET CLE	07/11/23 03:45
Total/NA	Analysis	SM 2540C		1	577886	GH	EET CLE	06/20/23 14:55

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: EB-001-F-A3-20230613-01

Lab Sample ID: 240-187259-8

Date Collected: 06/13/23 16:00

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 22:15
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 14:29
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 18:33
Total/NA	Analysis	300.0		1	580125	ALT	EET CLE	07/11/23 04:06
Total/NA	Analysis	SM 2540C		1	577886	GH	EET CLE	06/20/23 14:55

Client Sample ID: BAC-10-F-A3-20230614-01

Lab Sample ID: 240-187259-9

Date Collected: 06/14/23 09:49

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 22:20
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 14:34
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 18:37
Total/NA	Analysis	300.0		1	580125	ALT	EET CLE	07/11/23 08:26
Total/NA	Analysis	SM 2540C		1	578050	GH	EET CLE	06/21/23 15:44

Client Sample ID: BAC-14-F-A3-20230614-01

Lab Sample ID: 240-187259-10

Date Collected: 06/14/23 10:55

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 22:24
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 14:38
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 18:41
Total/NA	Analysis	300.0		1	580125	ALT	EET CLE	07/11/23 09:09
Total/NA	Analysis	300.0		10	580390	ALT	EET CLE	07/12/23 15:04
Total/NA	Analysis	SM 2540C		1	578050	GH	EET CLE	06/21/23 15:44

Client Sample ID: DUP-002-BAC-14-F-A3-20230614-01

Lab Sample ID: 240-187259-11

Date Collected: 06/14/23 10:55

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6010D		1	578108	RKT	EET CLE	06/21/23 22:37
Total Recoverable	Prep	3005A			577826	BN	EET CLE	06/20/23 14:00
Total Recoverable	Analysis	6020B		1	578100	DSH	EET CLE	06/21/23 14:43

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: DUP-002-BAC-14-F-A3-20230614-01

Lab Sample ID: 240-187259-11

Date Collected: 06/14/23 10:55

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 18:44
Total/NA	Analysis	300.0		1	580125	ALT	EET CLE	07/11/23 10:15
Total/NA	Analysis	300.0		10	580390	ALT	EET CLE	07/12/23 15:24
Total/NA	Analysis	SM 2540C		1	578050	GH	EET CLE	06/21/23 15:44

Client Sample ID: EB-001-F-A4-20230613-01

Lab Sample ID: 240-187259-12

Date Collected: 06/13/23 16:00

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577687	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 19:11
Total/NA	Prep	7470A			577689	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 17:14
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 18:50
Total/NA	Analysis	300.0-1993 R2.1		1	580125	ALT	EET CLE	07/11/23 04:28
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620395	SCB	EET SL	07/17/23 09:31
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619620	FLC	EET SL	07/10/23 16:06
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 12:05

Client Sample ID: BAC-10-F-A4-20230614-01

Lab Sample ID: 240-187259-13

Date Collected: 06/14/23 09:49

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577687	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 19:32
Total/NA	Prep	7470A			577689	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 17:23
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 19:01
Total/NA	Analysis	300.0-1993 R2.1		1	580125	ALT	EET CLE	07/11/23 10:36
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620395	SCB	EET SL	07/17/23 09:32
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619620	FLC	EET SL	07/10/23 16:07
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 12:05

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-14-F-A4-20230614-01

Lab Sample ID: 240-187259-14

Date Collected: 06/14/23 10:55

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577687	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 19:35
Total/NA	Prep	7470A			577689	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 17:25
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 18:54
Total/NA	Analysis	300.0-1993 R2.1		1	580125	ALT	EET CLE	07/11/23 10:58
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620396	SCB	EET SL	07/17/23 09:34
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619620	FLC	EET SL	07/10/23 16:07
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 12:05

Client Sample ID: DUP-002-BAC-14-F-A4-20230614-01

Lab Sample ID: 240-187259-15

Date Collected: 06/14/23 10:55

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577687	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 19:38
Total/NA	Prep	7470A			577689	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 17:27
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 19:05
Total/NA	Analysis	300.0-1993 R2.1		1	580125	ALT	EET CLE	07/11/23 11:20
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620396	SCB	EET SL	07/17/23 09:34
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619620	FLC	EET SL	07/10/23 16:07
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 13:20

Client Sample ID: BAC-12-F-A4-20230614-01

Lab Sample ID: 240-187259-16

Date Collected: 06/14/23 12:10

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577687	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 19:40
Total/NA	Prep	7470A			577689	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 17:29
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 19:09
Total/NA	Analysis	300.0-1993 R2.1		1	580125	ALT	EET CLE	07/11/23 11:41
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620396	SCB	EET SL	07/17/23 09:34
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619620	FLC	EET SL	07/10/23 16:07

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

Client Sample ID: BAC-12-F-A4-20230614-01

Lab Sample ID: 240-187259-16

Date Collected: 06/14/23 12:10

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 13:20

Client Sample ID: BAC-16-F-A4-20230614-01

Lab Sample ID: 240-187259-17

Date Collected: 06/14/23 13:03

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577687	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 19:43
Total/NA	Prep	7470A			577689	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 17:36
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 19:12
Total/NA	Analysis	300.0-1993 R2.1		1	580125	ALT	EET CLE	07/11/23 12:03
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620396	SCB	EET SL	07/17/23 09:38
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619620	FLC	EET SL	07/10/23 16:07
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 13:20

Client Sample ID: EB-001-F-A4-20230614-01

Lab Sample ID: 240-187259-18

Date Collected: 06/14/23 15:20

Matrix: Water

Date Received: 06/17/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			577687	GK	EET CLE	06/19/23 14:00
Total Recoverable	Analysis	6020B		1	577918	DSH	EET CLE	06/20/23 19:46
Total/NA	Prep	7470A			577689	GK	EET CLE	06/19/23 14:00
Total/NA	Analysis	7470A		1	577919	MRL	EET CLE	06/20/23 17:38
Total/NA	Analysis	2320B-1997		1	578219	JMR	EET CLE	06/20/23 19:16
Total/NA	Analysis	300.0-1993 R2.1		1	580125	ALT	EET CLE	07/11/23 12:25
Total/NA	Prep	PrecSep-21			616969	KAC	EET SL	06/21/23 10:14
Total/NA	Analysis	9315		1	620396	SCB	EET SL	07/17/23 09:35
Total/NA	Prep	PrecSep_0			616970	KAC	EET SL	06/21/23 10:17
Total/NA	Analysis	9320		1	619620	FLC	EET SL	07/10/23 16:07
Total/NA	Analysis	Ra226_Ra228		1	620374	SCB	EET SL	07/17/23 13:20

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
 Project/Site: Federal CCR Wells - App III & App IV

Job ID: 240-187259-1

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
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-23 *
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-23 *
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-24
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-23
MI - RadChem Recognition	State	9005	06-30-23 *
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-23
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III & App IV


Job ID: 240-187259-1

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 Dakota	State	R-207	06-30-23 *
Oklahoma	NELAP	9997	08-31-23
Oregon	NELAP	4157	09-01-23
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23 *
Texas	NELAP	T104704193	07-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO000542021-14	07-31-23
Virginia	NELAP	10310	06-15-25
Washington	State	C592	08-30-23
West Virginia DEP	State	381	10-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Client Information		Sampler: <i>Sobby Caste</i>	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No: 240-93465-34577-1																																																																																																																																																																																		
Client Contact: Taylor Huffman		Phone: 740-323-4308	E-Mail: roxanne.cisneros@Eurofinset.com	State of Origin:	Page: <i>1 of 2</i>																																																																																																																																																																																		
Company: Lightstone Generation Gavin Power LLC		PWSID:	Job #:																																																																																																																																																																																				
Address: 7397 OH-7		Analysis Requested																																																																																																																																																																																					
City: Cheshire	TAT Requested (days):	Total Number of Containers																																																																																																																																																																																					
State, Zip: OH, 45620	Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Special Instructions/Note:																																																																																																																																																																																					
Phone: 740-925-3171(Tel)	PO #: 2935505	<div style="border: 1px solid black; padding: 5px; text-align: center;">  <p>240-187259 Chain of Custody</p> </div>																																																																																																																																																																																					
Email: taylor.huffman@lightstonegen.com	WO #: 24019633	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 Other:																																																																																																																																																																																					
Project Name: Federal CCR Wells - App III	Site: <i>Gavin Plant</i>	Preservation Codes: 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)																																																																																																																																																																																					
<table border="1"> <thead> <tr> <th>Sample Identification</th> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=comp, G=grab)</th> <th>Matrix (W=water, S=solid, O=other)</th> <th>Field Filtered Sample (Yes or No)</th> <th>Perform MS/MSD (Yes or No)</th> <th>2540C, Calcd, 300.0, 28D</th> <th>2320B - Alkalinity</th> <th>D</th> <th>N</th> <th>I</th> <th>N</th> <th>Total Number of Containers</th> <th>Special Instructions/Note:</th> </tr> </thead> <tbody> <tr> <td>BAC-21-F-A3-20230612-01</td> <td>6-12-23</td> <td>1053</td> <td>6</td> <td>W</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>DUP-001-BAC-21-F-A3-20230612-01</td> <td>6-12-23</td> <td>1053</td> <td>6</td> <td>W</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>BAC-22-F-A3-20230612-01</td> <td>6-12-23</td> <td>1234</td> <td>6</td> <td>W</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>BAC-23-F-A3-20230612-01</td> <td>6-12-23</td> <td>1326</td> <td>6</td> <td>W</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>BAC-08-F-A3-20230612-01</td> <td>6-12-23</td> <td>1423</td> <td>6</td> <td>W</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>EB-001-F-A3-20230612-01</td> <td>6-12-23</td> <td>1500</td> <td>6</td> <td>W</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>BAC-18-F-A3-20230613-01</td> <td>6-13-23</td> <td>1318</td> <td>6</td> <td>W</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>EB-001-F-A3-20230613-01</td> <td>6-13-23</td> <td>1600</td> <td>6</td> <td>W</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>BAC10-F-A3-20230614-01</td> <td>6-14-23</td> <td>0949</td> <td>6</td> <td>W</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>BAC-14-F-A3-20230614-01</td> <td>6-14-23</td> <td>1055</td> <td>6</td> <td>W</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>DUP-002-BAC-14-F-A3-20230614-01</td> <td>6-14-23</td> <td>1055</td> <td>6</td> <td>W</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=other)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540C, Calcd, 300.0, 28D	2320B - Alkalinity	D	N	I	N	Total Number of Containers	Special Instructions/Note:	BAC-21-F-A3-20230612-01	6-12-23	1053	6	W											DUP-001-BAC-21-F-A3-20230612-01	6-12-23	1053	6	W											BAC-22-F-A3-20230612-01	6-12-23	1234	6	W											BAC-23-F-A3-20230612-01	6-12-23	1326	6	W											BAC-08-F-A3-20230612-01	6-12-23	1423	6	W											EB-001-F-A3-20230612-01	6-12-23	1500	6	W											BAC-18-F-A3-20230613-01	6-13-23	1318	6	W											EB-001-F-A3-20230613-01	6-13-23	1600	6	W											BAC10-F-A3-20230614-01	6-14-23	0949	6	W											BAC-14-F-A3-20230614-01	6-14-23	1055	6	W											DUP-002-BAC-14-F-A3-20230614-01	6-14-23	1055	6	W											Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=other)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540C, Calcd, 300.0, 28D	2320B - Alkalinity	D	N	I	N	Total Number of Containers	Special Instructions/Note:																																																																																																																																																																									
BAC-21-F-A3-20230612-01	6-12-23	1053	6	W																																																																																																																																																																																			
DUP-001-BAC-21-F-A3-20230612-01	6-12-23	1053	6	W																																																																																																																																																																																			
BAC-22-F-A3-20230612-01	6-12-23	1234	6	W																																																																																																																																																																																			
BAC-23-F-A3-20230612-01	6-12-23	1326	6	W																																																																																																																																																																																			
BAC-08-F-A3-20230612-01	6-12-23	1423	6	W																																																																																																																																																																																			
EB-001-F-A3-20230612-01	6-12-23	1500	6	W																																																																																																																																																																																			
BAC-18-F-A3-20230613-01	6-13-23	1318	6	W																																																																																																																																																																																			
EB-001-F-A3-20230613-01	6-13-23	1600	6	W																																																																																																																																																																																			
BAC10-F-A3-20230614-01	6-14-23	0949	6	W																																																																																																																																																																																			
BAC-14-F-A3-20230614-01	6-14-23	1055	6	W																																																																																																																																																																																			
DUP-002-BAC-14-F-A3-20230614-01	6-14-23	1055	6	W																																																																																																																																																																																			
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/QC Requirements:																																																																																																																																																																																					
Empty Kit Relinquished by: <i>Sobby Caste</i> Date: 6-16-23/0915 Relinquished by: <i>Sobby Caste</i> Date/Time: 6-16-23 1700 Relinquished by: <i>Sobby Caste</i> Date/Time:		Method of Shipment:																																																																																																																																																																																					
Custody Seals Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Custody Seal No.:		Received by: <i>Sobby Caste</i> Company: <i>EPA</i> Date/Time: 6-16-23 1700 Received by: <i>Leah M. Smith</i> Company: <i>EETNC</i> Date/Time: 06-16-23 800 Received by:																																																																																																																																																																																					



Chain of Custody Record

209



Client Information
 Client Contact: Bobby Costo
 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: Federal CCR Wells - App IV
 Site:

Sample Information
 Sample: Bobby Costo
 Lab PM: Cisneros, Roxanne
 E-Mail: roxanne.cisneros@Eurofinset.com
 Carrier Tracking No(s):
 State of Origin:
 COC No: 240-93466-34578.1
 Page: Page 1 of 1
 Job #:

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Swab, Other)	Preservation Code	Field Filtered Sample (Yes or No)	Perform MSD (Yes or No)	6020, 7470A	300.0, 28D - Fluoride	2320B - Alkalinity	9315, Ra226, 9320, Ra228, Ra226Ra228, GPPC
EB-001-F-A4-20230613-01	6-13-23	1600	6	Water		X	X				
BAC-10-F-A4-20230614-01	6-14-23	0949	6	Water		X	X				
BAC-14-F-A4-20230614-01	6-14-23	1055	6	Water		X	X				
DUP-002-BAC-14-F-A4-20230614-01	6-14-23	1055	6	Water		X	X				
BAC-12-F-A4-20230614-01	6-14-23	1210	6	Water		X	X				
BAC-16-F-A4-20230614-01	6-14-23	1303	6	W		X	X				
FB-001-F-A4-20230614-01	6-14-23	1520	6	W		X	X				

Special Instructions/Note:

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
 Other:

M - Hexane
 N - None
 O - AsNaO2
 P - Na2OAS
 Q - Na2SO3
 R - Na2SO4
 S - H2SO4
 T - TSP Dodecahydrate
 U - Acetone
 V - MCAA
 W - pH 4-5
 Z - other (specify)

Total Number of Containers: X

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant
 Poison B Unknown Radiological
 Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Empty Kit Relinquished by: *Bobby Costo* Date: 6-16-23
 Relinquished by: *Bobby Costo* Date: 6-16-23
 Relinquished by: *Paul M. Smith* Date: 6-17-23

Company: KEMRON Company: ECTM
 Date/Time: 6-16-23 0915 Date/Time: 6-16-23 800
 Date/Time: 6-16-23 1700

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



Eurofins - Canton Sample Receipt Form/Narrative Login # : _____
Barberton Facility

Client Lightstone Generation Gavin Power Site Name _____ Cooler unpacked by: Leah M. Smith
Cooler Received on 06-17-23 Opened on 06-17-23
FedEx: 1st Grd Exp UPS FAS Clipper 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 # 22 (CF r0.0 °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 NA
-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# 10BDH4321
14. Were VOAs on the COC? Yes No NA
15. Were air bubbles >6 mm in any VOA vials? Yes No NA **● ← Larger than this.**
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 _____

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

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: _____



Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container		Preservative	
			pH	Temp	Added (mls)	Lot #
BAC-21-F-A3-20230612-01	240-187259-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-001-BAC-21-F-A3-20230612-01	240-187259-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-22-F-A3-20230612-01	240-187259-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-23-F-A3-20230612-01	240-187259-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-08-F-A3-20230612-01	240-187259-C-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A3-20230612-01	240-187259-C-6	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-18-F-A3-20230613-01	240-187259-C-7	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A3-20230613-01	240-187259-C-8	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-10-F-A3-20230614-01	240-187259-C-9	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-14-F-A3-20230614-01	240-187259-C-10	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-002-BAC-14-F-A3-20230614-01	240-187259-C-11	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230613-01	240-187259-C-12	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230613-01	240-187259-D-12	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230613-01	240-187259-E-12	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-10-F-A4-20230614-01	240-187259-C-13	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-10-F-A4-20230614-01	240-187259-D-13	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-10-F-A4-20230614-01	240-187259-E-13	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-14-F-A4-20230614-01	240-187259-C-14	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-14-F-A4-20230614-01	240-187259-D-14	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-14-F-A4-20230614-01	240-187259-E-14	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-002-F-A4-20230614-01	240-187259-C-15	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-002-F-A4-20230614-01	240-187259-D-15	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-002-F-A4-20230614-01	240-187259-E-15	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-12-F-A4-20230614-01	240-187259-C-16	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-12-F-A4-20230614-01	240-187259-D-16	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-12-F-A4-20230614-01	240-187259-E-16	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-16-F-A4-20230614-01	240-187259-C-17	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-16-F-A4-20230614-01	240-187259-D-17	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-16-F-A4-20230614-01	240-187259-E-17	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230614-01	240-187259-C-18	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230614-01	240-187259-D-18	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230614-01	240-187259-E-18	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____



Client Information (Sub Contract Lab)		Lab PM: C. Cisneros, Roxanne	Carrier Tracking No(s):	COC No: 240-169563.1
Client Contact: Tesi/America Laboratories, Inc.		E-Mail: roxanne.cisneros@et.eurofins.com	State of Origin: Ohio	Page: Page 1 of 1
Address: 13715 Rider Trail North, City: Earth City, State, Zip: MO, 63045		Job #: 240-187259-1		
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		Preservation Codes: A - HCL M - Hexane B - NaOH O - AsNaO2 C - Zn Acetate P - Na2OAS D - Nitric Acid Q - Na2SO3 E - NaHSO4 R - Na2S2O3 F - MeOH S - H2SO4 G - Amchlor H - Ascorbic Acid I - Ice J - DI Water V - MCAA K - EDTA W - pH 4-5 Y - Trizma L - EDA Z - other (specify)		
Project Name: Federal GWM Wells		Other:		
Site: 24019633		Special Instructions/Note:		
Due Date Requested: 7/3/2023		Total Number of containers		
TAT Requested (days):		Recount of TAR after 21 day ingrowth if > action limit: save planchet		
PO #:		Recount of TAR after 21 day ingrowth if > action limit: save planchet		
WO #:		Recount of TAR after 21 day ingrowth if > action limit: save planchet		
Project #:		Recount of TAR after 21 day ingrowth if > action limit: save planchet		
SSOW#:		Recount of TAR after 21 day ingrowth if > action limit: save planchet		
Sample Identification - Client ID (Lab ID)		Recount of TAR after 21 day ingrowth if > action limit: save planchet		
EB-001-F-A4-20230613-01 (240-187259-12)	6/14/23	16:00 Eastern	Water	2
BAC-10-F-A4-20230614-01 (240-187259-13)	6/14/23	09:49 Eastern	Water	2
BAC-14-F-A4-20230614-01 (240-187259-14)	6/14/23	10:55 Eastern	Water	2
DUP-002-F-A4-20230614-01 (240-187259-15)	6/14/23	10:55 Eastern	Water	2
BAC-12-F-A4-20230614-01 (240-187259-16)	6/14/23	12:10 Eastern	Water	2
BAC-16-F-A4-20230614-01 (240-187259-17)	6/14/23	13:03 Eastern	Water	2
EB-001-F-A4-20230614-01 (240-187259-18)	6/14/23	15:20 Eastern	Water	2
Matrix (W=Water, S=solid, O=wastewater, BT=Tissue, A=Air)		Special Instructions/Note:		
Sample Type (C=Comp, G=grab)		Recount of TAR after 21 day ingrowth if > action limit: save planchet		
Sample Time		Recount of TAR after 21 day ingrowth if > action limit: save planchet		
Sample Date		Recount of TAR after 21 day ingrowth if > action limit: save planchet		
Field Filtered Sample (Yes or No)		Recount of TAR after 21 day ingrowth if > action limit: save planchet		
Uniformity (Yes or No)		Recount of TAR after 21 day ingrowth if > action limit: save planchet		
9315_Ra226/PreSep_21 Radium-226 (GFC)		Recount of TAR after 21 day ingrowth if > action limit: save planchet		
9320_Ra226/PreSep_0 Radium-226 (GFC)		Recount of TAR after 21 day ingrowth if > action limit: save planchet		
Ra226Ra228_GFC/ Combined Radium-226 and Radium-228		Recount of TAR after 21 day ingrowth if > action limit: save planchet		
Analysis Requested		Recount of TAR after 21 day ingrowth if > action limit: save planchet		

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

Relinquished by: *Paulette Abriele* Date/Time: *6-19-23 8:30*
 Relinquished by: *fedex* Date/Time: *6/20/23 08:45*
 Relinquished by: _____ Date/Time: _____
 Custody Seals Intact: Yes No
 Cooler Temperature(s) °C and Other Remarks:



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-187259-1

Login Number: 187259

List Number: 2

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

List Creation: 06/20/23 01:40 PM

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





ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 9/18/2023 12:37:05 PM

JOB DESCRIPTION

Federal GWM Wells - App IV

JOB NUMBER

240-190363-1

Eurofins Cleveland

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
9/18/2023 12:37:05 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

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.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Job ID: 240-190363-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-190363-1

Receipt

The samples were received on 8/18/2023 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 0.1°C, 0.2°C, 2.4°C, 2.5°C, 4.5°C and 22.1°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 9315_Ra226: Radium-226 Prep Batch 160-624958: The following samples were prepared at a reduced aliquot due to Matrix: BAC-10-F-A4-20230815-01 (240-190363-1), DUP-001-BAC-10-F-A4-20230815-01 (240-190363-2), BAC-21-F-A4-20230816-01 (240-190363-4) and BAC-22-F-A4-20230816-01 (240-190363-5). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method 9315_Ra226: Radium-226 prep Batch 160-624958: Insufficient sample volume was available to perform a sample duplicate for the following samples: EB-001-F-A4-20230815-01 (240-190363-3), BAC-23-F-A4-20230816-01 (240-190363-6) and EB-001-F-A4-20230816-01 (240-190363-7). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method 9315_Ra226: Radium-226 prep batch 160-624958: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-10-F-A4-20230815-01 (240-190363-1), DUP-001-BAC-10-F-A4-20230815-01 (240-190363-2), EB-001-F-A4-20230815-01 (240-190363-3), BAC-21-F-A4-20230816-01 (240-190363-4), BAC-22-F-A4-20230816-01 (240-190363-5), BAC-23-F-A4-20230816-01 (240-190363-6), EB-001-F-A4-20230816-01 (240-190363-7), (LCS 160-624958/2-A), (LCSD 160-624958/3-A) and (MB 160-624958/1-A)

Method 9320_Ra228: Radium-228 Prep Batch 160-624959: The following samples were prepared at a reduced aliquot due to Matrix: BAC-10-F-A4-20230815-01 (240-190363-1), DUP-001-BAC-10-F-A4-20230815-01 (240-190363-2), BAC-21-F-A4-20230816-01 (240-190363-4) and BAC-22-F-A4-20230816-01 (240-190363-5). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method 9320_Ra228: Radium-228 Prep Batch 160-62959: Insufficient sample volume was available to perform a sample duplicate for the following samples: EB-001-F-A4-20230815-01 (240-190363-3), BAC-23-F-A4-20230816-01 (240-190363-6) and EB-001-F-A4-20230816-01 (240-190363-7). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method 9320_Ra228: Radium-228 prep batch 160-624959: The following sample(s) did not meet the requested limit (RL) due to the reduced sample volume attributed to the presence of matrix interference. During preparation the analyst visually noted matrix effects. The data have been reported with this narrative. BAC-10-F-A4-20230815-01 (240-190363-1), DUP-001-BAC-10-F-A4-20230815-01 (240-190363-2) and BAC-21-F-A4-20230816-01 (240-190363-4)

Method 9320_Ra228: Radium-228 prep batch 160-624959: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-10-F-A4-20230815-01 (240-190363-1), DUP-001-BAC-10-F-A4-20230815-01 (240-190363-2), EB-001-F-A4-20230815-01 (240-190363-3), BAC-21-F-A4-20230816-01 (240-190363-4), BAC-22-F-A4-20230816-01 (240-190363-5), BAC-23-F-A4-20230816-01 (240-190363-6), EB-001-F-A4-20230816-01 (240-190363-7), (LCS 160-624959/2-A), (LCSD 160-624959/3-A) and (MB 160-624959/1-A)

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Job ID: 240-190363-1 (Continued)

Laboratory: Eurofins Cleveland (Continued)

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.

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Method Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0-1993 R2.1	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 GWM Wells - App IV

Job ID: 240-190363-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-190363-1	BAC-10-F-A4-20230815-01	Water	08/15/23 14:46	08/18/23 08:00
240-190363-2	DUP-001-BAC-10-F-A4-20230815-01	Water	08/15/23 14:46	08/18/23 08:00
240-190363-3	EB-001-F-A4-20230815-01	Water	08/15/23 15:15	08/18/23 08:00
240-190363-4	BAC-21-F-A4-20230816-01	Water	08/16/23 12:58	08/18/23 08:00
240-190363-5	BAC-22-F-A4-20230816-01	Water	08/16/23 13:48	08/18/23 08:00
240-190363-6	BAC-23-F-A4-20230816-01	Water	08/16/23 14:32	08/18/23 08:00
240-190363-7	EB-001-F-A4-20230816-01	Water	08/16/23 15:00	08/18/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: BAC-10-F-A4-20230815-01

Lab Sample ID: 240-190363-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.69	J	2.0	0.57	ug/L	1		6020B	Total Recoverable
Arsenic	4.3	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	55		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.28	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Chromium	5.3		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	3.7		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	3.5		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	7.3	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	27000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1900		1000	220	ug/L	1		6020B	Total Recoverable
Selenium	0.90	J	5.0	0.89	ug/L	1		6020B	Total Recoverable
Sodium	47000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	1.5		1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.15		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: DUP-001-BAC-10-F-A4-20230815-01

Lab Sample ID: 240-190363-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.5	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	52		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	4.5	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	3.2		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	3.3		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.5	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	27000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	48000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.15		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: EB-001-F-A4-20230815-01

Lab Sample ID: 240-190363-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: BAC-21-F-A4-20230816-01

Lab Sample ID: 240-190363-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.5		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	190		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	7.6		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.9		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	5.0		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	9.9		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	15000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.2	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	30000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.076		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-22-F-A4-20230816-01

Lab Sample ID: 240-190363-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.9	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	130		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	3.1	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.2		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	2.5		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.8	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	18000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	19000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.076		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-23-F-A4-20230816-01

Lab Sample ID: 240-190363-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.8	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	130		5.0	2.2	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 GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: BAC-23-F-A4-20230816-01 (Continued)

Lab Sample ID: 240-190363-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	1.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	4.1	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	16000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	20000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.13		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: EB-001-F-A4-20230816-01

Lab Sample ID: 240-190363-7

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: BAC-10-F-A4-20230815-01

Lab Sample ID: 240-190363-1

Date Collected: 08/15/23 14:46

Matrix: Water

Date Received: 08/18/23 08:00

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		08/22/23 14:00	08/24/23 15:41	1
Arsenic	4.3	J	5.0	0.75	ug/L		08/22/23 14:00	08/24/23 15:41	1
Barium	55		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 15:41	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 15:41	1
Cadmium	0.28	J	1.0	0.20	ug/L		08/22/23 14:00	08/24/23 15:41	1
Chromium	5.3		5.0	1.2	ug/L		08/22/23 14:00	08/24/23 15:41	1
Cobalt	3.7		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 15:41	1
Lead	3.5		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 15:41	1
Lithium	7.3	J	8.0	1.7	ug/L		08/22/23 14:00	08/24/23 15:41	1
Magnesium	27000		1000	61	ug/L		08/22/23 14:00	08/24/23 15:41	1
Molybdenum	ND		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 15:41	1
Potassium	1900		1000	220	ug/L		08/22/23 14:00	08/24/23 15:41	1
Selenium	0.90	J	5.0	0.89	ug/L		08/22/23 14:00	08/24/23 15:41	1
Sodium	47000		1000	330	ug/L		08/22/23 14:00	08/24/23 15:41	1
Thallium	1.5		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 15:41	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		08/22/23 14:00	08/24/23 16:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			08/22/23 20:01	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			08/22/23 20:01	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:01	1
Fluoride (EPA 300.0-1993 R2.1)	0.15		0.050	0.024	mg/L			09/07/23 05:39	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	0.325		0.179	0.182	1.00	0.216	pCi/L	08/22/23 09:59	09/13/23 09:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	62.4		30 - 110					08/22/23 09:59	09/13/23 09:23	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	-1.24	U G	0.732	0.741	1.00	1.64	pCi/L	08/22/23 10:02	09/08/23 12:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	62.4		30 - 110					08/22/23 10:02	09/08/23 12:15	1
Y Carrier	75.1		30 - 110					08/22/23 10:02	09/08/23 12:15	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: BAC-10-F-A4-20230815-01

Lab Sample ID: 240-190363-1

Date Collected: 08/15/23 14:46

Matrix: Water

Date Received: 08/18/23 08:00

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	-0.916	U	0.754	0.763	5.00	1.64	pCi/L		09/18/23 10:10	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: DUP-001-BAC-10-F-A4-20230815-01

Lab Sample ID: 240-190363-2

Date Collected: 08/15/23 14:46

Matrix: Water

Date Received: 08/18/23 08:00

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		08/22/23 14:00	08/24/23 16:06	1
Arsenic	3.5	J	5.0	0.75	ug/L		08/22/23 14:00	08/24/23 16:06	1
Barium	52		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 16:06	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 16:06	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 16:06	1
Chromium	4.5	J	5.0	1.2	ug/L		08/22/23 14:00	08/24/23 16:06	1
Cobalt	3.2		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 16:06	1
Lead	3.3		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 16:06	1
Lithium	6.5	J	8.0	1.7	ug/L		08/22/23 14:00	08/24/23 16:06	1
Magnesium	27000		1000	61	ug/L		08/22/23 14:00	08/24/23 16:06	1
Molybdenum	ND		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 16:06	1
Potassium	1900		1000	220	ug/L		08/22/23 14:00	08/24/23 16:06	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 16:06	1
Sodium	48000		1000	330	ug/L		08/22/23 14:00	08/24/23 16:06	1
Thallium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 16:06	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		08/22/23 14:00	08/24/23 16:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			08/22/23 20:05	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			08/22/23 20:05	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:05	1
Fluoride (EPA 300.0-1993 R2.1)	0.15		0.050	0.024	mg/L			09/07/23 06:44	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	0.292	U	0.220	0.222	1.00	0.319	pCi/L	08/22/23 09:59	09/13/23 09:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.7		30 - 110					08/22/23 09:59	09/13/23 09:27	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	0.708	U G	1.06	1.06	1.00	1.78	pCi/L	08/22/23 10:02	09/08/23 12:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.7		30 - 110					08/22/23 10:02	09/08/23 12:15	1
Y Carrier	83.0		30 - 110					08/22/23 10:02	09/08/23 12:15	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: DUP-001-BAC-10-F-A4-20230815-01

Lab Sample ID: 240-190363-2

Date Collected: 08/15/23 14:46

Matrix: Water

Date Received: 08/18/23 08:00

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	1.00	U	1.08	1.08	5.00	1.78	pCi/L		09/18/23 10:10	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: EB-001-F-A4-20230815-01

Lab Sample ID: 240-190363-3

Date Collected: 08/15/23 15:15

Matrix: Water

Date Received: 08/18/23 08:00

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		08/22/23 14:00	08/24/23 16:11	1
Arsenic	ND		5.0	0.75	ug/L		08/22/23 14:00	08/24/23 16:11	1
Barium	ND		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 16:11	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 16:11	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 16:11	1
Chromium	ND		5.0	1.2	ug/L		08/22/23 14:00	08/24/23 16:11	1
Cobalt	ND		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 16:11	1
Lead	ND		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 16:11	1
Lithium	ND		8.0	1.7	ug/L		08/22/23 14:00	08/24/23 16:11	1
Magnesium	ND		1000	61	ug/L		08/22/23 14:00	08/24/23 16:11	1
Molybdenum	ND		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 16:11	1
Potassium	ND		1000	220	ug/L		08/22/23 14:00	08/24/23 16:11	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 16:11	1
Sodium	ND		1000	330	ug/L		08/22/23 14:00	08/24/23 16:11	1
Thallium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 16:11	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		08/22/23 14:00	08/24/23 16:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:09	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:09	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:09	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			09/07/23 07:06	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0640	U	0.0798	0.0800	1.00	0.132	pCi/L	08/22/23 09:59	09/13/23 09:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.2		30 - 110					08/22/23 09:59	09/13/23 09:28	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.349	U	0.382	0.384	1.00	0.624	pCi/L	08/22/23 10:02	09/08/23 12:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.2		30 - 110					08/22/23 10:02	09/08/23 12:15	1
Y Carrier	86.7		30 - 110					08/22/23 10:02	09/08/23 12:15	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: EB-001-F-A4-20230815-01

Lab Sample ID: 240-190363-3

Date Collected: 08/15/23 15:15

Matrix: Water

Date Received: 08/18/23 08:00

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	0.413	U	0.390	0.392	5.00	0.624	pCi/L		09/18/23 10:10	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: BAC-21-F-A4-20230816-01

Lab Sample ID: 240-190363-4

Date Collected: 08/16/23 12:58

Matrix: Water

Date Received: 08/18/23 08:00

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		08/22/23 14:00	08/24/23 16:15	1
Arsenic	7.5		5.0	0.75	ug/L		08/22/23 14:00	08/24/23 16:15	1
Barium	190		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 16:15	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 16:15	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 16:15	1
Chromium	7.6		5.0	1.2	ug/L		08/22/23 14:00	08/24/23 16:15	1
Cobalt	2.9		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 16:15	1
Lead	5.0		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 16:15	1
Lithium	9.9		8.0	1.7	ug/L		08/22/23 14:00	08/24/23 16:15	1
Magnesium	15000		1000	61	ug/L		08/22/23 14:00	08/24/23 16:15	1
Molybdenum	1.2 J		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 16:15	1
Potassium	2800		1000	220	ug/L		08/22/23 14:00	08/24/23 16:15	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 16:15	1
Sodium	30000		1000	330	ug/L		08/22/23 14:00	08/24/23 16:15	1
Thallium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 16:15	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		08/22/23 14:00	08/24/23 16:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			08/22/23 20:13	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			08/22/23 20:13	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:13	1
Fluoride (EPA 300.0-1993 R2.1)	0.076		0.050	0.024	mg/L			09/07/23 07:28	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.567	U	0.405	0.408	1.00	0.579	pCi/L	08/22/23 09:59	09/13/23 09:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	42.1		30 - 110					08/22/23 09:59	09/13/23 09:28	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	1.48	U G	1.66	1.67	1.00	2.72	pCi/L	08/22/23 10:02	09/08/23 12:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	42.1		30 - 110					08/22/23 10:02	09/08/23 12:15	1
Y Carrier	83.7		30 - 110					08/22/23 10:02	09/08/23 12:15	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: BAC-21-F-A4-20230816-01

Lab Sample ID: 240-190363-4

Date Collected: 08/16/23 12:58

Matrix: Water

Date Received: 08/18/23 08:00

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	U	1.71	1.72	5.00	2.72	pCi/L		09/18/23 10:10	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: BAC-22-F-A4-20230816-01

Lab Sample ID: 240-190363-5

Date Collected: 08/16/23 13:48

Matrix: Water

Date Received: 08/18/23 08:00

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		08/22/23 14:00	08/24/23 16:20	1
Arsenic	2.9	J	5.0	0.75	ug/L		08/22/23 14:00	08/24/23 16:20	1
Barium	130		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 16:20	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 16:20	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 16:20	1
Chromium	3.1	J	5.0	1.2	ug/L		08/22/23 14:00	08/24/23 16:20	1
Cobalt	2.2		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 16:20	1
Lead	2.5		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 16:20	1
Lithium	6.8	J	8.0	1.7	ug/L		08/22/23 14:00	08/24/23 16:20	1
Magnesium	18000		1000	61	ug/L		08/22/23 14:00	08/24/23 16:20	1
Molybdenum	ND		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 16:20	1
Potassium	2800		1000	220	ug/L		08/22/23 14:00	08/24/23 16:20	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 16:20	1
Sodium	19000		1000	330	ug/L		08/22/23 14:00	08/24/23 16:20	1
Thallium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 16:20	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		08/22/23 14:00	08/24/23 16:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			08/22/23 20:19	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			08/22/23 20:19	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:19	1
Fluoride (EPA 300.0-1993 R2.1)	0.076		0.050	0.024	mg/L			09/07/23 07:49	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	0.243		0.169	0.170	1.00	0.242	pCi/L	08/22/23 09:59	09/13/23 09:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.5		30 - 110					08/22/23 09:59	09/13/23 09:28	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	0.161	U	0.444	0.444	1.00	0.792	pCi/L	08/22/23 10:02	09/08/23 12:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.5		30 - 110					08/22/23 10:02	09/08/23 12:15	1
Y Carrier	87.1		30 - 110					08/22/23 10:02	09/08/23 12:15	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: BAC-22-F-A4-20230816-01

Lab Sample ID: 240-190363-5

Date Collected: 08/16/23 13:48

Matrix: Water

Date Received: 08/18/23 08:00

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	0.404	U	0.475	0.475	5.00	0.792	pCi/L		09/18/23 10:10	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: BAC-23-F-A4-20230816-01

Lab Sample ID: 240-190363-6

Date Collected: 08/16/23 14:32

Matrix: Water

Date Received: 08/18/23 08:00

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		08/22/23 14:00	08/24/23 16:24	1
Arsenic	1.8	J	5.0	0.75	ug/L		08/22/23 14:00	08/24/23 16:24	1
Barium	130		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 16:24	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 16:24	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 16:24	1
Chromium	ND		5.0	1.2	ug/L		08/22/23 14:00	08/24/23 16:24	1
Cobalt	1.1		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 16:24	1
Lead	ND		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 16:24	1
Lithium	4.1	J	8.0	1.7	ug/L		08/22/23 14:00	08/24/23 16:24	1
Magnesium	16000		1000	61	ug/L		08/22/23 14:00	08/24/23 16:24	1
Molybdenum	ND		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 16:24	1
Potassium	2000		1000	220	ug/L		08/22/23 14:00	08/24/23 16:24	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 16:24	1
Sodium	20000		1000	330	ug/L		08/22/23 14:00	08/24/23 16:24	1
Thallium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 16:24	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		08/22/23 14:00	08/24/23 16:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230		5.0	2.6	mg/L			08/22/23 20:24	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230		5.0	2.6	mg/L			08/22/23 20:24	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:24	1
Fluoride (EPA 300.0-1993 R2.1)	0.13		0.050	0.024	mg/L			09/07/23 08:11	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	0.166		0.111	0.112	1.00	0.156	pCi/L	08/22/23 09:59	09/13/23 09:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.7		30 - 110					08/22/23 09:59	09/13/23 09:29	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	0.170	U	0.323	0.323	1.00	0.560	pCi/L	08/22/23 10:02	09/08/23 12:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.7		30 - 110					08/22/23 10:02	09/08/23 12:15	1
Y Carrier	86.0		30 - 110					08/22/23 10:02	09/08/23 12:15	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: BAC-23-F-A4-20230816-01

Lab Sample ID: 240-190363-6

Date Collected: 08/16/23 14:32

Matrix: Water

Date Received: 08/18/23 08:00

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	0.336	U	0.342	0.342	5.00	0.560	pCi/L		09/18/23 10:10	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: EB-001-F-A4-20230816-01

Lab Sample ID: 240-190363-7

Date Collected: 08/16/23 15:00

Matrix: Water

Date Received: 08/18/23 08:00

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		08/22/23 14:00	08/24/23 16:29	1
Arsenic	ND		5.0	0.75	ug/L		08/22/23 14:00	08/24/23 16:29	1
Barium	ND		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 16:29	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 16:29	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 16:29	1
Chromium	ND		5.0	1.2	ug/L		08/22/23 14:00	08/24/23 16:29	1
Cobalt	ND		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 16:29	1
Lead	ND		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 16:29	1
Lithium	ND		8.0	1.7	ug/L		08/22/23 14:00	08/24/23 16:29	1
Magnesium	ND		1000	61	ug/L		08/22/23 14:00	08/24/23 16:29	1
Molybdenum	ND		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 16:29	1
Potassium	ND		1000	220	ug/L		08/22/23 14:00	08/24/23 16:29	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 16:29	1
Sodium	ND		1000	330	ug/L		08/22/23 14:00	08/24/23 16:29	1
Thallium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 16:29	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		08/22/23 14:00	08/24/23 16:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:28	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:28	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:28	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			09/07/23 08:33	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0370	U	0.0881	0.0881	1.00	0.161	pCi/L	08/22/23 09:59	09/13/23 09:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.2		30 - 110					08/22/23 09:59	09/13/23 09:29	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	-0.0622	U	0.385	0.385	1.00	0.734	pCi/L	08/22/23 10:02	09/08/23 12:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.2		30 - 110					08/22/23 10:02	09/08/23 12:15	1
Y Carrier	80.7		30 - 110					08/22/23 10:02	09/08/23 12:15	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: EB-001-F-A4-20230816-01

Lab Sample ID: 240-190363-7

Date Collected: 08/16/23 15:00

Matrix: Water

Date Received: 08/18/23 08:00

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	-0.0252	U	0.395	0.395	5.00	0.734	pCi/L		09/18/23 10:10	1

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Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
240-190363-1	BAC-10-F-A4-20230815-01	62.4	
240-190363-2	DUP-001-BAC-10-F-A4-20230815-01	79.7	
240-190363-3	EB-001-F-A4-20230815-01	87.2	
240-190363-4	BAC-21-F-A4-20230816-01	42.1	
240-190363-5	BAC-22-F-A4-20230816-01	80.5	
240-190363-6	BAC-23-F-A4-20230816-01	89.7	
240-190363-7	EB-001-F-A4-20230816-01	81.2	
LCS 160-624958/2-A	Lab Control Sample	94.7	
LCSD 160-624958/3-A	Lab Control Sample Dup	95.0	
MB 160-624958/1-A	Method Blank	93.5	

Tracer/Carrier Legend
Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-190363-1	BAC-10-F-A4-20230815-01	62.4	75.1
240-190363-2	DUP-001-BAC-10-F-A4-20230815-01	79.7	83.0
240-190363-3	EB-001-F-A4-20230815-01	87.2	86.7
240-190363-4	BAC-21-F-A4-20230816-01	42.1	83.7
240-190363-5	BAC-22-F-A4-20230816-01	80.5	87.1
240-190363-6	BAC-23-F-A4-20230816-01	89.7	86.0
240-190363-7	EB-001-F-A4-20230816-01	81.2	80.7
LCS 160-624959/2-A	Lab Control Sample	94.7	84.1
LCSD 160-624959/3-A	Lab Control Sample Dup	95.0	87.9
MB 160-624959/1-A	Method Blank	93.5	83.7

Tracer/Carrier Legend
Ba = Ba Carrier
Y = Y Carrier

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-584712/1-A
Matrix: Water
Analysis Batch: 585084

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 584712

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		08/22/23 14:00	08/24/23 15:00	1
Arsenic	ND		5.0	0.75	ug/L		08/22/23 14:00	08/24/23 15:00	1
Barium	ND		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 15:00	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 15:00	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 15:00	1
Chromium	ND		5.0	1.2	ug/L		08/22/23 14:00	08/24/23 15:00	1
Cobalt	ND		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 15:00	1
Lead	ND		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 15:00	1
Lithium	ND		8.0	1.7	ug/L		08/22/23 14:00	08/24/23 15:00	1
Magnesium	ND		1000	61	ug/L		08/22/23 14:00	08/24/23 15:00	1
Molybdenum	ND		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 15:00	1
Potassium	ND		1000	220	ug/L		08/22/23 14:00	08/24/23 15:00	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 15:00	1
Sodium	ND		1000	330	ug/L		08/22/23 14:00	08/24/23 15:00	1
Thallium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 15:00	1

Lab Sample ID: LCS 240-584712/2-A
Matrix: Water
Analysis Batch: 585084

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 584712

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	105		ug/L		105	80 - 120
Arsenic	1000	1010		ug/L		101	80 - 120
Barium	1000	985		ug/L		98	80 - 120
Beryllium	500	457		ug/L		91	80 - 120
Cadmium	500	499		ug/L		100	80 - 120
Chromium	500	516		ug/L		103	80 - 120
Cobalt	500	519		ug/L		104	80 - 120
Lead	500	518		ug/L		104	80 - 120
Lithium	500	514		ug/L		103	80 - 120
Magnesium	25000	25200		ug/L		101	80 - 120
Molybdenum	500	509		ug/L		102	80 - 120
Potassium	25000	24700		ug/L		99	80 - 120
Selenium	1000	980		ug/L		98	80 - 120
Sodium	25000	25800		ug/L		103	80 - 120
Thallium	1000	991		ug/L		99	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-584713/1-A
Matrix: Water
Analysis Batch: 585098

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 584713

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		08/22/23 14:00	08/24/23 16:26	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-584713/2-A
 Matrix: Water
 Analysis Batch: 585098

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 584713

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.09		ug/L		102	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-584875/3
 Matrix: Water
 Analysis Batch: 584875

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			08/22/23 18:44	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/22/23 18:44	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/22/23 18:44	1

Lab Sample ID: LCS 240-584875/2
 Matrix: Water
 Analysis Batch: 584875

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	77.8		mg/L		96	86 - 123

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-586313/4
 Matrix: Water
 Analysis Batch: 586313

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			09/06/23 22:04	1

Lab Sample ID: LCS 240-586313/5
 Matrix: Water
 Analysis Batch: 586313

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.69		mg/L		107	90 - 110

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-624958/1-A
 Matrix: Water
 Analysis Batch: 627939

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 624958

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.03362	U	0.0822	0.0822	1.00	0.151	pCi/L	08/22/23 09:59	09/13/23 07:32	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		30 - 110					08/22/23 09:59	09/13/23 07:32	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: LCS 160-624958/2-A
Matrix: Water
Analysis Batch: 627939

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 624958

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	
Radium-226	11.3	11.03		1.18	1.00	0.137	pCi/L	97	75 - 125	
Carrier	%Yield	LCS Qualifier	Limits							
Ba Carrier	94.7		30 - 110							

Lab Sample ID: LCSD 160-624958/3-A
Matrix: Water
Analysis Batch: 627939

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 624958

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-226	11.3	9.447		1.05	1.00	0.168	pCi/L	83	75 - 125	0.71	1
Carrier	%Yield	LCSD Qualifier	Limits								
Ba Carrier	95.0		30 - 110								

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-624959/1-A
Matrix: Water
Analysis Batch: 627236

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 624959

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.4573	U	0.426	0.428	1.00	0.683	pCi/L	08/22/23 10:02	09/08/23 12:06	1
Carrier	%Yield	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	93.5		30 - 110			08/22/23 10:02	09/08/23 12:06	1		
Y Carrier	83.7		30 - 110			08/22/23 10:02	09/08/23 12:06	1		

Lab Sample ID: LCS 160-624959/2-A
Matrix: Water
Analysis Batch: 627236

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 624959

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	7.89	7.824		1.15	1.00	0.528	pCi/L	99	75 - 125
Carrier	%Yield	LCS Qualifier	Limits						
Ba Carrier	94.7		30 - 110						
Y Carrier	84.1		30 - 110						

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

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

Lab Sample ID: LCSD 160-624959/3-A
 Matrix: Water
 Analysis Batch: 627236

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 624959

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-228	7.89	8.795		1.23	1.00	0.565	pCi/L	111	75 - 125	0.41	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	95.0		30 - 110
Y Carrier	87.9		30 - 110

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Metals

Prep Batch: 584712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190363-1	BAC-10-F-A4-20230815-01	Total Recoverable	Water	3005A	
240-190363-2	DUP-001-BAC-10-F-A4-20230815-01	Total Recoverable	Water	3005A	
240-190363-3	EB-001-F-A4-20230815-01	Total Recoverable	Water	3005A	
240-190363-4	BAC-21-F-A4-20230816-01	Total Recoverable	Water	3005A	
240-190363-5	BAC-22-F-A4-20230816-01	Total Recoverable	Water	3005A	
240-190363-6	BAC-23-F-A4-20230816-01	Total Recoverable	Water	3005A	
240-190363-7	EB-001-F-A4-20230816-01	Total Recoverable	Water	3005A	
MB 240-584712/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-584712/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 584713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190363-1	BAC-10-F-A4-20230815-01	Total/NA	Water	7470A	
240-190363-2	DUP-001-BAC-10-F-A4-20230815-01	Total/NA	Water	7470A	
240-190363-3	EB-001-F-A4-20230815-01	Total/NA	Water	7470A	
240-190363-4	BAC-21-F-A4-20230816-01	Total/NA	Water	7470A	
240-190363-5	BAC-22-F-A4-20230816-01	Total/NA	Water	7470A	
240-190363-6	BAC-23-F-A4-20230816-01	Total/NA	Water	7470A	
240-190363-7	EB-001-F-A4-20230816-01	Total/NA	Water	7470A	
MB 240-584713/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-584713/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 585084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190363-1	BAC-10-F-A4-20230815-01	Total Recoverable	Water	6020B	584712
240-190363-2	DUP-001-BAC-10-F-A4-20230815-01	Total Recoverable	Water	6020B	584712
240-190363-3	EB-001-F-A4-20230815-01	Total Recoverable	Water	6020B	584712
240-190363-4	BAC-21-F-A4-20230816-01	Total Recoverable	Water	6020B	584712
240-190363-5	BAC-22-F-A4-20230816-01	Total Recoverable	Water	6020B	584712
240-190363-6	BAC-23-F-A4-20230816-01	Total Recoverable	Water	6020B	584712
240-190363-7	EB-001-F-A4-20230816-01	Total Recoverable	Water	6020B	584712
MB 240-584712/1-A	Method Blank	Total Recoverable	Water	6020B	584712
LCS 240-584712/2-A	Lab Control Sample	Total Recoverable	Water	6020B	584712

Analysis Batch: 585098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190363-1	BAC-10-F-A4-20230815-01	Total/NA	Water	7470A	584713
240-190363-2	DUP-001-BAC-10-F-A4-20230815-01	Total/NA	Water	7470A	584713
240-190363-3	EB-001-F-A4-20230815-01	Total/NA	Water	7470A	584713
240-190363-4	BAC-21-F-A4-20230816-01	Total/NA	Water	7470A	584713
240-190363-5	BAC-22-F-A4-20230816-01	Total/NA	Water	7470A	584713
240-190363-6	BAC-23-F-A4-20230816-01	Total/NA	Water	7470A	584713
240-190363-7	EB-001-F-A4-20230816-01	Total/NA	Water	7470A	584713
MB 240-584713/1-A	Method Blank	Total/NA	Water	7470A	584713
LCS 240-584713/2-A	Lab Control Sample	Total/NA	Water	7470A	584713

General Chemistry

Analysis Batch: 584875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190363-1	BAC-10-F-A4-20230815-01	Total/NA	Water	2320B-1997	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

General Chemistry (Continued)

Analysis Batch: 584875 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190363-2	DUP-001-BAC-10-F-A4-20230815-01	Total/NA	Water	2320B-1997	
240-190363-3	EB-001-F-A4-20230815-01	Total/NA	Water	2320B-1997	
240-190363-4	BAC-21-F-A4-20230816-01	Total/NA	Water	2320B-1997	
240-190363-5	BAC-22-F-A4-20230816-01	Total/NA	Water	2320B-1997	
240-190363-6	BAC-23-F-A4-20230816-01	Total/NA	Water	2320B-1997	
240-190363-7	EB-001-F-A4-20230816-01	Total/NA	Water	2320B-1997	
MB 240-584875/3	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-584875/2	Lab Control Sample	Total/NA	Water	2320B-1997	

Analysis Batch: 586313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190363-1	BAC-10-F-A4-20230815-01	Total/NA	Water	300.0-1993 R2.1	
240-190363-2	DUP-001-BAC-10-F-A4-20230815-01	Total/NA	Water	300.0-1993 R2.1	
240-190363-3	EB-001-F-A4-20230815-01	Total/NA	Water	300.0-1993 R2.1	
240-190363-4	BAC-21-F-A4-20230816-01	Total/NA	Water	300.0-1993 R2.1	
240-190363-5	BAC-22-F-A4-20230816-01	Total/NA	Water	300.0-1993 R2.1	
240-190363-6	BAC-23-F-A4-20230816-01	Total/NA	Water	300.0-1993 R2.1	
240-190363-7	EB-001-F-A4-20230816-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-586313/4	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-586313/5	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

Rad

Prep Batch: 624958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190363-1	BAC-10-F-A4-20230815-01	Total/NA	Water	PrecSep-21	
240-190363-2	DUP-001-BAC-10-F-A4-20230815-01	Total/NA	Water	PrecSep-21	
240-190363-3	EB-001-F-A4-20230815-01	Total/NA	Water	PrecSep-21	
240-190363-4	BAC-21-F-A4-20230816-01	Total/NA	Water	PrecSep-21	
240-190363-5	BAC-22-F-A4-20230816-01	Total/NA	Water	PrecSep-21	
240-190363-6	BAC-23-F-A4-20230816-01	Total/NA	Water	PrecSep-21	
240-190363-7	EB-001-F-A4-20230816-01	Total/NA	Water	PrecSep-21	
MB 160-624958/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-624958/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-624958/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 624959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190363-1	BAC-10-F-A4-20230815-01	Total/NA	Water	PrecSep_0	
240-190363-2	DUP-001-BAC-10-F-A4-20230815-01	Total/NA	Water	PrecSep_0	
240-190363-3	EB-001-F-A4-20230815-01	Total/NA	Water	PrecSep_0	
240-190363-4	BAC-21-F-A4-20230816-01	Total/NA	Water	PrecSep_0	
240-190363-5	BAC-22-F-A4-20230816-01	Total/NA	Water	PrecSep_0	
240-190363-6	BAC-23-F-A4-20230816-01	Total/NA	Water	PrecSep_0	
240-190363-7	EB-001-F-A4-20230816-01	Total/NA	Water	PrecSep_0	
MB 160-624959/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-624959/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-624959/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: BAC-10-F-A4-20230815-01

Lab Sample ID: 240-190363-1

Date Collected: 08/15/23 14:46

Matrix: Water

Date Received: 08/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584712	BN	EET CLE	08/22/23 14:00
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 15:41
Total/NA	Prep	7470A			584713	BN	EET CLE	08/22/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 16:37
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 20:01
Total/NA	Analysis	300.0-1993 R2.1		1	586313	JMR	EET CLE	09/07/23 05:39
Total/NA	Prep	PrecSep-21			624958	KAC	EET SL	08/22/23 09:59
Total/NA	Analysis	9315		1	627936	FLC	EET SL	09/13/23 09:23
Total/NA	Prep	PrecSep_0			624959	KAC	EET SL	08/22/23 10:02
Total/NA	Analysis	9320		1	627239	SCB	EET SL	09/08/23 12:15
Total/NA	Analysis	Ra226_Ra228		1	628538	FLC	EET SL	09/18/23 10:10

Client Sample ID: DUP-001-BAC-10-F-A4-20230815-01

Lab Sample ID: 240-190363-2

Date Collected: 08/15/23 14:46

Matrix: Water

Date Received: 08/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584712	BN	EET CLE	08/22/23 14:00
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 16:06
Total/NA	Prep	7470A			584713	BN	EET CLE	08/22/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 16:39
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 20:05
Total/NA	Analysis	300.0-1993 R2.1		1	586313	JMR	EET CLE	09/07/23 06:44
Total/NA	Prep	PrecSep-21			624958	KAC	EET SL	08/22/23 09:59
Total/NA	Analysis	9315		1	627939	FLC	EET SL	09/13/23 09:27
Total/NA	Prep	PrecSep_0			624959	KAC	EET SL	08/22/23 10:02
Total/NA	Analysis	9320		1	627239	SCB	EET SL	09/08/23 12:15
Total/NA	Analysis	Ra226_Ra228		1	628538	FLC	EET SL	09/18/23 10:10

Client Sample ID: EB-001-F-A4-20230815-01

Lab Sample ID: 240-190363-3

Date Collected: 08/15/23 15:15

Matrix: Water

Date Received: 08/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584712	BN	EET CLE	08/22/23 14:00
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 16:11
Total/NA	Prep	7470A			584713	BN	EET CLE	08/22/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 16:41
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 20:09
Total/NA	Analysis	300.0-1993 R2.1		1	586313	JMR	EET CLE	09/07/23 07:06
Total/NA	Prep	PrecSep-21			624958	KAC	EET SL	08/22/23 09:59
Total/NA	Analysis	9315		1	627939	FLC	EET SL	09/13/23 09:28
Total/NA	Prep	PrecSep_0			624959	KAC	EET SL	08/22/23 10:02
Total/NA	Analysis	9320		1	627241	SCB	EET SL	09/08/23 12:15

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: EB-001-F-A4-20230815-01

Lab Sample ID: 240-190363-3

Date Collected: 08/15/23 15:15

Matrix: Water

Date Received: 08/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228		1	628538	FLC	EET SL	09/18/23 10:10

Client Sample ID: BAC-21-F-A4-20230816-01

Lab Sample ID: 240-190363-4

Date Collected: 08/16/23 12:58

Matrix: Water

Date Received: 08/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584712	BN	EET CLE	08/22/23 14:00
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 16:15
Total/NA	Prep	7470A			584713	BN	EET CLE	08/22/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 16:43
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 20:13
Total/NA	Analysis	300.0-1993 R2.1		1	586313	JMR	EET CLE	09/07/23 07:28
Total/NA	Prep	PrecSep-21			624958	KAC	EET SL	08/22/23 09:59
Total/NA	Analysis	9315		1	627939	FLC	EET SL	09/13/23 09:28
Total/NA	Prep	PrecSep_0			624959	KAC	EET SL	08/22/23 10:02
Total/NA	Analysis	9320		1	627241	SCB	EET SL	09/08/23 12:15
Total/NA	Analysis	Ra226_Ra228		1	628538	FLC	EET SL	09/18/23 10:10

Client Sample ID: BAC-22-F-A4-20230816-01

Lab Sample ID: 240-190363-5

Date Collected: 08/16/23 13:48

Matrix: Water

Date Received: 08/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584712	BN	EET CLE	08/22/23 14:00
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 16:20
Total/NA	Prep	7470A			584713	BN	EET CLE	08/22/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 16:45
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 20:19
Total/NA	Analysis	300.0-1993 R2.1		1	586313	JMR	EET CLE	09/07/23 07:49
Total/NA	Prep	PrecSep-21			624958	KAC	EET SL	08/22/23 09:59
Total/NA	Analysis	9315		1	627939	FLC	EET SL	09/13/23 09:28
Total/NA	Prep	PrecSep_0			624959	KAC	EET SL	08/22/23 10:02
Total/NA	Analysis	9320		1	627241	SCB	EET SL	09/08/23 12:15
Total/NA	Analysis	Ra226_Ra228		1	628538	FLC	EET SL	09/18/23 10:10

Client Sample ID: BAC-23-F-A4-20230816-01

Lab Sample ID: 240-190363-6

Date Collected: 08/16/23 14:32

Matrix: Water

Date Received: 08/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584712	BN	EET CLE	08/22/23 14:00
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 16:24
Total/NA	Prep	7470A			584713	BN	EET CLE	08/22/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 16:51

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

Client Sample ID: BAC-23-F-A4-20230816-01

Lab Sample ID: 240-190363-6

Date Collected: 08/16/23 14:32

Matrix: Water

Date Received: 08/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 20:24
Total/NA	Analysis	300.0-1993 R2.1		1	586313	JMR	EET CLE	09/07/23 08:11
Total/NA	Prep	PrecSep-21			624958	KAC	EET SL	08/22/23 09:59
Total/NA	Analysis	9315		1	627939	FLC	EET SL	09/13/23 09:29
Total/NA	Prep	PrecSep_0			624959	KAC	EET SL	08/22/23 10:02
Total/NA	Analysis	9320		1	627241	SCB	EET SL	09/08/23 12:15
Total/NA	Analysis	Ra226_Ra228		1	628538	FLC	EET SL	09/18/23 10:10

Client Sample ID: EB-001-F-A4-20230816-01

Lab Sample ID: 240-190363-7

Date Collected: 08/16/23 15:00

Matrix: Water

Date Received: 08/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584712	BN	EET CLE	08/22/23 14:00
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 16:29
Total/NA	Prep	7470A			584713	BN	EET CLE	08/22/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 16:53
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 20:28
Total/NA	Analysis	300.0-1993 R2.1		1	586313	JMR	EET CLE	09/07/23 08:33
Total/NA	Prep	PrecSep-21			624958	KAC	EET SL	08/22/23 09:59
Total/NA	Analysis	9315		1	627939	FLC	EET SL	09/13/23 09:29
Total/NA	Prep	PrecSep_0			624959	KAC	EET SL	08/22/23 10:02
Total/NA	Analysis	9320		1	627241	SCB	EET SL	09/08/23 12:15
Total/NA	Analysis	Ra226_Ra228		1	628538	FLC	EET SL	09/18/23 10:10

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
 Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

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
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-24
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-24
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-24
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-24
Massachusetts	State	M-MO054	06-30-24
MI - RadChem Recognition	State	9005	06-30-24
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-24
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App IV

Job ID: 240-190363-1

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	07-31-24
North Dakota	State	R-207	06-30-24
Oregon	NELAP	4157	09-01-24
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23 *
Texas	NELAP	T104704193	07-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO000542021-14	07-31-24
Virginia	NELAP	10310	06-15-25
West Virginia DEP	State	381	10-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Barberton Facility

Client Lightstone

Site Name _____

Cooler unpacked by: _____

Cooler Received on 8-18-23

Opened on 8-18-23

Nancy Page

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 # 22 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity each 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 NA

-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 NA

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# HC312502

14. Were VOAs on the COC? Yes No NA

15. Were air bubbles >6 mm in any VOA vials? Yes No NA  ← Larger than this.

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: _____



Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-10F-A4-20230815-01	240-190363-C-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-10F-A4-20230815-01	240-190363-D-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-10F-A4-20230815-01	240-190363-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-001-BAC-10-F-A4-20230815-01	240-190363-C-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-001-BAC-10-F-A4-20230815-01	240-190363-D-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-001-BAC-10-F-A4-20230815-01	240-190363-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230815-01	240-190363-C-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230815-01	240-190363-D-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230815-01	240-190363-E-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-21-F-A4-20230815-01	240-190363-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-21-F-A4-20230815-01	240-190363-D-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-21-F-A4-20230815-01	240-190363-E-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-22-F-A4-20230816-01	240-190363-C-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-22-F-A4-20230816-01	240-190363-D-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-22-F-A4-20230816-01	240-190363-E-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-23-F-A4-20230816-01	240-190363-C-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-23-F-A4-20230816-01	240-190363-D-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-23-F-A4-20230816-01	240-190363-E-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230816-01	240-190363-C-7	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230816-01	240-190363-D-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230816-01	240-190363-E-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

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: Federal CCR Wells - App IV Site: <i>Truh Plant</i>		Lab PW: Cisneros, Roxanne E-Mail: roxanne.cisneros@Eurofinset.com Carrier Tracking No(s): State of Origin:		COC No: 240-93466-34578.1 Page: Page 1 of 1 Job #:	
Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: 2935505 WO #:		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 Other:		Preservation Codes: M - Hexane N - None O - AsHClO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - EDA Z - other (specify)	
Sample Identification Sample ID: BAC-10-F-A4-20230815-01 DUP-001-BAC-10-F-A4-20230815-01 EB-001-F-A4-20230815-01 BAC-21-F-A4-20230815-01 BAC-22-F-A4-20230816-01 BAC-23-F-A4-20230816-01 EB-001-F-A4-20230816-01		Sample Type (C=comp, G=grab) Sample Time Sample Date Matrix (W=water, S=solid, O=organic, A=acid)		Field Filtered Sample (Yes or No) Form MS/SD (Yes or No) 6020, 7470A 300.0, 28D - Fluoride 2308 - Alkalinity 8315, Ra226, 9320, Ra228, Ra226Ra228, GPPC	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Total Number of Containers: <input checked="" type="checkbox"/>	
Empty Kit Relinquished by: <i>Bobby Castle</i> Relinquished by: <i>Ashley Deal</i> Relinquished by:		Date: 8-17-23 / 1700 Date: 8-17-23 / 1700 Date:		Date/Time: 8-17-23 / 1144 Date/Time: 8-18-23 800 Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks:		Company: ETA Company: EETNC Company:	



Eurofins - Cleveland Sample Receipt Form/Narrative
Barberton Facility

Login # : 190363

Client Lightstone

Site Name _____

Cooler unpacked by: Nancy Payer

Cooler Received on 8-18-23

Opened on 8-18-23

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 # 22 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity leach 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# HC312502
14. Were VOAs on the COC? Yes No
15. Were air bubbles >6 mm in any VOA vials? Yes 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: _____



Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-10F-A4-20230815-01	240-190363-C-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-10F-A4-20230815-01	240-190363-D-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-10F-A4-20230815-01	240-190363-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-001-BAC-10-F-A4-20230815-01	240-190363-C-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-001-BAC-10-F-A4-20230815-01	240-190363-D-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-001-BAC-10-F-A4-20230815-01	240-190363-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230815-01	240-190363-C-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230815-01	240-190363-D-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230815-01	240-190363-E-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-21-F-A4-20230815-01	240-190363-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-21-F-A4-20230815-01	240-190363-D-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-21-F-A4-20230815-01	240-190363-E-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-22-F-A4-20230816-01	240-190363-C-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-22-F-A4-20230816-01	240-190363-D-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-22-F-A4-20230816-01	240-190363-E-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-23-F-A4-20230816-01	240-190363-C-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-23-F-A4-20230816-01	240-190363-D-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-23-F-A4-20230816-01	240-190363-E-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230816-01	240-190363-C-7	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230816-01	240-190363-D-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230816-01	240-190363-E-7	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-190363-1

Login Number: 190363

List Number: 2

Creator: Pinette, Meadow L

List Source: Eurofins St. Louis

List Creation: 08/21/23 01:10 PM

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



 **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 GWM Wells - App III

JOB NUMBER

240-190365-1

Eurofins Cleveland

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
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Job ID: 240-190365-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative
240-190365-1

Comments

No additional comments.

Receipt

The samples were received on 8/18/2023 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 0.1° C, 0.2° C, 2.4° C, 2.5° C, 4.5° C and 21.2° C.

Metals

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

General Chemistry

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

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Method Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
SM 2540C	Solids, Total Dissolved (TDS)	SM	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
Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-190365-1	BAC-10-F-A3-20230815-01	Water	08/15/23 14:46	08/18/23 08:00
240-190365-2	DUP-001-BAC-10-F-A3-20230815-01	Water	08/15/23 14:46	08/18/23 08:00
240-190365-3	EB-001-F-A3-20230815-01	Water	08/15/23 15:15	08/18/23 08:00
240-190365-4	BAC-21-F-A3-20230816-01	Water	08/16/23 12:58	08/18/23 08:00
240-190365-5	BAC-22-F-A3-20230816-01	Water	08/16/23 13:48	08/18/23 08:00
240-190365-6	BAC-23-F-A3-20230816-01	Water	08/16/23 14:32	08/18/23 08:00
240-190365-7	EB-001-F-A3-20230816-01	Water	08/16/23 15:00	08/18/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Client Sample ID: BAC-10-F-A3-20230815-01

Lab Sample ID: 240-190365-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	490		100	57	ug/L	1		6010D	Total Recoverable
Calcium	100000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	27000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	47000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	47		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.15		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	120		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	560		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-001-BAC-10-F-A3-20230815-01

Lab Sample ID: 240-190365-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	510		100	57	ug/L	1		6010D	Total Recoverable
Calcium	110000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	28000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	49000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	47		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.15		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	220		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	580		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-001-F-A3-20230815-01

Lab Sample ID: 240-190365-3

No Detections.

Client Sample ID: BAC-21-F-A3-20230816-01

Lab Sample ID: 240-190365-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	390		100	57	ug/L	1		6010D	Total Recoverable
Calcium	140000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	17000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	32000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA

This Detection Summary does not include radiochemical test results.

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Client Sample ID: BAC-21-F-A3-20230816-01 (Continued)

Lab Sample ID: 240-190365-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	77		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.069		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	130		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	540		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-22-F-A3-20230816-01

Lab Sample ID: 240-190365-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	230		100	57	ug/L	1		6010D	Total Recoverable
Calcium	160000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	3100		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	20000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	32		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.078		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	240		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	610		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-23-F-A3-20230816-01

Lab Sample ID: 240-190365-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	270		100	57	ug/L	1		6010D	Total Recoverable
Calcium	130000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	16000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	20000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	44		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	140		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	470		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-001-F-A3-20230816-01

Lab Sample ID: 240-190365-7

No Detections.

This Detection Summary does not include radiochemical test results.

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Client Sample ID: BAC-10-F-A3-20230815-01

Lab Sample ID: 240-190365-1

Date Collected: 08/15/23 14:46

Matrix: Water

Date Received: 08/18/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	490		100	57	ug/L		08/21/23 14:00	08/22/23 19:46	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	100000		1000	250	ug/L		08/21/23 14:00	08/22/23 19:51	1
Magnesium	27000		1000	61	ug/L		08/21/23 14:00	08/22/23 11:50	1
Potassium	1900		1000	220	ug/L		08/21/23 14:00	08/22/23 11:50	1
Sodium	47000		1000	330	ug/L		08/21/23 14:00	08/22/23 11:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			08/22/23 20:45	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			08/22/23 20:45	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:45	1
Chloride (EPA 300.0)	47		1.0	0.13	mg/L			08/26/23 06:59	1
Fluoride (EPA 300.0)	0.15		0.050	0.024	mg/L			08/29/23 18:55	1
Sulfate (EPA 300.0)	120		5.0	1.7	mg/L			08/26/23 07:59	5
Total Dissolved Solids (SM 2540C)	560		10	7.8	mg/L			08/22/23 10:33	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Client Sample ID: DUP-001-BAC-10-F-A3-20230815-01

Lab Sample ID: 240-190365-2

Date Collected: 08/15/23 14:46

Matrix: Water

Date Received: 08/18/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	510		100	57	ug/L		08/21/23 14:00	08/22/23 19:50	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110000		1000	250	ug/L		08/21/23 14:00	08/22/23 19:53	1
Magnesium	28000		1000	61	ug/L		08/21/23 14:00	08/22/23 11:52	1
Potassium	2000		1000	220	ug/L		08/21/23 14:00	08/22/23 11:52	1
Sodium	49000		1000	330	ug/L		08/21/23 14:00	08/22/23 11:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			08/22/23 20:54	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			08/22/23 20:54	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:54	1
Chloride (EPA 300.0)	47		1.0	0.13	mg/L			08/26/23 08:19	1
Fluoride (EPA 300.0)	0.15		0.050	0.024	mg/L			08/29/23 19:17	1
Sulfate (EPA 300.0)	220		5.0	1.7	mg/L			08/26/23 08:40	5
Total Dissolved Solids (SM 2540C)	580		10	7.8	mg/L			08/21/23 15:16	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Client Sample ID: EB-001-F-A3-20230815-01

Lab Sample ID: 240-190365-3

Date Collected: 08/15/23 15:15

Matrix: Water

Date Received: 08/18/23 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		08/21/23 14:00	08/22/23 19:55	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		08/21/23 14:00	08/22/23 11:55	1
Magnesium	ND		1000	61	ug/L		08/21/23 14:00	08/22/23 11:55	1
Potassium	ND		1000	220	ug/L		08/21/23 14:00	08/22/23 11:55	1
Sodium	ND		1000	330	ug/L		08/21/23 14:00	08/22/23 11:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:58	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:58	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 20:58	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			08/26/23 09:00	1
Fluoride (EPA 300.0)	ND	F1	0.050	0.024	mg/L			08/29/23 19:39	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			08/26/23 09:00	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			08/21/23 15:16	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Client Sample ID: BAC-21-F-A3-20230816-01

Lab Sample ID: 240-190365-4

Date Collected: 08/16/23 12:58

Matrix: Water

Date Received: 08/18/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	390		100	57	ug/L		08/21/23 14:00	08/22/23 19:59	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	140000		1000	250	ug/L		08/21/23 14:00	08/22/23 19:56	1
Magnesium	17000		1000	61	ug/L		08/21/23 14:00	08/22/23 12:03	1
Potassium	2800		1000	220	ug/L		08/21/23 14:00	08/22/23 12:03	1
Sodium	32000		1000	330	ug/L		08/21/23 14:00	08/22/23 12:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			08/22/23 21:04	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			08/22/23 21:04	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 21:04	1
Chloride (EPA 300.0)	77		1.0	0.13	mg/L			08/28/23 14:10	1
Fluoride (EPA 300.0)	0.069		0.050	0.024	mg/L			08/28/23 14:10	1
Sulfate (EPA 300.0)	130		1.0	0.35	mg/L			08/28/23 14:10	1
Total Dissolved Solids (SM 2540C)	540		10	7.8	mg/L			08/22/23 10:33	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Client Sample ID: BAC-22-F-A3-20230816-01

Lab Sample ID: 240-190365-5

Date Collected: 08/16/23 13:48

Matrix: Water

Date Received: 08/18/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	230		100	57	ug/L		08/21/23 14:00	08/22/23 20:03	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	160000		1000	250	ug/L		08/21/23 14:00	08/22/23 19:59	1
Magnesium	20000		1000	61	ug/L		08/21/23 14:00	08/22/23 12:05	1
Potassium	3100		1000	220	ug/L		08/21/23 14:00	08/22/23 12:05	1
Sodium	20000		1000	330	ug/L		08/21/23 14:00	08/22/23 12:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			08/22/23 21:09	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			08/22/23 21:09	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 21:09	1
Chloride (EPA 300.0)	32		1.0	0.13	mg/L			08/28/23 16:20	1
Fluoride (EPA 300.0)	0.078		0.050	0.024	mg/L			08/28/23 16:20	1
Sulfate (EPA 300.0)	240		5.0	1.7	mg/L			08/28/23 16:42	5
Total Dissolved Solids (SM 2540C)	610		10	7.8	mg/L			08/22/23 10:33	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Client Sample ID: BAC-23-F-A3-20230816-01

Lab Sample ID: 240-190365-6

Date Collected: 08/16/23 14:32

Matrix: Water

Date Received: 08/18/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	270		100	57	ug/L		08/21/23 14:00	08/22/23 20:16	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130000		1000	250	ug/L		08/21/23 14:00	08/22/23 20:01	1
Magnesium	16000		1000	61	ug/L		08/21/23 14:00	08/22/23 12:08	1
Potassium	2000		1000	220	ug/L		08/21/23 14:00	08/22/23 12:08	1
Sodium	20000		1000	330	ug/L		08/21/23 14:00	08/22/23 12:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230		5.0	2.6	mg/L			08/22/23 21:14	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230		5.0	2.6	mg/L			08/22/23 21:14	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 21:14	1
Chloride (EPA 300.0)	44		1.0	0.13	mg/L			08/28/23 17:47	1
Fluoride (EPA 300.0)	0.13		0.050	0.024	mg/L			08/28/23 17:47	1
Sulfate (EPA 300.0)	140		1.0	0.35	mg/L			08/28/23 17:47	1
Total Dissolved Solids (SM 2540C)	470		10	7.8	mg/L			08/22/23 10:33	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Client Sample ID: EB-001-F-A3-20230816-01

Lab Sample ID: 240-190365-7

Date Collected: 08/16/23 15:00

Matrix: Water

Date Received: 08/18/23 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		08/21/23 14:00	08/22/23 20:21	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		08/21/23 14:00	08/22/23 12:11	1
Magnesium	ND		1000	61	ug/L		08/21/23 14:00	08/22/23 12:11	1
Potassium	ND		1000	220	ug/L		08/21/23 14:00	08/22/23 12:11	1
Sodium	ND		1000	330	ug/L		08/21/23 14:00	08/22/23 12:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 21:17	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 21:17	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/22/23 21:17	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			08/28/23 18:30	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			08/28/23 18:30	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			08/28/23 18:30	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			08/22/23 10:33	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-584567/1-A
 Matrix: Water
 Analysis Batch: 584753

Client Sample ID: Method Blank
 Prep Type: Total Recoverable
 Prep Batch: 584567

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		08/21/23 14:00	08/22/23 18:59	1

Lab Sample ID: LCS 240-584567/3-A
 Matrix: Water
 Analysis Batch: 584753

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 584567

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 240-584567/1-A
 Matrix: Water
 Analysis Batch: 584769

Client Sample ID: Method Blank
 Prep Type: Total Recoverable
 Prep Batch: 584567

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		08/21/23 14:00	08/22/23 11:20	1
Magnesium	ND		1000	61	ug/L		08/21/23 14:00	08/22/23 11:20	1
Potassium	ND		1000	220	ug/L		08/21/23 14:00	08/22/23 11:20	1
Sodium	ND		1000	330	ug/L		08/21/23 14:00	08/22/23 11:20	1

Lab Sample ID: LCS 240-584567/2-A
 Matrix: Water
 Analysis Batch: 584769

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 584567

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	24700		ug/L		99	80 - 120
Magnesium	25000	25100		ug/L		100	80 - 120
Potassium	25000	24900		ug/L		100	80 - 120
Sodium	25000	25400		ug/L		102	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-584875/29
 Matrix: Water
 Analysis Batch: 584875

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			08/22/23 20:41	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/22/23 20:41	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/22/23 20:41	1

Lab Sample ID: MB 240-584875/3
 Matrix: Water
 Analysis Batch: 584875

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			08/22/23 18:44	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/22/23 18:44	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/22/23 18:44	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Method: 2320B-1997 - Alkalinity, Total (Continued)

Lab Sample ID: LCS 240-584875/28
 Matrix: Water
 Analysis Batch: 584875

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	80.0		mg/L		99	86 - 123

Lab Sample ID: 240-190365-1 DU
 Matrix: Water
 Analysis Batch: 584875

Client Sample ID: BAC-10-F-A3-20230815-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	220		221		mg/L		0.6	20
Bicarbonate Alkalinity as CaCO3	220		221		mg/L		0.6	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-585213/3
 Matrix: Water
 Analysis Batch: 585213

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			08/25/23 19:54	1
Sulfate	ND		1.0	0.35	mg/L			08/25/23 19:54	1

Lab Sample ID: LCS 240-585213/4
 Matrix: Water
 Analysis Batch: 585213

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	50.7		mg/L		101	90 - 110
Sulfate	50.0	52.7		mg/L		105	90 - 110

Lab Sample ID: MB 240-585376/3
 Matrix: Water
 Analysis Batch: 585376

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			08/28/23 13:27	1
Fluoride	ND		0.050	0.024	mg/L			08/28/23 13:27	1
Sulfate	ND		1.0	0.35	mg/L			08/28/23 13:27	1

Lab Sample ID: LCS 240-585376/4
 Matrix: Water
 Analysis Batch: 585376

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	50.7		mg/L		101	90 - 110
Fluoride	2.50	2.70		mg/L		108	90 - 110
Sulfate	50.0	52.3		mg/L		105	90 - 110

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-190365-4 MS
Matrix: Water
Analysis Batch: 585376

Client Sample ID: BAC-21-F-A3-20230816-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	77		50.0	128		mg/L		102	80 - 120
Fluoride	0.069		2.50	2.97		mg/L		116	80 - 120
Sulfate	130		50.0	181		mg/L		100	80 - 120

Lab Sample ID: 240-190365-4 MSD
Matrix: Water
Analysis Batch: 585376

Client Sample ID: BAC-21-F-A3-20230816-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	77		50.0	127		mg/L		101	80 - 120	0	15
Fluoride	0.069		2.50	2.94		mg/L		115	80 - 120	1	15
Sulfate	130		50.0	181		mg/L		99	80 - 120	0	15

Lab Sample ID: MB 240-585526/3
Matrix: Water
Analysis Batch: 585526

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			08/29/23 13:09	1
Fluoride	ND		0.050	0.024	mg/L			08/29/23 13:09	1
Sulfate	ND		1.0	0.35	mg/L			08/29/23 13:09	1

Lab Sample ID: LCS 240-585526/4
Matrix: Water
Analysis Batch: 585526

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.1		mg/L		102	90 - 110
Fluoride	2.50	2.71		mg/L		108	90 - 110
Sulfate	50.0	52.9		mg/L		106	90 - 110

Lab Sample ID: 240-190365-3 MS
Matrix: Water
Analysis Batch: 585526

Client Sample ID: EB-001-F-A3-20230815-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	ND		50.0	55.4		mg/L		111	80 - 120
Fluoride	ND	F1	2.50	3.10	F1	mg/L		124	80 - 120
Sulfate	ND	F1	50.0	62.1	F1	mg/L		124	80 - 120

Lab Sample ID: 240-190365-3 MSD
Matrix: Water
Analysis Batch: 585526

Client Sample ID: EB-001-F-A3-20230815-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND		50.0	54.1		mg/L		108	80 - 120	2	15
Fluoride	ND	F1	2.50	3.03	F1	mg/L		121	80 - 120	2	15
Sulfate	ND	F1	50.0	59.8		mg/L		120	80 - 120	4	15

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

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

Lab Sample ID: MB 240-584630/1
Matrix: Water
Analysis Batch: 584630

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			08/21/23 15:16	1

Lab Sample ID: LCS 240-584630/2
Matrix: Water
Analysis Batch: 584630

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	242	226		mg/L		93	80 - 120

Lab Sample ID: MB 240-584730/1
Matrix: Water
Analysis Batch: 584730

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			08/22/23 10:33	1

Lab Sample ID: LCS 240-584730/2
Matrix: Water
Analysis Batch: 584730

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	242	220		mg/L		91	80 - 120

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Metals

Prep Batch: 584567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190365-1	BAC-10-F-A3-20230815-01	Total Recoverable	Water	3005A	
240-190365-2	DUP-001-BAC-10-F-A3-20230815-01	Total Recoverable	Water	3005A	
240-190365-3	EB-001-F-A3-20230815-01	Total Recoverable	Water	3005A	
240-190365-4	BAC-21-F-A3-20230816-01	Total Recoverable	Water	3005A	
240-190365-5	BAC-22-F-A3-20230816-01	Total Recoverable	Water	3005A	
240-190365-6	BAC-23-F-A3-20230816-01	Total Recoverable	Water	3005A	
240-190365-7	EB-001-F-A3-20230816-01	Total Recoverable	Water	3005A	
MB 240-584567/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-584567/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-584567/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 584753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190365-1	BAC-10-F-A3-20230815-01	Total Recoverable	Water	6010D	584567
240-190365-2	DUP-001-BAC-10-F-A3-20230815-01	Total Recoverable	Water	6010D	584567
240-190365-3	EB-001-F-A3-20230815-01	Total Recoverable	Water	6010D	584567
240-190365-4	BAC-21-F-A3-20230816-01	Total Recoverable	Water	6010D	584567
240-190365-5	BAC-22-F-A3-20230816-01	Total Recoverable	Water	6010D	584567
240-190365-6	BAC-23-F-A3-20230816-01	Total Recoverable	Water	6010D	584567
240-190365-7	EB-001-F-A3-20230816-01	Total Recoverable	Water	6010D	584567
MB 240-584567/1-A	Method Blank	Total Recoverable	Water	6010D	584567
LCS 240-584567/3-A	Lab Control Sample	Total Recoverable	Water	6010D	584567

Analysis Batch: 584769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190365-1	BAC-10-F-A3-20230815-01	Total Recoverable	Water	6020B	584567
240-190365-2	DUP-001-BAC-10-F-A3-20230815-01	Total Recoverable	Water	6020B	584567
240-190365-3	EB-001-F-A3-20230815-01	Total Recoverable	Water	6020B	584567
240-190365-4	BAC-21-F-A3-20230816-01	Total Recoverable	Water	6020B	584567
240-190365-5	BAC-22-F-A3-20230816-01	Total Recoverable	Water	6020B	584567
240-190365-6	BAC-23-F-A3-20230816-01	Total Recoverable	Water	6020B	584567
240-190365-7	EB-001-F-A3-20230816-01	Total Recoverable	Water	6020B	584567
MB 240-584567/1-A	Method Blank	Total Recoverable	Water	6020B	584567
LCS 240-584567/2-A	Lab Control Sample	Total Recoverable	Water	6020B	584567

Analysis Batch: 584849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190365-1	BAC-10-F-A3-20230815-01	Total Recoverable	Water	6020B	584567
240-190365-2	DUP-001-BAC-10-F-A3-20230815-01	Total Recoverable	Water	6020B	584567
240-190365-4	BAC-21-F-A3-20230816-01	Total Recoverable	Water	6020B	584567
240-190365-5	BAC-22-F-A3-20230816-01	Total Recoverable	Water	6020B	584567
240-190365-6	BAC-23-F-A3-20230816-01	Total Recoverable	Water	6020B	584567

General Chemistry

Analysis Batch: 584630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190365-2	DUP-001-BAC-10-F-A3-20230815-01	Total/NA	Water	SM 2540C	
240-190365-3	EB-001-F-A3-20230815-01	Total/NA	Water	SM 2540C	
MB 240-584630/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-584630/2	Lab Control Sample	Total/NA	Water	SM 2540C	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

General Chemistry

Analysis Batch: 584730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190365-1	BAC-10-F-A3-20230815-01	Total/NA	Water	SM 2540C	
240-190365-4	BAC-21-F-A3-20230816-01	Total/NA	Water	SM 2540C	
240-190365-5	BAC-22-F-A3-20230816-01	Total/NA	Water	SM 2540C	
240-190365-6	BAC-23-F-A3-20230816-01	Total/NA	Water	SM 2540C	
240-190365-7	EB-001-F-A3-20230816-01	Total/NA	Water	SM 2540C	
MB 240-584730/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-584730/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 584875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190365-1	BAC-10-F-A3-20230815-01	Total/NA	Water	2320B-1997	
240-190365-2	DUP-001-BAC-10-F-A3-20230815-01	Total/NA	Water	2320B-1997	
240-190365-3	EB-001-F-A3-20230815-01	Total/NA	Water	2320B-1997	
240-190365-4	BAC-21-F-A3-20230816-01	Total/NA	Water	2320B-1997	
240-190365-5	BAC-22-F-A3-20230816-01	Total/NA	Water	2320B-1997	
240-190365-6	BAC-23-F-A3-20230816-01	Total/NA	Water	2320B-1997	
240-190365-7	EB-001-F-A3-20230816-01	Total/NA	Water	2320B-1997	
MB 240-584875/29	Method Blank	Total/NA	Water	2320B-1997	
MB 240-584875/3	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-584875/28	Lab Control Sample	Total/NA	Water	2320B-1997	
240-190365-1 DU	BAC-10-F-A3-20230815-01	Total/NA	Water	2320B-1997	

Analysis Batch: 585213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190365-1	BAC-10-F-A3-20230815-01	Total/NA	Water	300.0	
240-190365-1	BAC-10-F-A3-20230815-01	Total/NA	Water	300.0	
240-190365-2	DUP-001-BAC-10-F-A3-20230815-01	Total/NA	Water	300.0	
240-190365-2	DUP-001-BAC-10-F-A3-20230815-01	Total/NA	Water	300.0	
240-190365-3	EB-001-F-A3-20230815-01	Total/NA	Water	300.0	
MB 240-585213/3	Method Blank	Total/NA	Water	300.0	
LCS 240-585213/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 585376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190365-4	BAC-21-F-A3-20230816-01	Total/NA	Water	300.0	
240-190365-5	BAC-22-F-A3-20230816-01	Total/NA	Water	300.0	
240-190365-5	BAC-22-F-A3-20230816-01	Total/NA	Water	300.0	
240-190365-6	BAC-23-F-A3-20230816-01	Total/NA	Water	300.0	
240-190365-7	EB-001-F-A3-20230816-01	Total/NA	Water	300.0	
MB 240-585376/3	Method Blank	Total/NA	Water	300.0	
LCS 240-585376/4	Lab Control Sample	Total/NA	Water	300.0	
240-190365-4 MS	BAC-21-F-A3-20230816-01	Total/NA	Water	300.0	
240-190365-4 MSD	BAC-21-F-A3-20230816-01	Total/NA	Water	300.0	

Analysis Batch: 585526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190365-1	BAC-10-F-A3-20230815-01	Total/NA	Water	300.0	
240-190365-2	DUP-001-BAC-10-F-A3-20230815-01	Total/NA	Water	300.0	
240-190365-3	EB-001-F-A3-20230815-01	Total/NA	Water	300.0	
MB 240-585526/3	Method Blank	Total/NA	Water	300.0	
LCS 240-585526/4	Lab Control Sample	Total/NA	Water	300.0	

Eurofins Cleveland

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

General Chemistry (Continued)

Analysis Batch: 585526 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190365-3 MS	EB-001-F-A3-20230815-01	Total/NA	Water	300.0	
240-190365-3 MSD	EB-001-F-A3-20230815-01	Total/NA	Water	300.0	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Client Sample ID: BAC-10-F-A3-20230815-01
Date Collected: 08/15/23 14:46
Date Received: 08/18/23 08:00

Lab Sample ID: 240-190365-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6010D		1	584753	AJC	EET CLE	08/22/23 19:46
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	584769	RKT	EET CLE	08/22/23 11:50
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	584849	RKT	EET CLE	08/22/23 19:51
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 20:45
Total/NA	Analysis	300.0		1	585526	ALT	EET CLE	08/29/23 18:55
Total/NA	Analysis	300.0		1	585213	JMR	EET CLE	08/26/23 06:59
Total/NA	Analysis	300.0		5	585213	JMR	EET CLE	08/26/23 07:59
Total/NA	Analysis	SM 2540C		1	584730	MS	EET CLE	08/22/23 10:33

Client Sample ID: DUP-001-BAC-10-F-A3-20230815-01
Date Collected: 08/15/23 14:46
Date Received: 08/18/23 08:00

Lab Sample ID: 240-190365-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6010D		1	584753	AJC	EET CLE	08/22/23 19:50
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	584769	RKT	EET CLE	08/22/23 11:52
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	584849	RKT	EET CLE	08/22/23 19:53
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 20:54
Total/NA	Analysis	300.0		1	585526	ALT	EET CLE	08/29/23 19:17
Total/NA	Analysis	300.0		1	585213	JMR	EET CLE	08/26/23 08:19
Total/NA	Analysis	300.0		5	585213	JMR	EET CLE	08/26/23 08:40
Total/NA	Analysis	SM 2540C		1	584630	MS	EET CLE	08/21/23 15:16

Client Sample ID: EB-001-F-A3-20230815-01
Date Collected: 08/15/23 15:15
Date Received: 08/18/23 08:00

Lab Sample ID: 240-190365-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6010D		1	584753	AJC	EET CLE	08/22/23 19:55
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	584769	RKT	EET CLE	08/22/23 11:55
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 20:58
Total/NA	Analysis	300.0		1	585526	ALT	EET CLE	08/29/23 19:39
Total/NA	Analysis	300.0		1	585213	JMR	EET CLE	08/26/23 09:00
Total/NA	Analysis	SM 2540C		1	584630	MS	EET CLE	08/21/23 15:16

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Client Sample ID: BAC-21-F-A3-20230816-01

Lab Sample ID: 240-190365-4

Date Collected: 08/16/23 12:58

Matrix: Water

Date Received: 08/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6010D		1	584753	AJC	EET CLE	08/22/23 19:59
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	584769	RKT	EET CLE	08/22/23 12:03
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	584849	RKT	EET CLE	08/22/23 19:56
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 21:04
Total/NA	Analysis	300.0		1	585376	JMR	EET CLE	08/28/23 14:10
Total/NA	Analysis	SM 2540C		1	584730	MS	EET CLE	08/22/23 10:33

Client Sample ID: BAC-22-F-A3-20230816-01

Lab Sample ID: 240-190365-5

Date Collected: 08/16/23 13:48

Matrix: Water

Date Received: 08/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6010D		1	584753	AJC	EET CLE	08/22/23 20:03
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	584769	RKT	EET CLE	08/22/23 12:05
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	584849	RKT	EET CLE	08/22/23 19:59
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 21:09
Total/NA	Analysis	300.0		1	585376	JMR	EET CLE	08/28/23 16:20
Total/NA	Analysis	300.0		5	585376	JMR	EET CLE	08/28/23 16:42
Total/NA	Analysis	SM 2540C		1	584730	MS	EET CLE	08/22/23 10:33

Client Sample ID: BAC-23-F-A3-20230816-01

Lab Sample ID: 240-190365-6

Date Collected: 08/16/23 14:32

Matrix: Water

Date Received: 08/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6010D		1	584753	AJC	EET CLE	08/22/23 20:16
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	584769	RKT	EET CLE	08/22/23 12:08
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	584849	RKT	EET CLE	08/22/23 20:01
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 21:14
Total/NA	Analysis	300.0		1	585376	JMR	EET CLE	08/28/23 17:47
Total/NA	Analysis	SM 2540C		1	584730	MS	EET CLE	08/22/23 10:33

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

Client Sample ID: EB-001-F-A3-20230816-01

Lab Sample ID: 240-190365-7

Date Collected: 08/16/23 15:00

Matrix: Water

Date Received: 08/18/23 08:00

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6010D		1	584753	AJC	EET CLE	08/22/23 20:21
Total Recoverable	Prep	3005A			584567	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	584769	RKT	EET CLE	08/22/23 12:11
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/22/23 21:17
Total/NA	Analysis	300.0		1	585376	JMR	EET CLE	08/28/23 18:30
Total/NA	Analysis	SM 2540C		1	584730	MS	EET CLE	08/22/23 10:33

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
Project/Site: Federal GWM Wells - App III

Job ID: 240-190365-1

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
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-23
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins - Cleveland Sample Receipt Form/Narrative
Barberton Facility

Login #: 190365

Client Lightstone Site Name _____ Cooler unpacked by: Nancy Page
Cooler Received on 8-18-23 Opened on 8-18-23
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 # 22 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity leach 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 NA
 - 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 NA
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
13. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC312502
14. Were VOAs on the COC? Yes No NA
15. Were air bubbles >6 mm in any VOA vials? Yes No NA
 Larger than this.
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: _____

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-10-F-A3-20230815-01	240-190365-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-001-BAC-10-F-A3-20230815-01	240-190365-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A3-20230815-01	240-190365-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-21-F-A3-20230816-01	240-190365-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-22-F-A3-20230816-01	240-190365-C-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-23-F-A3-20230816-01	240-190365-C-6	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A3-20230816-01	240-190365-C-7	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____

Chain of Custody Record

Eurofins Canton
180 S. Van Buren Avenue
Barberton, OH 44203
Phone (330) 497-9396 Phone (330) 497-0772

Client Information		Sampler: <i>Bobby Castle</i>		Lab P/M: Cisneros, Roxanne		COC No: 240-93465-34577.1	
Client Contact: Taylor Huffman		Phone: 740-323-4308		E-Mail: roxanne.cisneros@eurofins.com		State of Origin:	
Company: Lightstone Generation Gavin Power LLC		Address: 7397 OH-7		City: Cheshire		State, Zip: OH, 45620	
Phone: 740-925-3171 (Tel)		PO #: 2935505		WO #: 2935505		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Email: taylor.huffman@lightstonegen.com		Project #: 24019633		SSOW#:		Site: <i>Gavin Plant</i>	
Due Date Requested:		TAT Requested (days):		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)	
Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=oil, BT=Tissue, A=air)	
Sample Identification		Sample Date		Sample Time		Sample Type	
BAC-10-F-A3-20230815-01		8-15-23		1446		W	
BUP-001-BAG-10-F-A3-20230815-01		8-15-23		1446		W	
EB-001-F-A3-20230815-01		8-15-23		1515		W	
BAC-21-F-A3-20230816-01		8-16-23		1258		W	
BAC-22-F-A3-20230816-01		8-16-23		1348		W	
BAC-23-F-A3-20230816-01		8-16-23		1432		W	
EB-001-F-A3-20230816-01		8-16-23		1500		W	
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard		<input type="checkbox"/> Flammable		<input type="checkbox"/> Skin Irritant	
Deliverable Requested: I, II, III, IV, Other (specify)		<input type="checkbox"/> Poison B		<input type="checkbox"/> Unknown		<input type="checkbox"/> Radiological	
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by: <i>Bobby Castle</i>		8-17-23		0900		Company: <i>Lightstone</i>	
Relinquished by: <i>Ashley Deal</i>		8-17-23		1200		Company: <i>ETA</i>	
Relinquished by:		Date/Time:		Date/Time:		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Received by: <i>Ashley Deal</i>	
Analysis Requested		Received by: <i>Ashley Deal</i>		Date/Time: 8-17-23 11:41		Company: <i>ETA</i>	
Special Instructions/QC Requirements:		Received by: <i>Joey Peys</i>		Date/Time: 8-18-23 800		Company: <i>ETPC</i>	
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Return To Client <input type="checkbox"/>		Disposal By Lab <input type="checkbox"/>		Archive For _____ Months	
Barcode: 240-190365 Chain of Custody		Total Number of Containers: <input type="checkbox"/>		Special Instructions/Note:		Preservation Codes:	
A - HCL		M - Hexane		B - NaOH		N - None	
C - Zn Acetate		O - AsNaO2		D - Nitric Acid		P - Na2O4S	
E - NaHSO4		Q - Na2SO3		F - MeOH		R - Na2SO3	
G - Amchlor		S - H2SO4		H - Ascorbic Acid		T - TSP Dodecahydrate	
I - Ice		U - Acetone		J - DI Water		V - MCAA	
K - EDTA		W - pH 4-5		L - EDA		Z - other (specify)	
Other:		Special Instructions/Note:		Total Number of Containers:		Preservation Codes:	



Eurofins - Cleveland Sample Receipt Form/Narrative
Barberton Facility

Login #: 190365

Client Lightstone

Site Name _____

Cooler unpacked by:

Cooler Received on 8-18-23

Opened on 8-18-23

Nancy Peyer

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

- Cooler temperature upon receipt
IR GUN # 22 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 See Multiple Cooler Form
- Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity leach
 - 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
- Shippers' packing slip attached to the cooler(s)? Yes No
- Did custody papers accompany the sample(s)? Yes No
- Were the custody papers relinquished & signed in the appropriate place? Yes No
- Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
- Did all bottles arrive in good condition (Unbroken)? Yes No
- Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes No
- For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)? Yes No
- Were correct bottle(s) used for the test(s) indicated? Yes No
- Sufficient quantity received to perform indicated analyses? Yes No
- 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.
- Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC312502
- Were VOAs on the COC? Yes No
- Were air bubbles >6 mm in any VOA vials? Yes Larger than this. Yes No NA
- Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
- 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: _____

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Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-10-F-A3-20230815-01	240-190365-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-001-BAC-10-F-A3-20230815-01	240-190365-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A3-20230815-01	240-190365-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-21-F-A3-20230816-01	240-190365-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-22-F-A3-20230816-01	240-190365-C-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-23-F-A3-20230816-01	240-190365-C-6	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A3-20230816-01	240-190365-C-7	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____



ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 9/5/2023 10:05:09 AM

JOB DESCRIPTION

Federal CCR Wells - App III

JOB NUMBER

240-190431-1

Eurofins Cleveland

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
9/5/2023 10:05:09 AM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
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(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

Job ID: 240-190431-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative
240-190431-1

Receipt

The samples were received on 8/19/2023 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 5 coolers at receipt time were 0.5°C, 0.8°C, 1.0°C, 3.0°C and 24.1°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 - App III

Job ID: 240-190431-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
SM 2540C	Solids, Total Dissolved (TDS)	SM	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
Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-190431-1	BAC-18-F-A3-20230817-01	Water	08/17/23 11:35	08/19/23 08:00
240-190431-2	BAC-16-F-A3-20230817-01	Water	08/17/23 14:04	08/19/23 08:00
240-190431-3	BAC-08-F-A3-20230817-01	Water	08/17/23 15:02	08/19/23 08:00
240-190431-4	EB-001-F-A3-20230817-01	Water	08/17/23 15:15	08/19/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

Client Sample ID: BAC-18-F-A3-20230817-01

Lab Sample ID: 240-190431-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1400		100	57	ug/L	1		6010D	Total Recoverable
Calcium	79000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	88		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	88		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	25		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.054		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	400		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-16-F-A3-20230817-01

Lab Sample ID: 240-190431-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1400		100	57	ug/L	1		6010D	Total Recoverable
Calcium	100000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	23000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	28		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.053		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	460		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-08-F-A3-20230817-01

Lab Sample ID: 240-190431-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	110		100	57	ug/L	1		6010D	Total Recoverable
Calcium	99000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	13000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	12000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	24		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	82		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	350		10	7.8	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

Client Sample ID: EB-001-F-A3-20230817-01

Lab Sample ID: 240-190431-4

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

Client Sample ID: BAC-18-F-A3-20230817-01

Lab Sample ID: 240-190431-1

Date Collected: 08/17/23 11:35

Matrix: Water

Date Received: 08/19/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1400		100	57	ug/L		08/21/23 14:00	08/24/23 02:44	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	79000		1000	250	ug/L		08/21/23 14:00	08/25/23 21:14	1
Magnesium	21000		1000	61	ug/L		08/21/23 14:00	08/25/23 21:14	1
Potassium	1400		1000	220	ug/L		08/21/23 14:00	08/25/23 21:14	1
Sodium	16000		1000	330	ug/L		08/21/23 14:00	08/25/23 21:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	88		5.0	2.6	mg/L			08/23/23 18:00	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	88		5.0	2.6	mg/L			08/23/23 18:00	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 18:00	1
Chloride (EPA 300.0)	25		1.0	0.13	mg/L			09/01/23 05:38	1
Fluoride (EPA 300.0)	0.054		0.050	0.024	mg/L			09/01/23 05:38	1
Sulfate (EPA 300.0)	190		1.0	0.35	mg/L			09/01/23 05:38	1
Total Dissolved Solids (SM 2540C)	400		10	7.8	mg/L			08/22/23 10:46	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

Client Sample ID: BAC-16-F-A3-20230817-01

Lab Sample ID: 240-190431-2

Date Collected: 08/17/23 14:04

Matrix: Water

Date Received: 08/19/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1400		100	57	ug/L		08/21/23 14:00	08/24/23 02:49	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	100000		1000	250	ug/L		08/21/23 14:00	08/25/23 21:17	1
Magnesium	23000		1000	61	ug/L		08/21/23 14:00	08/25/23 21:17	1
Potassium	1800		1000	220	ug/L		08/21/23 14:00	08/25/23 21:17	1
Sodium	15000		1000	330	ug/L		08/21/23 14:00	08/25/23 21:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	160		5.0	2.6	mg/L			08/23/23 18:04	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	160		5.0	2.6	mg/L			08/23/23 18:04	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 18:04	1
Chloride (EPA 300.0)	28		1.0	0.13	mg/L			09/01/23 06:00	1
Fluoride (EPA 300.0)	0.053		0.050	0.024	mg/L			09/01/23 06:00	1
Sulfate (EPA 300.0)	190		1.0	0.35	mg/L			09/01/23 06:00	1
Total Dissolved Solids (SM 2540C)	460		10	7.8	mg/L			08/22/23 10:46	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

Client Sample ID: BAC-08-F-A3-20230817-01

Lab Sample ID: 240-190431-3

Date Collected: 08/17/23 15:02

Matrix: Water

Date Received: 08/19/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	110		100	57	ug/L		08/21/23 14:00	08/24/23 02:53	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	99000		1000	250	ug/L		08/21/23 14:00	08/25/23 21:25	1
Magnesium	13000		1000	61	ug/L		08/21/23 14:00	08/25/23 21:25	1
Potassium	1500		1000	220	ug/L		08/21/23 14:00	08/25/23 21:25	1
Sodium	12000		1000	330	ug/L		08/21/23 14:00	08/25/23 21:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	190		5.0	2.6	mg/L			08/23/23 18:09	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	190		5.0	2.6	mg/L			08/23/23 18:09	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 18:09	1
Chloride (EPA 300.0)	24		1.0	0.13	mg/L			09/01/23 06:22	1
Fluoride (EPA 300.0)	0.12		0.050	0.024	mg/L			09/01/23 06:22	1
Sulfate (EPA 300.0)	82		1.0	0.35	mg/L			09/01/23 06:22	1
Total Dissolved Solids (SM 2540C)	350		10	7.8	mg/L			08/22/23 10:46	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

Client Sample ID: EB-001-F-A3-20230817-01

Lab Sample ID: 240-190431-4

Date Collected: 08/17/23 15:15

Matrix: Water

Date Received: 08/19/23 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		08/21/23 14:00	08/24/23 02:57	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		08/21/23 14:00	08/25/23 21:27	1
Magnesium	ND		1000	61	ug/L		08/21/23 14:00	08/25/23 21:27	1
Potassium	ND		1000	220	ug/L		08/21/23 14:00	08/25/23 21:27	1
Sodium	ND		1000	330	ug/L		08/21/23 14:00	08/25/23 21:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 18:12	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 18:12	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 18:12	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			09/01/23 06:43	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			09/01/23 06:43	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			09/01/23 06:43	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			08/22/23 10:46	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-584561/1-A
 Matrix: Water
 Analysis Batch: 584923

Client Sample ID: Method Blank
 Prep Type: Total Recoverable
 Prep Batch: 584561

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		08/21/23 14:00	08/24/23 00:43	1

Lab Sample ID: LCS 240-584561/2-A
 Matrix: Water
 Analysis Batch: 584923

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 584561

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	992		ug/L		99	80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-584561/1-A
 Matrix: Water
 Analysis Batch: 585084

Client Sample ID: Method Blank
 Prep Type: Total Recoverable
 Prep Batch: 584561

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		08/21/23 14:00	08/24/23 17:37	1
Magnesium	ND		1000	61	ug/L		08/21/23 14:00	08/24/23 17:37	1
Potassium	ND		1000	220	ug/L		08/21/23 14:00	08/24/23 17:37	1
Sodium	ND		1000	330	ug/L		08/21/23 14:00	08/24/23 17:37	1

Lab Sample ID: LCS 240-584561/3-A
 Matrix: Water
 Analysis Batch: 585084

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 584561

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	23800		ug/L		95	80 - 120
Magnesium	25000	24800		ug/L		99	80 - 120
Potassium	25000	24400		ug/L		98	80 - 120
Sodium	25000	25200		ug/L		101	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-585070/30
 Matrix: Water
 Analysis Batch: 585070

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			08/23/23 17:31	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 17:31	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 17:31	1

Lab Sample ID: MB 240-585070/4
 Matrix: Water
 Analysis Batch: 585070

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			08/23/23 15:31	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 15:31	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 15:31	1

Eurofins Cleveland

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

Method: 2320B-1997 - Alkalinity, Total (Continued)

Lab Sample ID: LCS 240-585070/29
 Matrix: Water
 Analysis Batch: 585070

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	79.1		mg/L		98	86 - 123

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-585846/35
 Matrix: Water
 Analysis Batch: 585846

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			09/01/23 04:55	1
Fluoride	ND		0.050	0.024	mg/L			09/01/23 04:55	1
Sulfate	ND		1.0	0.35	mg/L			09/01/23 04:55	1

Lab Sample ID: LCS 240-585846/36
 Matrix: Water
 Analysis Batch: 585846

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.2		mg/L		102	90 - 110
Fluoride	2.50	2.71		mg/L		109	90 - 110
Sulfate	50.0	53.0		mg/L		106	90 - 110

Lab Sample ID: 240-190431-4 MS
 Matrix: Water
 Analysis Batch: 585846

Client Sample ID: EB-001-F-A3-20230817-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	ND		50.0	54.6		mg/L		109	80 - 120
Fluoride	ND		2.50	2.94		mg/L		117	80 - 120
Sulfate	ND		50.0	58.5		mg/L		117	80 - 120

Lab Sample ID: 240-190431-4 MSD
 Matrix: Water
 Analysis Batch: 585846

Client Sample ID: EB-001-F-A3-20230817-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Chloride	ND		50.0	54.9		mg/L		110	80 - 120	0	15
Fluoride	ND		2.50	2.92		mg/L		117	80 - 120	1	15
Sulfate	ND		50.0	57.6		mg/L		115	80 - 120	2	15

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

Lab Sample ID: MB 240-584736/1
 Matrix: Water
 Analysis Batch: 584736

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			08/22/23 10:46	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

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

Lab Sample ID: LCS 240-584736/2
Matrix: Water
Analysis Batch: 584736

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	242	217		mg/L		90	80 - 120

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

Metals

Prep Batch: 584561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190431-1	BAC-18-F-A3-20230817-01	Total Recoverable	Water	3005A	
240-190431-2	BAC-16-F-A3-20230817-01	Total Recoverable	Water	3005A	
240-190431-3	BAC-08-F-A3-20230817-01	Total Recoverable	Water	3005A	
240-190431-4	EB-001-F-A3-20230817-01	Total Recoverable	Water	3005A	
MB 240-584561/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-584561/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-584561/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 584923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190431-1	BAC-18-F-A3-20230817-01	Total Recoverable	Water	6010D	584561
240-190431-2	BAC-16-F-A3-20230817-01	Total Recoverable	Water	6010D	584561
240-190431-3	BAC-08-F-A3-20230817-01	Total Recoverable	Water	6010D	584561
240-190431-4	EB-001-F-A3-20230817-01	Total Recoverable	Water	6010D	584561
MB 240-584561/1-A	Method Blank	Total Recoverable	Water	6010D	584561
LCS 240-584561/2-A	Lab Control Sample	Total Recoverable	Water	6010D	584561

Analysis Batch: 585084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-584561/1-A	Method Blank	Total Recoverable	Water	6020B	584561
LCS 240-584561/3-A	Lab Control Sample	Total Recoverable	Water	6020B	584561

Analysis Batch: 585284

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190431-1	BAC-18-F-A3-20230817-01	Total Recoverable	Water	6020B	584561
240-190431-2	BAC-16-F-A3-20230817-01	Total Recoverable	Water	6020B	584561
240-190431-3	BAC-08-F-A3-20230817-01	Total Recoverable	Water	6020B	584561
240-190431-4	EB-001-F-A3-20230817-01	Total Recoverable	Water	6020B	584561

General Chemistry

Analysis Batch: 584736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190431-1	BAC-18-F-A3-20230817-01	Total/NA	Water	SM 2540C	
240-190431-2	BAC-16-F-A3-20230817-01	Total/NA	Water	SM 2540C	
240-190431-3	BAC-08-F-A3-20230817-01	Total/NA	Water	SM 2540C	
240-190431-4	EB-001-F-A3-20230817-01	Total/NA	Water	SM 2540C	
MB 240-584736/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-584736/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 585070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190431-1	BAC-18-F-A3-20230817-01	Total/NA	Water	2320B-1997	
240-190431-2	BAC-16-F-A3-20230817-01	Total/NA	Water	2320B-1997	
240-190431-3	BAC-08-F-A3-20230817-01	Total/NA	Water	2320B-1997	
240-190431-4	EB-001-F-A3-20230817-01	Total/NA	Water	2320B-1997	
MB 240-585070/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-585070/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-585070/29	Lab Control Sample	Total/NA	Water	2320B-1997	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

General Chemistry

Analysis Batch: 585846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190431-1	BAC-18-F-A3-20230817-01	Total/NA	Water	300.0	
240-190431-2	BAC-16-F-A3-20230817-01	Total/NA	Water	300.0	
240-190431-3	BAC-08-F-A3-20230817-01	Total/NA	Water	300.0	
240-190431-4	EB-001-F-A3-20230817-01	Total/NA	Water	300.0	
MB 240-585846/35	Method Blank	Total/NA	Water	300.0	
LCS 240-585846/36	Lab Control Sample	Total/NA	Water	300.0	
240-190431-4 MS	EB-001-F-A3-20230817-01	Total/NA	Water	300.0	
240-190431-4 MSD	EB-001-F-A3-20230817-01	Total/NA	Water	300.0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

Client Sample ID: BAC-18-F-A3-20230817-01

Lab Sample ID: 240-190431-1

Date Collected: 08/17/23 11:35

Matrix: Water

Date Received: 08/19/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584561	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6010D		1	584923	AJC	EET CLE	08/24/23 02:44
Total Recoverable	Prep	3005A			584561	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	585284	AJC	EET CLE	08/25/23 21:14
Total/NA	Analysis	2320B-1997		1	585070	JMR	EET CLE	08/23/23 18:00
Total/NA	Analysis	300.0		1	585846	ALT	EET CLE	09/01/23 05:38
Total/NA	Analysis	SM 2540C		1	584736	MS	EET CLE	08/22/23 10:46

Client Sample ID: BAC-16-F-A3-20230817-01

Lab Sample ID: 240-190431-2

Date Collected: 08/17/23 14:04

Matrix: Water

Date Received: 08/19/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584561	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6010D		1	584923	AJC	EET CLE	08/24/23 02:49
Total Recoverable	Prep	3005A			584561	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	585284	AJC	EET CLE	08/25/23 21:17
Total/NA	Analysis	2320B-1997		1	585070	JMR	EET CLE	08/23/23 18:04
Total/NA	Analysis	300.0		1	585846	ALT	EET CLE	09/01/23 06:00
Total/NA	Analysis	SM 2540C		1	584736	MS	EET CLE	08/22/23 10:46

Client Sample ID: BAC-08-F-A3-20230817-01

Lab Sample ID: 240-190431-3

Date Collected: 08/17/23 15:02

Matrix: Water

Date Received: 08/19/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584561	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6010D		1	584923	AJC	EET CLE	08/24/23 02:53
Total Recoverable	Prep	3005A			584561	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	585284	AJC	EET CLE	08/25/23 21:25
Total/NA	Analysis	2320B-1997		1	585070	JMR	EET CLE	08/23/23 18:09
Total/NA	Analysis	300.0		1	585846	ALT	EET CLE	09/01/23 06:22
Total/NA	Analysis	SM 2540C		1	584736	MS	EET CLE	08/22/23 10:46

Client Sample ID: EB-001-F-A3-20230817-01

Lab Sample ID: 240-190431-4

Date Collected: 08/17/23 15:15

Matrix: Water

Date Received: 08/19/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584561	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6010D		1	584923	AJC	EET CLE	08/24/23 02:57
Total Recoverable	Prep	3005A			584561	BN	EET CLE	08/21/23 14:00
Total Recoverable	Analysis	6020B		1	585284	AJC	EET CLE	08/25/23 21:27
Total/NA	Analysis	2320B-1997		1	585070	JMR	EET CLE	08/23/23 18:12

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Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

Client Sample ID: EB-001-F-A3-20230817-01

Lab Sample ID: 240-190431-4

Date Collected: 08/17/23 15:15

Matrix: Water

Date Received: 08/19/23 08:00

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total/NA	Analysis	300.0		1	585846	ALT	EET CLE	09/01/23 06:43
Total/NA	Analysis	SM 2540C		1	584736	MS	EET CLE	08/22/23 10:46

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
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190431-1

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
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.



Client Lightstone

Site Name _____

Cooler unpacked by: Vany Beyer

Cooler Received on 8-19-23

Opened on 8-19-23

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 # 22 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

- 2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity perch 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 NA
 - Were tamper/custody seals intact and uncompromised? Yes No NA

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

- 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# HC312502
 - 14. Were VOAs on the COC? Yes No
 - 15. Were air bubbles >6 mm in any VOA vials? Yes No NA • Larger than this.
 - 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: _____

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-18-F-A3-20230817-01	240-190431-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-16-F-A3-20230817-01	240-190431-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-08-F-A3-20230817-01	240-190431-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A3-20230817-01	240-190431-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____

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ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 9/21/2023 5:18:11 PM

JOB DESCRIPTION

Federal CCR Wells - App IV

JOB NUMBER

240-190433-1

Eurofins Cleveland

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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9/21/2023 5:18:11 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
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(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

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
F1	MS and/or MSD recovery exceeds control limits.
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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Job ID: 240-190433-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-190433-1

Receipt

The samples were received on 8/19/2023 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 5 coolers at receipt time were 0.5° C, 0.8° C, 1.0° C, 3.0° C and 24.1° C.

RAD

Method 9315: Radium-226 prep batch 160-625154: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-07-F-A4-20230817-01 (240-190433-1), BAC-18-F-A4-20230817-01 (240-190433-2), BAC-06-F-A4-20230817-01 (240-190433-3), BAC-06-F-A4-20230817-01 (240-190433-3[MS]), BAC-06-F-A4-20230817-01 (240-190433-3[MSD]), BAC-16-F-A4-20230817-01 (240-190433-4), BAC-08-F-A4-20230817-01 (240-190433-5), EB-001-F-4A-20230817-01 (240-190433-6), (LCS 160-625154/2-A) and (MB 160-625154/1-A)

Method 9320: Radium-228 batch 625155: The detection goal was not met for the following sample(s). Sample was prepped at a reduced volume due to the presence of matrix interferences: BAC-08-F-A4-20230817-01 (240-190433-5). Analytical results are reported with the detection limit achieved.

Method 9320: Radium-228 batch 625155: The matrix spike (MS) recoveries were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. BAC-06-F-A4-20230817-01 (240-190433-3[MS])

Method 9320: Radium-228 batch 625155: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-07-F-A4-20230817-01 (240-190433-1), BAC-18-F-A4-20230817-01 (240-190433-2), BAC-06-F-A4-20230817-01 (240-190433-3), BAC-06-F-A4-20230817-01 (240-190433-3[MS]), BAC-06-F-A4-20230817-01 (240-190433-3[MSD]), BAC-16-F-A4-20230817-01 (240-190433-4), BAC-08-F-A4-20230817-01 (240-190433-5), EB-001-F-4A-20230817-01 (240-190433-6), (LCS 160-625155/2-A) and (MB 160-625155/1-A)

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

Metals

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

General Chemistry

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0-1993 R2.1	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 - App IV

Job ID: 240-190433-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-190433-1	BAC-07-F-A4-20230817-01	Water	08/17/23 10:42	08/19/23 08:00
240-190433-2	BAC-18-F-A4-20230817-01	Water	08/17/23 11:35	08/19/23 08:00
240-190433-3	BAC-06-F-A4-20230817-01	Water	08/17/23 12:51	08/19/23 08:00
240-190433-4	BAC-16-F-A4-20230817-01	Water	08/17/23 14:04	08/19/23 08:00
240-190433-5	BAC-08-F-A4-20230817-01	Water	08/17/23 15:02	08/19/23 08:00
240-190433-6	EB-001-F-4A-20230817-01	Water	08/17/23 15:15	08/19/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-07-F-A4-20230817-01

Lab Sample ID: 240-190433-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	40		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.6		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	6.3	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	130		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	130		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.069		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-18-F-A4-20230817-01

Lab Sample ID: 240-190433-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.86	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	29		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.9		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.2		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	7.6	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	90		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	90		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.054		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-06-F-A4-20230817-01

Lab Sample ID: 240-190433-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.0	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	91		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	4.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	7.9	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	27000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	17000		1000	330	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 - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-06-F-A4-20230817-01 (Continued)

Lab Sample ID: 240-190433-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Thallium	1.3		1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.092		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-16-F-A4-20230817-01

Lab Sample ID: 240-190433-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.2	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	51		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	1.5	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.2		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	8.3		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	23000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.054		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-08-F-A4-20230817-01

Lab Sample ID: 240-190433-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.3	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	130		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	1.3	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.0		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.47	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	5.0	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	13000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.3	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	1500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	13000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	200		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.12		0.050	0.024	mg/L	1		300.0-1993 R2.1	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 - App IV

Job ID: 240-190433-1

Client Sample ID: EB-001-F-4A-20230817-01

Lab Sample ID: 240-190433-6

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-07-F-A4-20230817-01

Lab Sample ID: 240-190433-1

Date Collected: 08/17/23 10:42

Matrix: Water

Date Received: 08/19/23 08:00

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		08/22/23 14:00	08/24/23 17:01	1
Arsenic	ND		5.0	0.75	ug/L		08/22/23 14:00	08/24/23 17:01	1
Barium	40		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 17:01	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 17:01	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 17:01	1
Chromium	ND		5.0	1.2	ug/L		08/22/23 14:00	08/24/23 17:01	1
Cobalt	1.6		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 17:01	1
Lead	ND		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 17:01	1
Lithium	6.3 J		8.0	1.7	ug/L		08/22/23 14:00	08/24/23 17:01	1
Magnesium	20000		1000	61	ug/L		08/22/23 14:00	08/24/23 17:01	1
Molybdenum	ND		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 17:01	1
Potassium	1300		1000	220	ug/L		08/22/23 14:00	08/24/23 17:01	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 17:01	1
Sodium	16000		1000	330	ug/L		08/22/23 14:00	08/24/23 17:01	1
Thallium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 17:01	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		08/22/23 14:00	08/24/23 17:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	130		5.0	2.6	mg/L			08/23/23 01:38	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	130		5.0	2.6	mg/L			08/23/23 01:38	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 01:38	1
Fluoride (EPA 300.0-1993 R2.1)	0.069		0.050	0.024	mg/L			09/12/23 01:38	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0279	U	0.0887	0.0887	1.00	0.166	pCi/L	08/23/23 10:08	09/18/23 09:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.2		30 - 110					08/23/23 10:08	09/18/23 09:58	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	1.59		0.554	0.573	1.00	0.698	pCi/L	08/23/23 10:12	09/14/23 11:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.2		30 - 110					08/23/23 10:12	09/14/23 11:47	1
Y Carrier	77.0		30 - 110					08/23/23 10:12	09/14/23 11:47	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-07-F-A4-20230817-01

Lab Sample ID: 240-190433-1

Date Collected: 08/17/23 10:42

Matrix: Water

Date Received: 08/19/23 08:00

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	1.61		0.561	0.580	5.00	0.698	pCi/L		09/21/23 17:54	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-18-F-A4-20230817-01

Lab Sample ID: 240-190433-2

Date Collected: 08/17/23 11:35

Matrix: Water

Date Received: 08/19/23 08:00

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		08/22/23 14:00	08/24/23 17:05	1
Arsenic	0.86	J	5.0	0.75	ug/L		08/22/23 14:00	08/24/23 17:05	1
Barium	29		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 17:05	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 17:05	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 17:05	1
Chromium	ND		5.0	1.2	ug/L		08/22/23 14:00	08/24/23 17:05	1
Cobalt	1.9		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 17:05	1
Lead	1.2		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 17:05	1
Lithium	7.6	J	8.0	1.7	ug/L		08/22/23 14:00	08/24/23 17:05	1
Magnesium	21000		1000	61	ug/L		08/22/23 14:00	08/24/23 17:05	1
Molybdenum	ND		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 17:05	1
Potassium	1300		1000	220	ug/L		08/22/23 14:00	08/24/23 17:05	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 17:05	1
Sodium	16000		1000	330	ug/L		08/22/23 14:00	08/24/23 17:05	1
Thallium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 17:05	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		08/22/23 14:00	08/24/23 17:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	90		5.0	2.6	mg/L			08/23/23 01:44	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	90		5.0	2.6	mg/L			08/23/23 01:44	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 01:44	1
Fluoride (EPA 300.0-1993 R2.1)	0.054		0.050	0.024	mg/L			09/12/23 02:00	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	0.148	U	0.152	0.152	1.00	0.240	pCi/L	08/23/23 14:00	09/18/23 09:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.9		30 - 110					08/23/23 14:00	09/18/23 09:59	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	0.699	U	0.563	0.567	1.00	0.872	pCi/L	08/23/23 14:05	09/14/23 11:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.9		30 - 110					08/23/23 14:05	09/14/23 11:47	1
Y Carrier	81.5		30 - 110					08/23/23 14:05	09/14/23 11:47	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-18-F-A4-20230817-01

Lab Sample ID: 240-190433-2

Date Collected: 08/17/23 11:35

Matrix: Water

Date Received: 08/19/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.847	U	0.583	0.587	5.00	0.872	pCi/L		09/21/23 17:54	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-06-F-A4-20230817-01

Lab Sample ID: 240-190433-3

Date Collected: 08/17/23 12:51

Matrix: Water

Date Received: 08/19/23 08:00

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		08/22/23 14:00	08/24/23 15:10	1
Arsenic	1.0	J	5.0	0.75	ug/L		08/22/23 14:00	08/24/23 15:10	1
Barium	91		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 15:10	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 15:10	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 15:10	1
Chromium	ND		5.0	1.2	ug/L		08/22/23 14:00	08/24/23 15:10	1
Cobalt	4.1		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 15:10	1
Lead	ND		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 15:10	1
Lithium	7.9	J	8.0	1.7	ug/L		08/22/23 14:00	08/24/23 15:10	1
Magnesium	27000		1000	61	ug/L		08/22/23 14:00	08/24/23 15:10	1
Molybdenum	ND		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 15:10	1
Potassium	1500		1000	220	ug/L		08/22/23 14:00	08/24/23 15:10	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 15:10	1
Sodium	17000		1000	330	ug/L		08/22/23 14:00	08/24/23 15:10	1
Thallium	1.3		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 15:10	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		08/22/23 14:00	08/24/23 16:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	200		5.0	2.6	mg/L			08/23/23 01:48	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	200		5.0	2.6	mg/L			08/23/23 01:48	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 01:48	1
Fluoride (EPA 300.0-1993 R2.1)	0.092		0.050	0.024	mg/L			09/12/23 02:22	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	0.111	U	0.129	0.130	1.00	0.211	pCi/L	08/23/23 14:00	09/18/23 09:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.9		30 - 110					08/23/23 14:00	09/18/23 09:59	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	0.657		0.429	0.433	1.00	0.622	pCi/L	08/23/23 14:05	09/14/23 11:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.9		30 - 110					08/23/23 14:05	09/14/23 11:47	1
Y Carrier	77.8		30 - 110					08/23/23 14:05	09/14/23 11:47	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-06-F-A4-20230817-01

Lab Sample ID: 240-190433-3

Date Collected: 08/17/23 12:51

Matrix: Water

Date Received: 08/19/23 08:00

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	0.768		0.448	0.452	5.00	0.622	pCi/L		09/21/23 17:54	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-16-F-A4-20230817-01

Lab Sample ID: 240-190433-4

Date Collected: 08/17/23 14:04

Matrix: Water

Date Received: 08/19/23 08:00

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		08/22/23 14:00	08/24/23 17:10	1
Arsenic	1.2	J	5.0	0.75	ug/L		08/22/23 14:00	08/24/23 17:10	1
Barium	51		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 17:10	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 17:10	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 17:10	1
Chromium	1.5	J	5.0	1.2	ug/L		08/22/23 14:00	08/24/23 17:10	1
Cobalt	2.1		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 17:10	1
Lead	1.2		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 17:10	1
Lithium	8.3		8.0	1.7	ug/L		08/22/23 14:00	08/24/23 17:10	1
Magnesium	23000		1000	61	ug/L		08/22/23 14:00	08/24/23 17:10	1
Molybdenum	ND		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 17:10	1
Potassium	1700		1000	220	ug/L		08/22/23 14:00	08/24/23 17:10	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 17:10	1
Sodium	16000		1000	330	ug/L		08/22/23 14:00	08/24/23 17:10	1
Thallium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 17:10	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		08/22/23 14:00	08/24/23 17:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	160		5.0	2.6	mg/L			08/23/23 01:58	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	160		5.0	2.6	mg/L			08/23/23 01:58	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 01:58	1
Fluoride (EPA 300.0-1993 R2.1)	0.054		0.050	0.024	mg/L			09/12/23 04:10	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	-0.0187	U	0.0806	0.0806	1.00	0.186	pCi/L	08/23/23 14:00	09/18/23 09:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.0		30 - 110					08/23/23 14:00	09/18/23 09:59	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	1.19		0.639	0.648	1.00	0.912	pCi/L	08/23/23 14:05	09/14/23 11:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.0		30 - 110					08/23/23 14:05	09/14/23 11:50	1
Y Carrier	79.6		30 - 110					08/23/23 14:05	09/14/23 11:50	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-16-F-A4-20230817-01

Lab Sample ID: 240-190433-4

Date Collected: 08/17/23 14:04

Matrix: Water

Date Received: 08/19/23 08:00

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	1.17		0.644	0.653	5.00	0.912	pCi/L		09/21/23 17:54	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-08-F-A4-20230817-01

Lab Sample ID: 240-190433-5

Date Collected: 08/17/23 15:02

Matrix: Water

Date Received: 08/19/23 08:00

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		08/22/23 14:00	08/24/23 17:14	1
Arsenic	2.3	J	5.0	0.75	ug/L		08/22/23 14:00	08/24/23 17:14	1
Barium	130		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 17:14	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 17:14	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 17:14	1
Chromium	1.3	J	5.0	1.2	ug/L		08/22/23 14:00	08/24/23 17:14	1
Cobalt	2.0		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 17:14	1
Lead	0.47	J	1.0	0.45	ug/L		08/22/23 14:00	08/24/23 17:14	1
Lithium	5.0	J	8.0	1.7	ug/L		08/22/23 14:00	08/24/23 17:14	1
Magnesium	13000		1000	61	ug/L		08/22/23 14:00	08/24/23 17:14	1
Molybdenum	1.3	J	5.0	1.1	ug/L		08/22/23 14:00	08/24/23 17:14	1
Potassium	1500		1000	220	ug/L		08/22/23 14:00	08/24/23 17:14	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 17:14	1
Sodium	13000		1000	330	ug/L		08/22/23 14:00	08/24/23 17:14	1
Thallium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 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		08/22/23 14:00	08/24/23 17:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	200		5.0	2.6	mg/L			08/23/23 02:02	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	200		5.0	2.6	mg/L			08/23/23 02:02	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 02:02	1
Fluoride (EPA 300.0-1993 R2.1)	0.12		0.050	0.024	mg/L			09/12/23 04:32	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	0.205		0.148	0.149	1.00	0.205	pCi/L	08/23/23 14:00	09/18/23 09:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.7		30 - 110					08/23/23 14:00	09/18/23 09:59	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	0.282	U G	0.637	0.638	1.00	1.11	pCi/L	08/23/23 14:05	09/14/23 11:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.7		30 - 110					08/23/23 14:05	09/14/23 11:50	1
Y Carrier	80.0		30 - 110					08/23/23 14:05	09/14/23 11:50	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-08-F-A4-20230817-01

Lab Sample ID: 240-190433-5

Date Collected: 08/17/23 15:02

Matrix: Water

Date Received: 08/19/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.487	U	0.654	0.655	5.00	1.11	pCi/L		09/21/23 17:54	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: EB-001-F-4A-20230817-01

Lab Sample ID: 240-190433-6

Date Collected: 08/17/23 15:15

Matrix: Water

Date Received: 08/19/23 08:00

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		08/22/23 14:00	08/24/23 17:19	1
Arsenic	ND		5.0	0.75	ug/L		08/22/23 14:00	08/24/23 17:19	1
Barium	ND		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 17:19	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 17:19	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 17:19	1
Chromium	ND		5.0	1.2	ug/L		08/22/23 14:00	08/24/23 17:19	1
Cobalt	ND		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 17:19	1
Lead	ND		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 17:19	1
Lithium	ND		8.0	1.7	ug/L		08/22/23 14:00	08/24/23 17:19	1
Magnesium	ND		1000	61	ug/L		08/22/23 14:00	08/24/23 17:19	1
Molybdenum	ND		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 17:19	1
Potassium	ND		1000	220	ug/L		08/22/23 14:00	08/24/23 17:19	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 17:19	1
Sodium	ND		1000	330	ug/L		08/22/23 14:00	08/24/23 17:19	1
Thallium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 17:19	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		08/22/23 14:00	08/24/23 17:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 02:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 02:06	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 02:06	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			09/12/23 04:54	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.198	U	0.146	0.147	1.00	0.213	pCi/L	08/23/23 14:00	09/18/23 09:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.7		30 - 110					08/23/23 14:00	09/18/23 09:59	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.254	U	0.372	0.373	1.00	0.629	pCi/L	08/23/23 14:05	09/14/23 11:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.7		30 - 110					08/23/23 14:05	09/14/23 11:50	1
Y Carrier	81.9		30 - 110					08/23/23 14:05	09/14/23 11:50	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: EB-001-F-4A-20230817-01

Lab Sample ID: 240-190433-6

Date Collected: 08/17/23 15:15

Matrix: Water

Date Received: 08/19/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.452	U	0.400	0.401	5.00	0.629	pCi/L		09/21/23 17:54	1

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Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
240-190433-1	BAC-07-F-A4-20230817-01	89.2	
240-190433-2	BAC-18-F-A4-20230817-01	78.9	
240-190433-3	BAC-06-F-A4-20230817-01	75.9	
240-190433-3 MS	BAC-06-F-A4-20230817-01	83.0	
240-190433-3 MSD	BAC-06-F-A4-20230817-01	86.0	
240-190433-4	BAC-16-F-A4-20230817-01	84.0	
240-190433-5	BAC-08-F-A4-20230817-01	76.7	
240-190433-6	EB-001-F-4A-20230817-01	78.7	
LCS 160-625154/2-A	Lab Control Sample	77.9	
MB 160-625154/1-A	Method Blank	84.2	

Tracer/Carrier Legend
 Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-190433-1	BAC-07-F-A4-20230817-01	89.2	77.0
240-190433-2	BAC-18-F-A4-20230817-01	78.9	81.5
240-190433-3	BAC-06-F-A4-20230817-01	75.9	77.8
240-190433-3 MS	BAC-06-F-A4-20230817-01	83.0	74.4
240-190433-3 MSD	BAC-06-F-A4-20230817-01	86.0	77.0
240-190433-4	BAC-16-F-A4-20230817-01	84.0	79.6
240-190433-5	BAC-08-F-A4-20230817-01	76.7	80.0
240-190433-6	EB-001-F-4A-20230817-01	78.7	81.9
LCS 160-625155/2-A	Lab Control Sample	77.9	76.3
MB 160-625155/1-A	Method Blank	84.2	77.4

Tracer/Carrier Legend
 Ba = Ba Carrier
 Y = Y Carrier

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-584712/1-A
Matrix: Water
Analysis Batch: 585084

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 584712

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	ND		2.0	0.57	ug/L		08/22/23 14:00	08/24/23 15:00	1
Arsenic	ND		5.0	0.75	ug/L		08/22/23 14:00	08/24/23 15:00	1
Barium	ND		5.0	2.2	ug/L		08/22/23 14:00	08/24/23 15:00	1
Beryllium	ND		1.0	0.62	ug/L		08/22/23 14:00	08/24/23 15:00	1
Cadmium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 15:00	1
Chromium	ND		5.0	1.2	ug/L		08/22/23 14:00	08/24/23 15:00	1
Cobalt	ND		1.0	0.19	ug/L		08/22/23 14:00	08/24/23 15:00	1
Lead	ND		1.0	0.45	ug/L		08/22/23 14:00	08/24/23 15:00	1
Lithium	ND		8.0	1.7	ug/L		08/22/23 14:00	08/24/23 15:00	1
Magnesium	ND		1000	61	ug/L		08/22/23 14:00	08/24/23 15:00	1
Molybdenum	ND		5.0	1.1	ug/L		08/22/23 14:00	08/24/23 15:00	1
Potassium	ND		1000	220	ug/L		08/22/23 14:00	08/24/23 15:00	1
Selenium	ND		5.0	0.89	ug/L		08/22/23 14:00	08/24/23 15:00	1
Sodium	ND		1000	330	ug/L		08/22/23 14:00	08/24/23 15:00	1
Thallium	ND		1.0	0.20	ug/L		08/22/23 14:00	08/24/23 15:00	1

Lab Sample ID: LCS 240-584712/2-A
Matrix: Water
Analysis Batch: 585084

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 584712

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1000	1010		ug/L		101	80 - 120
Barium	1000	985		ug/L		98	80 - 120
Beryllium	500	457		ug/L		91	80 - 120
Cadmium	500	499		ug/L		100	80 - 120
Chromium	500	516		ug/L		103	80 - 120
Cobalt	500	519		ug/L		104	80 - 120
Lead	500	518		ug/L		104	80 - 120
Lithium	500	514		ug/L		103	80 - 120
Magnesium	25000	25200		ug/L		101	80 - 120
Molybdenum	500	509		ug/L		102	80 - 120
Potassium	25000	24700		ug/L		99	80 - 120
Selenium	1000	980		ug/L		98	80 - 120
Sodium	25000	25800		ug/L		103	80 - 120
Thallium	1000	991		ug/L		99	80 - 120

Lab Sample ID: 240-190433-3 MS
Matrix: Water
Analysis Batch: 585084

Client Sample ID: BAC-06-F-A4-20230817-01
Prep Type: Total Recoverable
Prep Batch: 584712

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
Antimony	ND		100	107		ug/L		107	80 - 120
Arsenic	1.0	J	1000	1020		ug/L		102	80 - 120
Barium	91		1000	1110		ug/L		102	80 - 120
Beryllium	ND		500	437		ug/L		87	80 - 120
Cadmium	ND		500	496		ug/L		99	80 - 120
Chromium	ND		500	516		ug/L		103	80 - 120
Cobalt	4.1		500	527		ug/L		105	80 - 120

Eurofins Cleveland

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

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

Lab Sample ID: 240-190433-3 MS
Matrix: Water
Analysis Batch: 585084

Client Sample ID: BAC-06-F-A4-20230817-01
Prep Type: Total Recoverable
Prep Batch: 584712

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				Limits	
Lead	ND		500	520		ug/L		104	80 - 120	
Lithium	7.9	J	500	516		ug/L		102	80 - 120	
Magnesium	27000		25000	52400		ug/L		100	80 - 120	
Molybdenum	ND		500	520		ug/L		104	80 - 120	
Potassium	1500		25000	26100		ug/L		98	80 - 120	
Selenium	ND		1000	983		ug/L		98	80 - 120	
Sodium	17000		25000	42400		ug/L		102	80 - 120	
Thallium	1.3		1000	1010		ug/L		100	80 - 120	

Lab Sample ID: 240-190433-3 MSD
Matrix: Water
Analysis Batch: 585084

Client Sample ID: BAC-06-F-A4-20230817-01
Prep Type: Total Recoverable
Prep Batch: 584712

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit	
Antimony	ND		100	107		ug/L		107	80 - 120	1	20	
Arsenic	1.0	J	1000	1030		ug/L		103	80 - 120	1	20	
Barium	91		1000	1090		ug/L		100	80 - 120	1	20	
Beryllium	ND		500	454		ug/L		91	80 - 120	4	20	
Cadmium	ND		500	497		ug/L		99	80 - 120	0	20	
Chromium	ND		500	523		ug/L		105	80 - 120	1	20	
Cobalt	4.1		500	525		ug/L		104	80 - 120	0	20	
Lead	ND		500	528		ug/L		106	80 - 120	2	20	
Lithium	7.9	J	500	542		ug/L		107	80 - 120	5	20	
Magnesium	27000		25000	52400		ug/L		100	80 - 120	0	20	
Molybdenum	ND		500	525		ug/L		105	80 - 120	1	20	
Potassium	1500		25000	26000		ug/L		98	80 - 120	0	20	
Selenium	ND		1000	988		ug/L		99	80 - 120	1	20	
Sodium	17000		25000	42200		ug/L		102	80 - 120	0	20	
Thallium	1.3		1000	1010		ug/L		101	80 - 120	1	20	

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-584713/1-A
Matrix: Water
Analysis Batch: 585098

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 584713

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil
	Result	Qualifier							
Mercury	ND		0.20	0.13	ug/L		08/22/23 14:00	08/24/23 16:26	1

Lab Sample ID: LCS 240-584713/2-A
Matrix: Water
Analysis Batch: 585098

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 584713

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
							Added
Mercury	5.00	5.09		ug/L		102	80 - 120

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 240-190433-3 MS
 Matrix: Water
 Analysis Batch: 585098

Client Sample ID: BAC-06-F-A4-20230817-01
 Prep Type: Total/NA
 Prep Batch: 584713

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

Lab Sample ID: 240-190433-3 MSD
 Matrix: Water
 Analysis Batch: 585098

Client Sample ID: BAC-06-F-A4-20230817-01
 Prep Type: Total/NA
 Prep Batch: 584713

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Mercury	ND		1.00	0.953		ug/L		95	80 - 120	7	20

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-584875/55
 Matrix: Water
 Analysis Batch: 584875

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			08/22/23 22:33	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/22/23 22:33	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/22/23 22:33	1

Lab Sample ID: MB 240-584875/82
 Matrix: Water
 Analysis Batch: 584875

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			08/23/23 00:19	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 00:19	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 00:19	1

Lab Sample ID: LCS 240-584875/81
 Matrix: Water
 Analysis Batch: 584875

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	79.2		mg/L		98	86 - 123

Lab Sample ID: 240-190433-3 DU
 Matrix: Water
 Analysis Batch: 584875

Client Sample ID: BAC-06-F-A4-20230817-01
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Alkalinity	200		203		mg/L		0.9	20
Bicarbonate Alkalinity as CaCO3	200		203		mg/L		0.9	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-586790/3
Matrix: Water
Analysis Batch: 586790

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			09/11/23 19:30	1

Lab Sample ID: LCS 240-586790/4
Matrix: Water
Analysis Batch: 586790

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.69		mg/L		108	90 - 110

Lab Sample ID: 240-190433-3 MS
Matrix: Water
Analysis Batch: 586790

Client Sample ID: BAC-06-F-A4-20230817-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.092		2.50	2.93		mg/L		114	80 - 120

Lab Sample ID: 240-190433-3 MSD
Matrix: Water
Analysis Batch: 586790

Client Sample ID: BAC-06-F-A4-20230817-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.092		2.50	2.96		mg/L		115	80 - 120	1	15

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-625154/1-A
Matrix: Water
Analysis Batch: 628632

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 625154

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.02857	U	0.0761	0.0761	1.00	0.143	pCi/L	08/23/23 10:08	09/18/23 09:50	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.2		30 - 110					08/23/23 10:08	09/18/23 09:50	1

Lab Sample ID: LCS 160-625154/2-A
Matrix: Water
Analysis Batch: 628632

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 625154

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	11.3	12.80		1.38	1.00	0.152	pCi/L	113	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	77.9		30 - 110						

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: 240-190433-3 MS
Matrix: Water
Analysis Batch: 628634

Client Sample ID: BAC-06-F-A4-20230817-01
Prep Type: Total/NA
Prep Batch: 625154

Analyte	Sample	Sample	Spike Added	MS	MS	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
	Result	Qual		Result	Qual						
Radium-226	0.111	U	11.4	11.78		1.28	1.00	0.134	pCi/L	103	60 - 140
Carrier	%Yield	MS Qualifier	Limits								
Ba Carrier	83.0		30 - 110								

Lab Sample ID: 240-190433-3 MSD
Matrix: Water
Analysis Batch: 628634

Client Sample ID: BAC-06-F-A4-20230817-01
Prep Type: Total/NA
Prep Batch: 625154

Analyte	Sample	Sample	Spike Added	MSD	MSD	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
	Result	Qual		Result	Qual								
Radium-226	0.111	U	11.4	11.68		1.27	1.00	0.144	pCi/L	102	60 - 140	0.04	1
Carrier	%Yield	MSD Qualifier	Limits										
Ba Carrier	86.0		30 - 110										

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-625155/1-A
Matrix: Water
Analysis Batch: 628152

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 625155

Analyte	MB	MB	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-228	0.3014	U	0.365	0.366	1.00	0.604	pCi/L	08/23/23 10:12	09/14/23 11:43	1
Carrier	%Yield	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	84.2		30 - 110			08/23/23 10:12	09/14/23 11:43	1		
Y Carrier	77.4		30 - 110			08/23/23 10:12	09/14/23 11:43	1		

Lab Sample ID: LCS 160-625155/2-A
Matrix: Water
Analysis Batch: 628152

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 625155

Analyte	Spike Added	LCS	LCS	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
		Result	Qual						
Radium-228	7.88	9.215		1.65	1.00	1.06	pCi/L	117	75 - 125
Carrier	%Yield	LCS Qualifier	Limits						
Ba Carrier	77.9		30 - 110						
Y Carrier	76.3		30 - 110						

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

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

Lab Sample ID: 240-190433-3 MS

Matrix: Water

Analysis Batch: 628146

Client Sample ID: BAC-06-F-A4-20230817-01

Prep Type: Total/NA

Prep Batch: 625155

Analyte	Sample	Sample	Spike	MS	MS	Total	RL	MDC	Unit	%Rec	%Rec	Limits
	Result	Qual		Result	Qual							
Radium-228	0.657		7.90	11.93	F1	1.64	1.00	0.659	pCi/L	143	60 - 140	
MS MS												
Carrier	%Yield	Qualifier	Limits									
Ba Carrier	83.0		30 - 110									
Y Carrier	74.4		30 - 110									

Lab Sample ID: 240-190433-3 MSD

Matrix: Water

Analysis Batch: 628146

Client Sample ID: BAC-06-F-A4-20230817-01

Prep Type: Total/NA

Prep Batch: 625155

Analyte	Sample	Sample	Spike	MSD	MSD	Total	RL	MDC	Unit	%Rec	%Rec	Limits	RER	Limit
	Result	Qual		Result	Qual									
Radium-228	0.657		7.91	10.85		1.51	1.00	0.620	pCi/L	129	60 - 140	0.34	1	
MSD MSD														
Carrier	%Yield	Qualifier	Limits											
Ba Carrier	86.0		30 - 110											
Y Carrier	77.0		30 - 110											

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Metals

Prep Batch: 584712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190433-1	BAC-07-F-A4-20230817-01	Total Recoverable	Water	3005A	
240-190433-2	BAC-18-F-A4-20230817-01	Total Recoverable	Water	3005A	
240-190433-3	BAC-06-F-A4-20230817-01	Total Recoverable	Water	3005A	
240-190433-4	BAC-16-F-A4-20230817-01	Total Recoverable	Water	3005A	
240-190433-5	BAC-08-F-A4-20230817-01	Total Recoverable	Water	3005A	
240-190433-6	EB-001-F-4A-20230817-01	Total Recoverable	Water	3005A	
MB 240-584712/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-584712/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-190433-3 MS	BAC-06-F-A4-20230817-01	Total Recoverable	Water	3005A	
240-190433-3 MSD	BAC-06-F-A4-20230817-01	Total Recoverable	Water	3005A	

Prep Batch: 584713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190433-1	BAC-07-F-A4-20230817-01	Total/NA	Water	7470A	
240-190433-2	BAC-18-F-A4-20230817-01	Total/NA	Water	7470A	
240-190433-3	BAC-06-F-A4-20230817-01	Total/NA	Water	7470A	
240-190433-4	BAC-16-F-A4-20230817-01	Total/NA	Water	7470A	
240-190433-5	BAC-08-F-A4-20230817-01	Total/NA	Water	7470A	
240-190433-6	EB-001-F-4A-20230817-01	Total/NA	Water	7470A	
MB 240-584713/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-584713/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-190433-3 MS	BAC-06-F-A4-20230817-01	Total/NA	Water	7470A	
240-190433-3 MSD	BAC-06-F-A4-20230817-01	Total/NA	Water	7470A	

Analysis Batch: 585084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190433-1	BAC-07-F-A4-20230817-01	Total Recoverable	Water	6020B	584712
240-190433-2	BAC-18-F-A4-20230817-01	Total Recoverable	Water	6020B	584712
240-190433-3	BAC-06-F-A4-20230817-01	Total Recoverable	Water	6020B	584712
240-190433-4	BAC-16-F-A4-20230817-01	Total Recoverable	Water	6020B	584712
240-190433-5	BAC-08-F-A4-20230817-01	Total Recoverable	Water	6020B	584712
240-190433-6	EB-001-F-4A-20230817-01	Total Recoverable	Water	6020B	584712
MB 240-584712/1-A	Method Blank	Total Recoverable	Water	6020B	584712
LCS 240-584712/2-A	Lab Control Sample	Total Recoverable	Water	6020B	584712
240-190433-3 MS	BAC-06-F-A4-20230817-01	Total Recoverable	Water	6020B	584712
240-190433-3 MSD	BAC-06-F-A4-20230817-01	Total Recoverable	Water	6020B	584712

Analysis Batch: 585098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190433-1	BAC-07-F-A4-20230817-01	Total/NA	Water	7470A	584713
240-190433-2	BAC-18-F-A4-20230817-01	Total/NA	Water	7470A	584713
240-190433-3	BAC-06-F-A4-20230817-01	Total/NA	Water	7470A	584713
240-190433-4	BAC-16-F-A4-20230817-01	Total/NA	Water	7470A	584713
240-190433-5	BAC-08-F-A4-20230817-01	Total/NA	Water	7470A	584713
240-190433-6	EB-001-F-4A-20230817-01	Total/NA	Water	7470A	584713
MB 240-584713/1-A	Method Blank	Total/NA	Water	7470A	584713
LCS 240-584713/2-A	Lab Control Sample	Total/NA	Water	7470A	584713
240-190433-3 MS	BAC-06-F-A4-20230817-01	Total/NA	Water	7470A	584713
240-190433-3 MSD	BAC-06-F-A4-20230817-01	Total/NA	Water	7470A	584713

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

General Chemistry

Analysis Batch: 584875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190433-1	BAC-07-F-A4-20230817-01	Total/NA	Water	2320B-1997	
240-190433-2	BAC-18-F-A4-20230817-01	Total/NA	Water	2320B-1997	
240-190433-3	BAC-06-F-A4-20230817-01	Total/NA	Water	2320B-1997	
240-190433-4	BAC-16-F-A4-20230817-01	Total/NA	Water	2320B-1997	
240-190433-5	BAC-08-F-A4-20230817-01	Total/NA	Water	2320B-1997	
240-190433-6	EB-001-F-4A-20230817-01	Total/NA	Water	2320B-1997	
MB 240-584875/55	Method Blank	Total/NA	Water	2320B-1997	
MB 240-584875/82	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-584875/81	Lab Control Sample	Total/NA	Water	2320B-1997	
240-190433-3 DU	BAC-06-F-A4-20230817-01	Total/NA	Water	2320B-1997	

Analysis Batch: 586790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190433-1	BAC-07-F-A4-20230817-01	Total/NA	Water	300.0-1993 R2.1	
240-190433-2	BAC-18-F-A4-20230817-01	Total/NA	Water	300.0-1993 R2.1	
240-190433-3	BAC-06-F-A4-20230817-01	Total/NA	Water	300.0-1993 R2.1	
240-190433-4	BAC-16-F-A4-20230817-01	Total/NA	Water	300.0-1993 R2.1	
240-190433-5	BAC-08-F-A4-20230817-01	Total/NA	Water	300.0-1993 R2.1	
240-190433-6	EB-001-F-4A-20230817-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-586790/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-586790/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-190433-3 MS	BAC-06-F-A4-20230817-01	Total/NA	Water	300.0-1993 R2.1	
240-190433-3 MSD	BAC-06-F-A4-20230817-01	Total/NA	Water	300.0-1993 R2.1	

Rad

Prep Batch: 625154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190433-1	BAC-07-F-A4-20230817-01	Total/NA	Water	PrecSep-21	
240-190433-2	BAC-18-F-A4-20230817-01	Total/NA	Water	PrecSep-21	
240-190433-3	BAC-06-F-A4-20230817-01	Total/NA	Water	PrecSep-21	
240-190433-4	BAC-16-F-A4-20230817-01	Total/NA	Water	PrecSep-21	
240-190433-5	BAC-08-F-A4-20230817-01	Total/NA	Water	PrecSep-21	
240-190433-6	EB-001-F-4A-20230817-01	Total/NA	Water	PrecSep-21	
MB 160-625154/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-625154/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
240-190433-3 MS	BAC-06-F-A4-20230817-01	Total/NA	Water	PrecSep-21	
240-190433-3 MSD	BAC-06-F-A4-20230817-01	Total/NA	Water	PrecSep-21	

Prep Batch: 625155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190433-1	BAC-07-F-A4-20230817-01	Total/NA	Water	PrecSep_0	
240-190433-2	BAC-18-F-A4-20230817-01	Total/NA	Water	PrecSep_0	
240-190433-3	BAC-06-F-A4-20230817-01	Total/NA	Water	PrecSep_0	
240-190433-4	BAC-16-F-A4-20230817-01	Total/NA	Water	PrecSep_0	
240-190433-5	BAC-08-F-A4-20230817-01	Total/NA	Water	PrecSep_0	
240-190433-6	EB-001-F-4A-20230817-01	Total/NA	Water	PrecSep_0	
MB 160-625155/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-625155/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
240-190433-3 MS	BAC-06-F-A4-20230817-01	Total/NA	Water	PrecSep_0	
240-190433-3 MSD	BAC-06-F-A4-20230817-01	Total/NA	Water	PrecSep_0	

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-07-F-A4-20230817-01

Lab Sample ID: 240-190433-1

Date Collected: 08/17/23 10:42

Matrix: Water

Date Received: 08/19/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584712	BN	EET CLE	08/22/23 14:00
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 17:01
Total/NA	Prep	7470A			584713	BN	EET CLE	08/22/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 17:03
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/23/23 01:38
Total/NA	Analysis	300.0-1993 R2.1		1	586790	JWW	EET CLE	09/12/23 01:38
Total/NA	Prep	PrecSep-21			625154	KAC	EET SL	08/23/23 10:08
Total/NA	Analysis	9315		1	628634	SCB	EET SL	09/18/23 09:58
Total/NA	Prep	PrecSep_0			625155	KAC	EET SL	08/23/23 10:12
Total/NA	Analysis	9320		1	628146	SCB	EET SL	09/14/23 11:47
Total/NA	Analysis	Ra226_Ra228		1	629191	EMH	EET SL	09/21/23 17:54

Client Sample ID: BAC-18-F-A4-20230817-01

Lab Sample ID: 240-190433-2

Date Collected: 08/17/23 11:35

Matrix: Water

Date Received: 08/19/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584712	BN	EET CLE	08/22/23 14:00
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 17:05
Total/NA	Prep	7470A			584713	BN	EET CLE	08/22/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 17:05
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/23/23 01:44
Total/NA	Analysis	300.0-1993 R2.1		1	586790	JWW	EET CLE	09/12/23 02:00
Total/NA	Prep	PrecSep-21			625154	KAC	EET SL	08/23/23 14:00
Total/NA	Analysis	9315		1	628634	SCB	EET SL	09/18/23 09:59
Total/NA	Prep	PrecSep_0			625155	KAC	EET SL	08/23/23 14:05
Total/NA	Analysis	9320		1	628146	SCB	EET SL	09/14/23 11:47
Total/NA	Analysis	Ra226_Ra228		1	629191	EMH	EET SL	09/21/23 17:54

Client Sample ID: BAC-06-F-A4-20230817-01

Lab Sample ID: 240-190433-3

Date Collected: 08/17/23 12:51

Matrix: Water

Date Received: 08/19/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584712	BN	EET CLE	08/22/23 14:00
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 15:10
Total/NA	Prep	7470A			584713	BN	EET CLE	08/22/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 16:30
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/23/23 01:48
Total/NA	Analysis	300.0-1993 R2.1		1	586790	JWW	EET CLE	09/12/23 02:22
Total/NA	Prep	PrecSep-21			625154	KAC	EET SL	08/23/23 14:00
Total/NA	Analysis	9315		1	628634	SCB	EET SL	09/18/23 09:59
Total/NA	Prep	PrecSep_0			625155	KAC	EET SL	08/23/23 14:05
Total/NA	Analysis	9320		1	628146	SCB	EET SL	09/14/23 11:47

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: BAC-06-F-A4-20230817-01

Lab Sample ID: 240-190433-3

Date Collected: 08/17/23 12:51

Matrix: Water

Date Received: 08/19/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228		1	629191	EMH	EET SL	09/21/23 17:54

Client Sample ID: BAC-16-F-A4-20230817-01

Lab Sample ID: 240-190433-4

Date Collected: 08/17/23 14:04

Matrix: Water

Date Received: 08/19/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584712	BN	EET CLE	08/22/23 14:00
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 17:10
Total/NA	Prep	7470A			584713	BN	EET CLE	08/22/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 17:07
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/23/23 01:58
Total/NA	Analysis	300.0-1993 R2.1		1	586790	JWW	EET CLE	09/12/23 04:10
Total/NA	Prep	PrecSep-21			625154	KAC	EET SL	08/23/23 14:00
Total/NA	Analysis	9315		1	628634	SCB	EET SL	09/18/23 09:59
Total/NA	Prep	PrecSep_0			625155	KAC	EET SL	08/23/23 14:05
Total/NA	Analysis	9320		1	628146	SCB	EET SL	09/14/23 11:50
Total/NA	Analysis	Ra226_Ra228		1	629191	EMH	EET SL	09/21/23 17:54

Client Sample ID: BAC-08-F-A4-20230817-01

Lab Sample ID: 240-190433-5

Date Collected: 08/17/23 15:02

Matrix: Water

Date Received: 08/19/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584712	BN	EET CLE	08/22/23 14:00
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 17:14
Total/NA	Prep	7470A			584713	BN	EET CLE	08/22/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 17:09
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/23/23 02:02
Total/NA	Analysis	300.0-1993 R2.1		1	586790	JWW	EET CLE	09/12/23 04:32
Total/NA	Prep	PrecSep-21			625154	KAC	EET SL	08/23/23 14:00
Total/NA	Analysis	9315		1	628634	SCB	EET SL	09/18/23 09:59
Total/NA	Prep	PrecSep_0			625155	KAC	EET SL	08/23/23 14:05
Total/NA	Analysis	9320		1	628146	SCB	EET SL	09/14/23 11:50
Total/NA	Analysis	Ra226_Ra228		1	629191	EMH	EET SL	09/21/23 17:54

Client Sample ID: EB-001-F-4A-20230817-01

Lab Sample ID: 240-190433-6

Date Collected: 08/17/23 15:15

Matrix: Water

Date Received: 08/19/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584712	BN	EET CLE	08/22/23 14:00
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 17:19
Total/NA	Prep	7470A			584713	BN	EET CLE	08/22/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 17:16

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

Client Sample ID: EB-001-F-4A-20230817-01

Lab Sample ID: 240-190433-6

Date Collected: 08/17/23 15:15

Matrix: Water

Date Received: 08/19/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2320B-1997		1	584875	JMR	EET CLE	08/23/23 02:06
Total/NA	Analysis	300.0-1993 R2.1		1	586790	JWW	EET CLE	09/12/23 04:54
Total/NA	Prep	PrecSep-21			625154	KAC	EET SL	08/23/23 14:00
Total/NA	Analysis	9315		1	628634	SCB	EET SL	09/18/23 09:59
Total/NA	Prep	PrecSep_0			625155	KAC	EET SL	08/23/23 14:05
Total/NA	Analysis	9320		1	628146	SCB	EET SL	09/14/23 11:50
Total/NA	Analysis	Ra226_Ra228		1	629191	EMH	EET SL	09/21/23 17:54

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
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

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
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-24
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-24
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-24
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-24
Massachusetts	State	M-MO054	06-30-24
MI - RadChem Recognition	State	9005	06-30-24
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-24
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-190433-1

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	07-31-24
North Dakota	State	R-207	06-30-24
Oregon	NELAP	4157	09-01-24
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23 *
Texas	NELAP	T104704193	07-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO000542021-14	07-31-24
Virginia	NELAP	10310	06-15-25
West Virginia DEP	State	381	10-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Due Date Requested:	Analysis Requested
TAT Requested (days):	
Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No	
PO #: 2935505	
WO #:	
Project #: 24019633	
SSOW#:	

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Soil, Sludge, Other)	Preservation Code:	Field Filtered Sample (Yes or No)	Form MSMSD (Yes or No)	6020, 7470A	300_0_28D - Fluoride	2320B - Alkalinity	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPc	Total Number of Containers	Special Instructions/Note:
BAC-07-F-A4-20230817-01	8-17-23	1042	G	Water									
BAC-18-F-A4-20230817-01	8-17-23	1135	G	Water									
BAC-06-F-A4-20230817-01	8-17-23	1251	G	Water									
BAC-06-F-A4-20230817-MS	8-17-23	1251	G	Water									
BAC-06-F-A4-20230817-MSD	8-17-23	1404	G	Water									
BAC-16-F-A4-20230817-01	8-17-23	1502	G	Water									
BAC-08-F-A4-20230817-01	8-17-23	1515	G	Water									
EB-001-F-A4-20230817-01													

Barcode: 240-190433 Chain of Custody

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological
 Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by: _____ Date: _____
Relinquished by: *Bobby Caste* Date: *8-18-23* Time: *0850*
Relinquished by: *Asney Deal* Date: *8-18-23* Time: *1700*
Relinquished by: _____ Date: _____ Time: _____

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
Special Instructions/QC Requirements:

Method of Shipment: _____
 Received by: *Asney Deal* Date/Time: *8-18-23 11:10* Company: *ETA*
 Received by: *Jamy Page* Date/Time: *8-19-23 800* Company: *ETA*
 Received by: _____ Date/Time: _____ Company: _____
 Cooler Temperature(s) °C and Other Remarks:

Custody Seals Intact: Yes No
 Custody Seal No.:

Barberton Facility

Client Lightstone

Site Name _____

Cooler unpacked by:

Cooler Received on 8-19-23

Opened on 8-19-23

Vany Rye

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 # 22 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity each 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# HC312502

14. Were VOAs on the COC? Yes No

15. Were air bubbles >6 mm in any VOA vials? Yes No NA Larger than this.

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: _____

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-07-F-A4-20230817-01	240-190433-C-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-A4-20230817-01	240-190433-D-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-07-F-A4-20230817-01	240-190433-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-18-F-A4-20230817-01	240-190433-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-18-F-A4-20230817-01	240-190433-D-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-18-F-A4-20230817-01	240-190433-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-A4-20230817-01	240-190433-G-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-A4-20230817-01	240-190433-H-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-A4-20230817-01	240-190433-I-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-A4-20230817-01	240-190433-J-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-A4-20230817-01	240-190433-K-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-A4-20230817-01	240-190433-L-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-A4-20230817-01	240-190433-M-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-A4-20230817-01	240-190433-N-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-06-F-A4-20230817-01	240-190433-O-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-16-F-A4-20230817-01	240-190433-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-16-F-A4-20230817-01	240-190433-D-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-16-F-A4-20230817-01	240-190433-E-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-08-F-A4-20230817-01	240-190433-C-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-08-F-A4-20230817-01	240-190433-D-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-08-F-A4-20230817-01	240-190433-E-5	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-4A-20230817-01	240-190433-C-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-4A-20230817-01	240-190433-D-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-4A-20230817-01	240-190433-E-6	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-190433-1

Login Number: 190433

List Number: 2

Creator: Worthington, Sierra M

List Source: Eurofins St. Louis

List Creation: 08/23/23 07:34 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?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 9/9/2023 10:38:32 AM

JOB DESCRIPTION

Federal CCR Wells - App III

JOB NUMBER

240-190488-1

Eurofins Cleveland

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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9/9/2023 10:38:32 AM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

Job ID: 240-190488-1

Laboratory: Eurofins Cleveland

Narrative

**Job Narrative
240-190488-1**

Receipt

The samples were received on 8/22/2023 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 1.1°C and 1.5°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 - App III

Job ID: 240-190488-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
SM 2540C	Solids, Total Dissolved (TDS)	SM	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
Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-190488-1	BAC-14-F-A3-20230818-01	Water	08/18/23 09:59	08/22/23 08:00
240-190488-2	BAC-12-F-A3-20230818-01	Water	08/18/23 10:56	08/22/23 08:00
240-190488-3	DUP-002-BAC-12-F-A3-20230818-01	Water	08/18/23 10:56	08/22/23 08:00
240-190488-4	EB-001-F-A3-20230818-01	Water	08/18/23 11:15	08/22/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

Client Sample ID: BAC-14-F-A3-20230818-01

Lab Sample ID: 240-190488-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2800		100	57	ug/L	1		6010D	Total Recoverable
Calcium	75000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	22000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	81		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	81		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	32		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.060		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	250		10	3.5	mg/L	10		300.0	Total/NA
Total Dissolved Solids	460		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-12-F-A3-20230818-01

Lab Sample ID: 240-190488-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1900		100	57	ug/L	1		6010D	Total Recoverable
Calcium	80000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	3100		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	32000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	85		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	85		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	68		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.065		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	240		10	3.5	mg/L	10		300.0	Total/NA
Total Dissolved Solids	510		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-002-BAC-12-F-A3-20230818-01

Lab Sample ID: 240-190488-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1900		100	57	ug/L	1		6010D	Total Recoverable
Calcium	79000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	3100		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	31000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	84		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	84		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	68		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.065		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	230		10	3.5	mg/L	10		300.0	Total/NA
Total Dissolved Solids	510		10	7.8	mg/L	1		SM 2540C	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 - App III

Job ID: 240-190488-1

Client Sample ID: EB-001-F-A3-20230818-01

Lab Sample ID: 240-190488-4

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

Client Sample ID: BAC-14-F-A3-20230818-01

Lab Sample ID: 240-190488-1

Date Collected: 08/18/23 09:59

Matrix: Water

Date Received: 08/22/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2800		100	57	ug/L		08/23/23 17:30	08/25/23 05:15	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	75000		1000	250	ug/L		08/23/23 17:30	08/24/23 12:49	1
Magnesium	20000		1000	61	ug/L		08/23/23 17:30	08/24/23 12:49	1
Potassium	1600		1000	220	ug/L		08/23/23 17:30	08/24/23 12:49	1
Sodium	22000		1000	330	ug/L		08/23/23 17:30	08/24/23 12:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	81		5.0	2.6	mg/L			08/23/23 18:29	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	81		5.0	2.6	mg/L			08/23/23 18:29	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 18:29	1
Chloride (EPA 300.0)	32		1.0	0.13	mg/L			09/05/23 18:59	1
Fluoride (EPA 300.0)	0.060		0.050	0.024	mg/L			09/05/23 18:59	1
Sulfate (EPA 300.0)	250		10	3.5	mg/L			09/07/23 12:31	10
Total Dissolved Solids (SM 2540C)	460		10	7.8	mg/L			08/23/23 08:49	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

Client Sample ID: BAC-12-F-A3-20230818-01

Lab Sample ID: 240-190488-2

Date Collected: 08/18/23 10:56

Matrix: Water

Date Received: 08/22/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1900		100	57	ug/L		08/23/23 17:30	08/25/23 05:36	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	80000		1000	250	ug/L		08/23/23 17:30	08/25/23 21:30	1
Magnesium	20000		1000	61	ug/L		08/23/23 17:30	08/25/23 21:30	1
Potassium	3100		1000	220	ug/L		08/23/23 17:30	08/25/23 21:30	1
Sodium	32000		1000	330	ug/L		08/23/23 17:30	08/25/23 21:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	85		5.0	2.6	mg/L			08/23/23 18:33	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	85		5.0	2.6	mg/L			08/23/23 18:33	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 18:33	1
Chloride (EPA 300.0)	68		1.0	0.13	mg/L			09/05/23 19:20	1
Fluoride (EPA 300.0)	0.065		0.050	0.024	mg/L			09/05/23 19:20	1
Sulfate (EPA 300.0)	240		10	3.5	mg/L			09/07/23 12:53	10
Total Dissolved Solids (SM 2540C)	510		10	7.8	mg/L			08/23/23 08:49	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

Client Sample ID: DUP-002-BAC-12-F-A3-20230818-01

Lab Sample ID: 240-190488-3

Date Collected: 08/18/23 10:56

Matrix: Water

Date Received: 08/22/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1900		100	57	ug/L		08/23/23 17:30	08/25/23 05:41	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	79000		1000	250	ug/L		08/23/23 17:30	08/25/23 21:33	1
Magnesium	20000		1000	61	ug/L		08/23/23 17:30	08/25/23 21:33	1
Potassium	3100		1000	220	ug/L		08/23/23 17:30	08/25/23 21:33	1
Sodium	31000		1000	330	ug/L		08/23/23 17:30	08/25/23 21:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	84		5.0	2.6	mg/L			08/25/23 18:27	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	84		5.0	2.6	mg/L			08/25/23 18:27	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/25/23 18:27	1
Chloride (EPA 300.0)	68		1.0	0.13	mg/L			09/05/23 19:42	1
Fluoride (EPA 300.0)	0.065		0.050	0.024	mg/L			09/05/23 19:42	1
Sulfate (EPA 300.0)	230		10	3.5	mg/L			09/07/23 13:14	10
Total Dissolved Solids (SM 2540C)	510		10	7.8	mg/L			08/23/23 08:49	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

Client Sample ID: EB-001-F-A3-20230818-01

Lab Sample ID: 240-190488-4

Date Collected: 08/18/23 11:15

Matrix: Water

Date Received: 08/22/23 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		08/23/23 17:30	08/25/23 05:45	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		08/23/23 17:30	08/25/23 21:35	1
Magnesium	ND		1000	61	ug/L		08/23/23 17:30	08/25/23 21:35	1
Potassium	ND		1000	220	ug/L		08/23/23 17:30	08/25/23 21:35	1
Sodium	ND		1000	330	ug/L		08/23/23 17:30	08/25/23 21:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/25/23 18:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/25/23 18:31	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/25/23 18:31	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			09/05/23 20:04	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			09/05/23 20:04	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			09/05/23 20:04	1
Total Dissolved Solids (SM 2540C)	ND		10	7.8	mg/L			08/23/23 08:49	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-584878/1-A
 Matrix: Water
 Analysis Batch: 585041

Client Sample ID: Method Blank
 Prep Type: Total Recoverable
 Prep Batch: 584878

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		08/23/23 17:30	08/25/23 04:58	1

Lab Sample ID: LCS 240-584878/2-A
 Matrix: Water
 Analysis Batch: 585041

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 584878

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1110		ug/L		111	80 - 120

Lab Sample ID: 240-190488-1 MS
 Matrix: Water
 Analysis Batch: 585041

Client Sample ID: BAC-14-F-A3-20230818-01
 Prep Type: Total Recoverable
 Prep Batch: 584878

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	2800		1000	3860		ug/L		108	75 - 125

Lab Sample ID: 240-190488-1 MSD
 Matrix: Water
 Analysis Batch: 585041

Client Sample ID: BAC-14-F-A3-20230818-01
 Prep Type: Total Recoverable
 Prep Batch: 584878

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	2800		1000	3830		ug/L		105	75 - 125	1	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-584878/1-A
 Matrix: Water
 Analysis Batch: 585084

Client Sample ID: Method Blank
 Prep Type: Total Recoverable
 Prep Batch: 584878

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		08/23/23 17:30	08/24/23 12:22	1
Magnesium	ND		1000	61	ug/L		08/23/23 17:30	08/24/23 12:22	1
Potassium	ND		1000	220	ug/L		08/23/23 17:30	08/24/23 12:22	1
Sodium	ND		1000	330	ug/L		08/23/23 17:30	08/24/23 12:22	1

Lab Sample ID: LCS 240-584878/3-A
 Matrix: Water
 Analysis Batch: 585084

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 584878

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	23800		ug/L		95	80 - 120
Magnesium	25000	24300		ug/L		97	80 - 120
Potassium	25000	24400		ug/L		98	80 - 120
Sodium	25000	24600		ug/L		98	80 - 120

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

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

Lab Sample ID: 240-190488-1 MS
Matrix: Water
Analysis Batch: 585084

Client Sample ID: BAC-14-F-A3-20230818-01
Prep Type: Total Recoverable
Prep Batch: 584878

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier				Limits	
Calcium	75000		25000	101000		ug/L		105	80 - 120	
Magnesium	20000		25000	45400		ug/L		100	80 - 120	
Potassium	1600		25000	26300		ug/L		99	80 - 120	
Sodium	22000		25000	47600		ug/L		102	80 - 120	

Lab Sample ID: 240-190488-1 MSD
Matrix: Water
Analysis Batch: 585084

Client Sample ID: BAC-14-F-A3-20230818-01
Prep Type: Total Recoverable
Prep Batch: 584878

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec		RPD
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit
Calcium	75000		25000	97200		ug/L		89	80 - 120		4
Magnesium	20000		25000	43200		ug/L		91	80 - 120		5
Potassium	1600		25000	25000		ug/L		93	80 - 120		5
Sodium	22000		25000	45600		ug/L		94	80 - 120		4

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-585070/30
Matrix: Water
Analysis Batch: 585070

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			08/23/23 17:31	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 17:31	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 17:31	1

Lab Sample ID: MB 240-585070/4
Matrix: Water
Analysis Batch: 585070

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			08/23/23 15:31	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 15:31	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 15:31	1

Lab Sample ID: LCS 240-585070/29
Matrix: Water
Analysis Batch: 585070

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec	
		Result	Qualifier				Limits	
Total Alkalinity	80.6	79.1		mg/L		98	86 - 123	

Lab Sample ID: 240-190488-1 DU
Matrix: Water
Analysis Batch: 585070

Client Sample ID: BAC-14-F-A3-20230818-01
Prep Type: Total/NA

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Total Alkalinity	81		81.0		mg/L		0.6	20
Bicarbonate Alkalinity as CaCO3	81		81.0		mg/L		0.6	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-585670/30
Matrix: Water
Analysis Batch: 585670

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			08/25/23 16:42	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/25/23 16:42	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/25/23 16:42	1

Lab Sample ID: MB 240-585670/4
Matrix: Water
Analysis Batch: 585670

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			08/25/23 14:47	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/25/23 14:47	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/25/23 14:47	1

Lab Sample ID: LCS 240-585670/29
Matrix: Water
Analysis Batch: 585670

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	79.1		mg/L		98	86 - 123

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-586171/3
Matrix: Water
Analysis Batch: 586171

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			09/05/23 17:10	1
Fluoride	ND		0.050	0.024	mg/L			09/05/23 17:10	1
Sulfate	ND		1.0	0.35	mg/L			09/05/23 17:10	1

Lab Sample ID: LCS 240-586171/4
Matrix: Water
Analysis Batch: 586171

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	50.1		mg/L		100	90 - 110
Fluoride	2.50	2.65		mg/L		106	90 - 110
Sulfate	50.0	51.8		mg/L		104	90 - 110

Lab Sample ID: MB 240-586383/3
Matrix: Water
Analysis Batch: 586383

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			09/07/23 10:43	1
Fluoride	ND		0.050	0.024	mg/L			09/07/23 10:43	1
Sulfate	ND		1.0	0.35	mg/L			09/07/23 10:43	1

Eurofins Cleveland

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 240-586383/4
 Matrix: Water
 Analysis Batch: 586383

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	49.8		mg/L		100	90 - 110	
Fluoride	2.50	2.65		mg/L		106	90 - 110	
Sulfate	50.0	51.5		mg/L		103	90 - 110	

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

Lab Sample ID: MB 240-584857/1
 Matrix: Water
 Analysis Batch: 584857

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Dissolved Solids	ND		10	7.8	mg/L			08/23/23 08:49	1

Lab Sample ID: LCS 240-584857/2
 Matrix: Water
 Analysis Batch: 584857

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	242	232		mg/L		96	80 - 120	

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

Metals

Prep Batch: 584878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190488-1	BAC-14-F-A3-20230818-01	Total Recoverable	Water	3005A	
240-190488-2	BAC-12-F-A3-20230818-01	Total Recoverable	Water	3005A	
240-190488-3	DUP-002-BAC-12-F-A3-20230818-01	Total Recoverable	Water	3005A	
240-190488-4	EB-001-F-A3-20230818-01	Total Recoverable	Water	3005A	
MB 240-584878/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-584878/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-584878/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-190488-1 MS	BAC-14-F-A3-20230818-01	Total Recoverable	Water	3005A	
240-190488-1 MS	BAC-14-F-A3-20230818-01	Total Recoverable	Water	3005A	
240-190488-1 MSD	BAC-14-F-A3-20230818-01	Total Recoverable	Water	3005A	
240-190488-1 MSD	BAC-14-F-A3-20230818-01	Total Recoverable	Water	3005A	

Analysis Batch: 585041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190488-1	BAC-14-F-A3-20230818-01	Total Recoverable	Water	6010D	584878
240-190488-2	BAC-12-F-A3-20230818-01	Total Recoverable	Water	6010D	584878
240-190488-3	DUP-002-BAC-12-F-A3-20230818-01	Total Recoverable	Water	6010D	584878
240-190488-4	EB-001-F-A3-20230818-01	Total Recoverable	Water	6010D	584878
MB 240-584878/1-A	Method Blank	Total Recoverable	Water	6010D	584878
LCS 240-584878/2-A	Lab Control Sample	Total Recoverable	Water	6010D	584878
240-190488-1 MS	BAC-14-F-A3-20230818-01	Total Recoverable	Water	6010D	584878
240-190488-1 MSD	BAC-14-F-A3-20230818-01	Total Recoverable	Water	6010D	584878

Analysis Batch: 585084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190488-1	BAC-14-F-A3-20230818-01	Total Recoverable	Water	6020B	584878
MB 240-584878/1-A	Method Blank	Total Recoverable	Water	6020B	584878
LCS 240-584878/3-A	Lab Control Sample	Total Recoverable	Water	6020B	584878
240-190488-1 MS	BAC-14-F-A3-20230818-01	Total Recoverable	Water	6020B	584878
240-190488-1 MSD	BAC-14-F-A3-20230818-01	Total Recoverable	Water	6020B	584878

Analysis Batch: 585284

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190488-2	BAC-12-F-A3-20230818-01	Total Recoverable	Water	6020B	584878
240-190488-3	DUP-002-BAC-12-F-A3-20230818-01	Total Recoverable	Water	6020B	584878
240-190488-4	EB-001-F-A3-20230818-01	Total Recoverable	Water	6020B	584878

General Chemistry

Analysis Batch: 584857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190488-1	BAC-14-F-A3-20230818-01	Total/NA	Water	SM 2540C	
240-190488-2	BAC-12-F-A3-20230818-01	Total/NA	Water	SM 2540C	
240-190488-3	DUP-002-BAC-12-F-A3-20230818-01	Total/NA	Water	SM 2540C	
240-190488-4	EB-001-F-A3-20230818-01	Total/NA	Water	SM 2540C	
MB 240-584857/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-584857/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 585070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190488-1	BAC-14-F-A3-20230818-01	Total/NA	Water	2320B-1997	

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

General Chemistry (Continued)

Analysis Batch: 585070 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190488-2	BAC-12-F-A3-20230818-01	Total/NA	Water	2320B-1997	
MB 240-585070/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-585070/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-585070/29	Lab Control Sample	Total/NA	Water	2320B-1997	
240-190488-1 DU	BAC-14-F-A3-20230818-01	Total/NA	Water	2320B-1997	

Analysis Batch: 585670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190488-3	DUP-002-BAC-12-F-A3-20230818-01	Total/NA	Water	2320B-1997	
240-190488-4	EB-001-F-A3-20230818-01	Total/NA	Water	2320B-1997	
MB 240-585670/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-585670/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-585670/29	Lab Control Sample	Total/NA	Water	2320B-1997	

Analysis Batch: 586171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190488-1	BAC-14-F-A3-20230818-01	Total/NA	Water	300.0	
240-190488-2	BAC-12-F-A3-20230818-01	Total/NA	Water	300.0	
240-190488-3	DUP-002-BAC-12-F-A3-20230818-01	Total/NA	Water	300.0	
240-190488-4	EB-001-F-A3-20230818-01	Total/NA	Water	300.0	
MB 240-586171/3	Method Blank	Total/NA	Water	300.0	
LCS 240-586171/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 586383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190488-1	BAC-14-F-A3-20230818-01	Total/NA	Water	300.0	
240-190488-2	BAC-12-F-A3-20230818-01	Total/NA	Water	300.0	
240-190488-3	DUP-002-BAC-12-F-A3-20230818-01	Total/NA	Water	300.0	
MB 240-586383/3	Method Blank	Total/NA	Water	300.0	
LCS 240-586383/4	Lab Control Sample	Total/NA	Water	300.0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

Client Sample ID: BAC-14-F-A3-20230818-01

Lab Sample ID: 240-190488-1

Date Collected: 08/18/23 09:59

Matrix: Water

Date Received: 08/22/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584878	GK	EET CLE	08/23/23 17:30
Total Recoverable	Analysis	6010D		1	585041	AJC	EET CLE	08/25/23 05:15
Total Recoverable	Prep	3005A			584878	GK	EET CLE	08/23/23 17:30
Total Recoverable	Analysis	6020B		1	585084	RKT	EET CLE	08/24/23 12:49
Total/NA	Analysis	2320B-1997		1	585070	JMR	EET CLE	08/23/23 18:29
Total/NA	Analysis	300.0		1	586171	JMR	EET CLE	09/05/23 18:59
Total/NA	Analysis	300.0		10	586383	JMR	EET CLE	09/07/23 12:31
Total/NA	Analysis	SM 2540C		1	584857	MS	EET CLE	08/23/23 08:49

Client Sample ID: BAC-12-F-A3-20230818-01

Lab Sample ID: 240-190488-2

Date Collected: 08/18/23 10:56

Matrix: Water

Date Received: 08/22/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584878	GK	EET CLE	08/23/23 17:30
Total Recoverable	Analysis	6010D		1	585041	AJC	EET CLE	08/25/23 05:36
Total Recoverable	Prep	3005A			584878	GK	EET CLE	08/23/23 17:30
Total Recoverable	Analysis	6020B		1	585284	AJC	EET CLE	08/25/23 21:30
Total/NA	Analysis	2320B-1997		1	585070	JMR	EET CLE	08/23/23 18:33
Total/NA	Analysis	300.0		1	586171	JMR	EET CLE	09/05/23 19:20
Total/NA	Analysis	300.0		10	586383	JMR	EET CLE	09/07/23 12:53
Total/NA	Analysis	SM 2540C		1	584857	MS	EET CLE	08/23/23 08:49

Client Sample ID: DUP-002-BAC-12-F-A3-20230818-01

Lab Sample ID: 240-190488-3

Date Collected: 08/18/23 10:56

Matrix: Water

Date Received: 08/22/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584878	GK	EET CLE	08/23/23 17:30
Total Recoverable	Analysis	6010D		1	585041	AJC	EET CLE	08/25/23 05:41
Total Recoverable	Prep	3005A			584878	GK	EET CLE	08/23/23 17:30
Total Recoverable	Analysis	6020B		1	585284	AJC	EET CLE	08/25/23 21:33
Total/NA	Analysis	2320B-1997		1	585670	JVVV	EET CLE	08/25/23 18:27
Total/NA	Analysis	300.0		1	586171	JMR	EET CLE	09/05/23 19:42
Total/NA	Analysis	300.0		10	586383	JMR	EET CLE	09/07/23 13:14
Total/NA	Analysis	SM 2540C		1	584857	MS	EET CLE	08/23/23 08:49

Client Sample ID: EB-001-F-A3-20230818-01

Lab Sample ID: 240-190488-4

Date Collected: 08/18/23 11:15

Matrix: Water

Date Received: 08/22/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584878	GK	EET CLE	08/23/23 17:30
Total Recoverable	Analysis	6010D		1	585041	AJC	EET CLE	08/25/23 05:45

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

Client Sample ID: EB-001-F-A3-20230818-01

Lab Sample ID: 240-190488-4

Date Collected: 08/18/23 11:15

Matrix: Water

Date Received: 08/22/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584878	GK	EET CLE	08/23/23 17:30
Total Recoverable	Analysis	6020B		1	585284	AJC	EET CLE	08/25/23 21:35
Total/NA	Analysis	2320B-1997		1	585670	JWW	EET CLE	08/25/23 18:31
Total/NA	Analysis	300.0		1	586171	JMR	EET CLE	09/05/23 20:04
Total/NA	Analysis	SM 2540C		1	584857	MS	EET CLE	08/23/23 08:49

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
 Project/Site: Federal CCR Wells - App III

Job ID: 240-190488-1

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
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.



Eurofins - Cleveland Sample Receipt Form/Narrative Login #: 190488
Barberton Facility
 Client Lightstone Site Name _____ Cooler unpacked by: Nancy Rye
 Cooler Received on 8-22-23 Opened on 8-22-23
 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 # 22 (CF 0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity leach 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# HC312502
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: _____

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-14-F-A3-20230818-01	240-190488-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-12-F-A3-20230818-01	240-190488-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-002-BAC-12-F-A3-20230818-01	240-190488-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A3-20230818-01	240-190488-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____

- 1
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- 9
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- 11
- 12
- 13



Client Information		Lab PM	Cisneros, Roxanne		Carrier Tracking No(s)	COC No: 240-93465-34577.1
Client Contact: Taylor Huffman		E-Mail	roxanne.cisneros@Eurofins.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):			Total Number of Containers	
State, Zip: OH, 45620		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No			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 Other:	
Phone: 740-925-3171(Tel)		PO #: 2935505			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)	
Email: taylor.huffman@lightstonegen.com		WO #:			Special Instructions/Note:	
Project Name: Federal CCR Wells - App III		Project #: 24019633				
Site: Garh Plant		SSOW#:				
Sample Identification		Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540B - Calcd. 300.0, 28D	6010B, 6020	
BAC-14-F-A3-20230818-c1	8-18-23 0959	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N	N	
BAC-12-F-A3-20230818-c1	8-18-23 1056	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N	N	
DUP-02-BAC-12-F-A3-20230818-c1	8-18-23 1056	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N	N	
EB-01-F-A3-20230818-c1	8-18-23 1115	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N	N	
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological <input type="checkbox"/> Deliverable Requested: I, II, III, IV, Other (specify)		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		
Empty Kit Relinquished by:		Date:		Method of Shipment:		
Relinquished by: <i>[Signature]</i>		8/21/23 - 0833		Received by: <i>[Signature]</i>		
Relinquished by: <i>[Signature]</i>		8/21/23 1700		Received by: <i>[Signature]</i>		
Relinquished by: <i>[Signature]</i>				Received by: <i>[Signature]</i>		
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		



190488

Barberton Facility

Client Lightstone

Site Name _____

Cooler unpacked by: _____

Cooler Received on 8-22-23

Opened on 8-22-23

Nancy Rye

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 # 22 (CF 0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity leach 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# HC312502

14. Were VOAs on the COC? Yes No

15. Were air bubbles >6 mm in any VOA vials? Yes No NA  Larger than this.

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: _____

- 1
- 2
- 3
- 4
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- 7
- 8
- 9
- 10
- 11
- 12
- 13

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-14-F-A3-20230818-01	240-190488-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-12-F-A3-20230818-01	240-190488-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-002-BAC-12-F-A3-20230818-01	240-190488-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A3-20230818-01	240-190488-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____



ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7

Cheshire, Ohio 45620

Generated 9/20/2023 3:07:30 PM

JOB DESCRIPTION

Federal CCR Wells - App IV

JOB NUMBER

240-190489-1

Eurofins Cleveland

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
9/20/2023 3:07:30 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

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.

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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Job ID: 240-190489-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-190489-1

Receipt

The samples were received on 8/22/2023 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 1.1° C and 1.5° C.

RAD

Methods 9315: Radium-226 batch 625310: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-14-F-A4-20230818-01 (240-190489-1), BAC-12-F-A4-20230818-01 (240-190489-2), DUP-002-BAC-12-F-A4-20230818-01 (240-190489-3), EB-001-F-A4-20230818-01 (240-190489-4), (LCS 160-625310/2-A), (MB 160-625310/1-A)

Method 9320: Radium-228 prep batch 160-625311: The following sample(s) did not meet the requested limit (RL) due to the reduced sample volume attributed to the presence of matrix interference. During preparation the analyst visually noted matrix effects. The data have been reported with this narrative. BAC-12-F-A4-20230818-01 (240-190489-2) and DUP-002-BAC-12-F-A4-20230818-01 (240-190489-3)

Methods 9320: Radium-228 prep batch 160-625311: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BAC-14-F-A4-20230818-01 (240-190489-1), BAC-12-F-A4-20230818-01 (240-190489-2), DUP-002-BAC-12-F-A4-20230818-01 (240-190489-3), EB-001-F-A4-20230818-01 (240-190489-4), (LCS 160-625311/2-A), (MB 160-625311/1-A)

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

Metals

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

General Chemistry

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0-1993 R2.1	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 - App IV

Job ID: 240-190489-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-190489-1	BAC-14-F-A4-20230818-01	Water	08/18/23 09:59	08/22/23 08:00
240-190489-2	BAC-12-F-A4-20230818-01	Water	08/18/23 10:56	08/22/23 08:00
240-190489-3	DUP-002-BAC-12-F-A4-20230818-01	Water	08/18/23 10:56	08/22/23 08:00
240-190489-4	EB-001-F-A4-20230818-01	Water	08/18/23 11:15	08/22/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Client Sample ID: BAC-14-F-A4-20230818-01

Lab Sample ID: 240-190489-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.9	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	96		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	1.5	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.78	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	6.3	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	23000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	81		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	81		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.057		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-12-F-A4-20230818-01

Lab Sample ID: 240-190489-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	9.5		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	130		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	3.7	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	10		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	6.2		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	11		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.2	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	3100		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	32000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	83		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	83		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.062		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: DUP-002-BAC-12-F-A4-20230818-01

Lab Sample ID: 240-190489-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	9.4		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	130		5.0	2.2	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 - App IV

Job ID: 240-190489-1

Client Sample ID: DUP-002-BAC-12-F-A4-20230818-01
 (Continued)

Lab Sample ID: 240-190489-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	3.6	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	11		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	6.5		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	11		8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.2	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	3200		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	33000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	84		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	84		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.066		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: EB-001-F-A4-20230818-01

Lab Sample ID: 240-190489-4

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Client Sample ID: BAC-14-F-A4-20230818-01

Lab Sample ID: 240-190489-1

Date Collected: 08/18/23 09:59

Matrix: Water

Date Received: 08/22/23 08:00

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		08/23/23 17:30	08/25/23 21:49	1
Arsenic	3.9	J	5.0	0.75	ug/L		08/23/23 17:30	08/25/23 21:49	1
Barium	96		5.0	2.2	ug/L		08/23/23 17:30	08/25/23 21:49	1
Beryllium	ND		1.0	0.62	ug/L		08/23/23 17:30	08/25/23 21:49	1
Cadmium	ND		1.0	0.20	ug/L		08/23/23 17:30	08/25/23 21:49	1
Chromium	1.5	J	5.0	1.2	ug/L		08/23/23 17:30	08/25/23 21:49	1
Cobalt	2.1		1.0	0.19	ug/L		08/23/23 17:30	08/25/23 21:49	1
Lead	0.78	J	1.0	0.45	ug/L		08/23/23 17:30	08/25/23 21:49	1
Lithium	6.3	J	8.0	1.7	ug/L		08/23/23 17:30	08/25/23 21:49	1
Magnesium	21000		1000	61	ug/L		08/23/23 17:30	08/25/23 21:49	1
Molybdenum	ND		5.0	1.1	ug/L		08/23/23 17:30	08/25/23 21:49	1
Potassium	1800		1000	220	ug/L		08/23/23 17:30	08/25/23 21:49	1
Selenium	ND		5.0	0.89	ug/L		08/23/23 17:30	08/25/23 21:49	1
Sodium	23000		1000	330	ug/L		08/23/23 17:30	08/25/23 21:49	1
Thallium	ND		1.0	0.20	ug/L		08/23/23 17:30	08/25/23 21:49	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		08/23/23 14:00	08/24/23 13:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	81		5.0	2.6	mg/L			08/25/23 17:37	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	81		5.0	2.6	mg/L			08/25/23 17:37	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/25/23 17:37	1
Fluoride (EPA 300.0-1993 R2.1)	0.057		0.050	0.024	mg/L			09/12/23 05:15	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	0.332		0.176	0.179	1.00	0.218	pCi/L	08/24/23 09:39	09/15/23 07:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.5		30 - 110					08/24/23 09:39	09/15/23 07:35	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	0.685	U	0.512	0.516	1.00	0.775	pCi/L	08/24/23 09:42	09/11/23 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.5		30 - 110					08/24/23 09:42	09/11/23 12:08	1
Y Carrier	83.7		30 - 110					08/24/23 09:42	09/11/23 12:08	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Client Sample ID: BAC-14-F-A4-20230818-01

Lab Sample ID: 240-190489-1

Date Collected: 08/18/23 09:59

Matrix: Water

Date Received: 08/22/23 08:00

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		0.541	0.546	5.00	0.775	pCi/L		09/20/23 14:56	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Client Sample ID: BAC-12-F-A4-20230818-01

Lab Sample ID: 240-190489-2

Date Collected: 08/18/23 10:56

Matrix: Water

Date Received: 08/22/23 08:00

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		08/23/23 17:30	08/25/23 21:57	1
Arsenic	9.5		5.0	0.75	ug/L		08/23/23 17:30	08/25/23 21:57	1
Barium	130		5.0	2.2	ug/L		08/23/23 17:30	08/25/23 21:57	1
Beryllium	ND		1.0	0.62	ug/L		08/23/23 17:30	08/25/23 21:57	1
Cadmium	ND		1.0	0.20	ug/L		08/23/23 17:30	08/25/23 21:57	1
Chromium	3.7 J		5.0	1.2	ug/L		08/23/23 17:30	08/25/23 21:57	1
Cobalt	10		1.0	0.19	ug/L		08/23/23 17:30	08/25/23 21:57	1
Lead	6.2		1.0	0.45	ug/L		08/23/23 17:30	08/25/23 21:57	1
Lithium	11		8.0	1.7	ug/L		08/23/23 17:30	08/25/23 21:57	1
Magnesium	20000		1000	61	ug/L		08/23/23 17:30	08/25/23 21:57	1
Molybdenum	1.2 J		5.0	1.1	ug/L		08/23/23 17:30	08/25/23 21:57	1
Potassium	3100		1000	220	ug/L		08/23/23 17:30	08/25/23 21:57	1
Selenium	ND		5.0	0.89	ug/L		08/23/23 17:30	08/25/23 21:57	1
Sodium	32000		1000	330	ug/L		08/23/23 17:30	08/25/23 21:57	1
Thallium	ND		1.0	0.20	ug/L		08/23/23 17:30	08/25/23 21:57	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		08/23/23 14:00	08/24/23 13:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	83		5.0	2.6	mg/L			08/25/23 18:23	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	83		5.0	2.6	mg/L			08/25/23 18:23	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/25/23 18:23	1
Fluoride (EPA 300.0-1993 R2.1)	0.062		0.050	0.024	mg/L			09/12/23 05:37	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	0.358		0.221	0.224	1.00	0.282	pCi/L	08/24/23 09:39	09/15/23 07:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.7		30 - 110					08/24/23 09:39	09/15/23 07:35	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	0.858	U G	0.790	0.794	1.00	1.25	pCi/L	08/24/23 09:42	09/11/23 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.7		30 - 110					08/24/23 09:42	09/11/23 12:08	1
Y Carrier	83.0		30 - 110					08/24/23 09:42	09/11/23 12:08	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Client Sample ID: BAC-12-F-A4-20230818-01

Lab Sample ID: 240-190489-2

Date Collected: 08/18/23 10:56

Matrix: Water

Date Received: 08/22/23 08:00

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	1.22	U	0.820	0.825	5.00	1.25	pCi/L		09/20/23 14:56	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Client Sample ID: DUP-002-BAC-12-F-A4-20230818-01

Lab Sample ID: 240-190489-3

Date Collected: 08/18/23 10:56

Matrix: Water

Date Received: 08/22/23 08:00

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		08/23/23 17:30	08/25/23 21:59	1
Arsenic	9.4		5.0	0.75	ug/L		08/23/23 17:30	08/25/23 21:59	1
Barium	130		5.0	2.2	ug/L		08/23/23 17:30	08/25/23 21:59	1
Beryllium	ND		1.0	0.62	ug/L		08/23/23 17:30	08/25/23 21:59	1
Cadmium	ND		1.0	0.20	ug/L		08/23/23 17:30	08/25/23 21:59	1
Chromium	3.6 J		5.0	1.2	ug/L		08/23/23 17:30	08/25/23 21:59	1
Cobalt	11		1.0	0.19	ug/L		08/23/23 17:30	08/25/23 21:59	1
Lead	6.5		1.0	0.45	ug/L		08/23/23 17:30	08/25/23 21:59	1
Lithium	11		8.0	1.7	ug/L		08/23/23 17:30	08/25/23 21:59	1
Magnesium	21000		1000	61	ug/L		08/23/23 17:30	08/25/23 21:59	1
Molybdenum	1.2 J		5.0	1.1	ug/L		08/23/23 17:30	08/25/23 21:59	1
Potassium	3200		1000	220	ug/L		08/23/23 17:30	08/25/23 21:59	1
Selenium	ND		5.0	0.89	ug/L		08/23/23 17:30	08/25/23 21:59	1
Sodium	33000		1000	330	ug/L		08/23/23 17:30	08/25/23 21:59	1
Thallium	ND		1.0	0.20	ug/L		08/23/23 17:30	08/25/23 21:59	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		08/23/23 14:00	08/24/23 13:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	84		5.0	2.6	mg/L			08/23/23 18:16	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	84		5.0	2.6	mg/L			08/23/23 18:16	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 18:16	1
Fluoride (EPA 300.0-1993 R2.1)	0.066		0.050	0.024	mg/L			09/12/23 05:59	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.330		0.220	0.222	1.00	0.279	pCi/L	08/24/23 09:39	09/15/23 07:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	71.4		30 - 110					08/24/23 09:39	09/15/23 07:35	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.0470	U G	0.922	0.922	1.00	1.68	pCi/L	08/24/23 09:42	09/11/23 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	71.4		30 - 110					08/24/23 09:42	09/11/23 12:08	1
Y Carrier	84.5		30 - 110					08/24/23 09:42	09/11/23 12:08	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Client Sample ID: DUP-002-BAC-12-F-A4-20230818-01

Lab Sample ID: 240-190489-3

Date Collected: 08/18/23 10:56

Matrix: Water

Date Received: 08/22/23 08:00

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	0.377	U	0.948	0.948	5.00	1.68	pCi/L		09/20/23 14:56	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Client Sample ID: EB-001-F-A4-20230818-01

Lab Sample ID: 240-190489-4

Date Collected: 08/18/23 11:15

Matrix: Water

Date Received: 08/22/23 08:00

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		08/23/23 17:30	08/25/23 22:02	1
Arsenic	ND		5.0	0.75	ug/L		08/23/23 17:30	08/25/23 22:02	1
Barium	ND		5.0	2.2	ug/L		08/23/23 17:30	08/25/23 22:02	1
Beryllium	ND		1.0	0.62	ug/L		08/23/23 17:30	08/25/23 22:02	1
Cadmium	ND		1.0	0.20	ug/L		08/23/23 17:30	08/25/23 22:02	1
Chromium	ND		5.0	1.2	ug/L		08/23/23 17:30	08/25/23 22:02	1
Cobalt	ND		1.0	0.19	ug/L		08/23/23 17:30	08/25/23 22:02	1
Lead	ND		1.0	0.45	ug/L		08/23/23 17:30	08/25/23 22:02	1
Lithium	ND		8.0	1.7	ug/L		08/23/23 17:30	08/25/23 22:02	1
Magnesium	ND		1000	61	ug/L		08/23/23 17:30	08/25/23 22:02	1
Molybdenum	ND		5.0	1.1	ug/L		08/23/23 17:30	08/25/23 22:02	1
Potassium	ND		1000	220	ug/L		08/23/23 17:30	08/25/23 22:02	1
Selenium	ND		5.0	0.89	ug/L		08/23/23 17:30	08/25/23 22:02	1
Sodium	ND		1000	330	ug/L		08/23/23 17:30	08/25/23 22:02	1
Thallium	ND		1.0	0.20	ug/L		08/23/23 17:30	08/25/23 22:02	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		08/23/23 14:00	08/24/23 13:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 18:20	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 18:20	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			08/23/23 18:20	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			09/12/23 06:20	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	0.0331	U	0.0888	0.0889	1.00	0.164	pCi/L	08/24/23 09:39	09/15/23 07:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.2		30 - 110					08/24/23 09:39	09/15/23 07:39	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	-0.118	U	0.254	0.254	1.00	0.527	pCi/L	08/24/23 09:42	09/11/23 12:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.2		30 - 110					08/24/23 09:42	09/11/23 12:09	1
Y Carrier	85.6		30 - 110					08/24/23 09:42	09/11/23 12:09	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Client Sample ID: EB-001-F-A4-20230818-01

Lab Sample ID: 240-190489-4

Date Collected: 08/18/23 11:15

Matrix: Water

Date Received: 08/22/23 08:00

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	-0.0845	U	0.269	0.269	5.00	0.527	pCi/L		09/20/23 14:56	1

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Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
240-190489-1	BAC-14-F-A4-20230818-01	80.5	
240-190489-2	BAC-12-F-A4-20230818-01	82.7	
240-190489-3	DUP-002-BAC-12-F-A4-20230818-01	71.4	
240-190489-4	EB-001-F-A4-20230818-01	86.2	
LCS 160-625310/2-A	Lab Control Sample	98.5	
MB 160-625310/1-A	Method Blank	91.0	

Tracer/Carrier Legend
Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-190489-1	BAC-14-F-A4-20230818-01	80.5	83.7
240-190489-2	BAC-12-F-A4-20230818-01	82.7	83.0
240-190489-3	DUP-002-BAC-12-F-A4-20230818-01	71.4	84.5
240-190489-4	EB-001-F-A4-20230818-01	86.2	85.6
LCS 160-625311/2-A	Lab Control Sample	98.5	87.9
MB 160-625311/1-A	Method Blank	91.0	83.7

Tracer/Carrier Legend
Ba = Ba Carrier
Y = Y Carrier

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-584878/1-A
Matrix: Water
Analysis Batch: 585084

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 584878

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		08/23/23 17:30	08/24/23 12:22	1
Arsenic	ND		5.0	0.75	ug/L		08/23/23 17:30	08/24/23 12:22	1
Barium	ND		5.0	2.2	ug/L		08/23/23 17:30	08/24/23 12:22	1
Beryllium	ND		1.0	0.62	ug/L		08/23/23 17:30	08/24/23 12:22	1
Cadmium	ND		1.0	0.20	ug/L		08/23/23 17:30	08/24/23 12:22	1
Chromium	ND		5.0	1.2	ug/L		08/23/23 17:30	08/24/23 12:22	1
Cobalt	ND		1.0	0.19	ug/L		08/23/23 17:30	08/24/23 12:22	1
Lead	ND		1.0	0.45	ug/L		08/23/23 17:30	08/24/23 12:22	1
Lithium	ND	^+	8.0	1.7	ug/L		08/23/23 17:30	08/24/23 12:22	1
Magnesium	ND		1000	61	ug/L		08/23/23 17:30	08/24/23 12:22	1
Molybdenum	ND		5.0	1.1	ug/L		08/23/23 17:30	08/24/23 12:22	1
Potassium	ND		1000	220	ug/L		08/23/23 17:30	08/24/23 12:22	1
Selenium	ND		5.0	0.89	ug/L		08/23/23 17:30	08/24/23 12:22	1
Sodium	ND		1000	330	ug/L		08/23/23 17:30	08/24/23 12:22	1
Thallium	ND		1.0	0.20	ug/L		08/23/23 17:30	08/24/23 12:22	1

Lab Sample ID: LCS 240-584878/3-A
Matrix: Water
Analysis Batch: 585084

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 584878

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	102		ug/L		102	80 - 120
Arsenic	1000	979		ug/L		98	80 - 120
Barium	1000	973		ug/L		97	80 - 120
Beryllium	500	449		ug/L		90	80 - 120
Cadmium	500	483		ug/L		97	80 - 120
Chromium	500	485		ug/L		97	80 - 120
Cobalt	500	498		ug/L		100	80 - 120
Lead	500	496		ug/L		99	80 - 120
Lithium	500	487	^+	ug/L		97	80 - 120
Magnesium	25000	24300		ug/L		97	80 - 120
Molybdenum	500	499		ug/L		100	80 - 120
Potassium	25000	24400		ug/L		98	80 - 120
Selenium	1000	960		ug/L		96	80 - 120
Sodium	25000	24600		ug/L		98	80 - 120
Thallium	1000	952		ug/L		95	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-584877/1-A
Matrix: Water
Analysis Batch: 585098

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 584877

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		08/23/23 14:00	08/24/23 13:08	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-584877/2-A
 Matrix: Water
 Analysis Batch: 585098

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 584877

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.23		ug/L		105	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-585070/30
 Matrix: Water
 Analysis Batch: 585070

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			08/23/23 17:31	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 17:31	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 17:31	1

Lab Sample ID: MB 240-585070/4
 Matrix: Water
 Analysis Batch: 585070

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			08/23/23 15:31	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 15:31	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/23/23 15:31	1

Lab Sample ID: LCS 240-585070/29
 Matrix: Water
 Analysis Batch: 585070

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	79.1		mg/L		98	86 - 123

Lab Sample ID: MB 240-585670/30
 Matrix: Water
 Analysis Batch: 585670

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			08/25/23 16:42	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/25/23 16:42	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/25/23 16:42	1

Lab Sample ID: MB 240-585670/4
 Matrix: Water
 Analysis Batch: 585670

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			08/25/23 14:47	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/25/23 14:47	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/25/23 14:47	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Method: 2320B-1997 - Alkalinity, Total (Continued)

Lab Sample ID: LCS 240-585670/29
 Matrix: Water
 Analysis Batch: 585670

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	79.1		mg/L		98	86 - 123

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-586790/3
 Matrix: Water
 Analysis Batch: 586790

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			09/11/23 19:30	1

Lab Sample ID: LCS 240-586790/4
 Matrix: Water
 Analysis Batch: 586790

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.69		mg/L		108	90 - 110

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-625310/1-A
 Matrix: Water
 Analysis Batch: 628311

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 625310

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.04740	U	0.0779	0.0781	1.00	0.136	pCi/L	08/24/23 09:39	09/15/23 07:31	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.0		30 - 110					08/24/23 09:39	09/15/23 07:31	1

Lab Sample ID: LCS 160-625310/2-A
 Matrix: Water
 Analysis Batch: 628632

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 625310

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	11.3	9.802		1.03	1.00	0.111	pCi/L	87	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	98.5		30 - 110						

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-625311/1-A
Matrix: Water
Analysis Batch: 627476

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 625311

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	-0.4778	U	0.229	0.233	1.00	0.582	pCi/L	08/24/23 09:42	09/11/23 12:05	1
Carrier	MB %Yield	MB Qualifier	Limits				Prepared		Analyzed	Dil Fac
Ba Carrier	91.0		30 - 110				08/24/23 09:42		09/11/23 12:05	1
Y Carrier	83.7		30 - 110				08/24/23 09:42		09/11/23 12:05	1

Lab Sample ID: LCS 160-625311/2-A
Matrix: Water
Analysis Batch: 627477

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 625311

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-228	7.88	7.884		1.11	1.00	0.518	pCi/L	100	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	98.5		30 - 110						
Y Carrier	87.9		30 - 110						

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Metals

Prep Batch: 584877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190489-1	BAC-14-F-A4-20230818-01	Total/NA	Water	7470A	
240-190489-2	BAC-12-F-A4-20230818-01	Total/NA	Water	7470A	
240-190489-3	DUP-002-BAC-12-F-A4-20230818-01	Total/NA	Water	7470A	
240-190489-4	EB-001-F-A4-20230818-01	Total/NA	Water	7470A	
MB 240-584877/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-584877/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 584878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190489-1	BAC-14-F-A4-20230818-01	Total Recoverable	Water	3005A	
240-190489-2	BAC-12-F-A4-20230818-01	Total Recoverable	Water	3005A	
240-190489-3	DUP-002-BAC-12-F-A4-20230818-01	Total Recoverable	Water	3005A	
240-190489-4	EB-001-F-A4-20230818-01	Total Recoverable	Water	3005A	
MB 240-584878/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-584878/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 585084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-584878/1-A	Method Blank	Total Recoverable	Water	6020B	584878
LCS 240-584878/3-A	Lab Control Sample	Total Recoverable	Water	6020B	584878

Analysis Batch: 585098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190489-1	BAC-14-F-A4-20230818-01	Total/NA	Water	7470A	584877
240-190489-2	BAC-12-F-A4-20230818-01	Total/NA	Water	7470A	584877
240-190489-3	DUP-002-BAC-12-F-A4-20230818-01	Total/NA	Water	7470A	584877
240-190489-4	EB-001-F-A4-20230818-01	Total/NA	Water	7470A	584877
MB 240-584877/1-A	Method Blank	Total/NA	Water	7470A	584877
LCS 240-584877/2-A	Lab Control Sample	Total/NA	Water	7470A	584877

Analysis Batch: 585284

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190489-1	BAC-14-F-A4-20230818-01	Total Recoverable	Water	6020B	584878
240-190489-2	BAC-12-F-A4-20230818-01	Total Recoverable	Water	6020B	584878
240-190489-3	DUP-002-BAC-12-F-A4-20230818-01	Total Recoverable	Water	6020B	584878
240-190489-4	EB-001-F-A4-20230818-01	Total Recoverable	Water	6020B	584878

General Chemistry

Analysis Batch: 585070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190489-3	DUP-002-BAC-12-F-A4-20230818-01	Total/NA	Water	2320B-1997	
240-190489-4	EB-001-F-A4-20230818-01	Total/NA	Water	2320B-1997	
MB 240-585070/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-585070/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-585070/29	Lab Control Sample	Total/NA	Water	2320B-1997	

Analysis Batch: 585670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190489-1	BAC-14-F-A4-20230818-01	Total/NA	Water	2320B-1997	
240-190489-2	BAC-12-F-A4-20230818-01	Total/NA	Water	2320B-1997	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

General Chemistry (Continued)

Analysis Batch: 585670 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-585670/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-585670/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-585670/29	Lab Control Sample	Total/NA	Water	2320B-1997	

Analysis Batch: 586790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190489-1	BAC-14-F-A4-20230818-01	Total/NA	Water	300.0-1993 R2.1	
240-190489-2	BAC-12-F-A4-20230818-01	Total/NA	Water	300.0-1993 R2.1	
240-190489-3	DUP-002-BAC-12-F-A4-20230818-01	Total/NA	Water	300.0-1993 R2.1	
240-190489-4	EB-001-F-A4-20230818-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-586790/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-586790/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

Rad

Prep Batch: 625310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190489-1	BAC-14-F-A4-20230818-01	Total/NA	Water	PrecSep-21	
240-190489-2	BAC-12-F-A4-20230818-01	Total/NA	Water	PrecSep-21	
240-190489-3	DUP-002-BAC-12-F-A4-20230818-01	Total/NA	Water	PrecSep-21	
240-190489-4	EB-001-F-A4-20230818-01	Total/NA	Water	PrecSep-21	
MB 160-625310/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-625310/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 625311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-190489-1	BAC-14-F-A4-20230818-01	Total/NA	Water	PrecSep_0	
240-190489-2	BAC-12-F-A4-20230818-01	Total/NA	Water	PrecSep_0	
240-190489-3	DUP-002-BAC-12-F-A4-20230818-01	Total/NA	Water	PrecSep_0	
240-190489-4	EB-001-F-A4-20230818-01	Total/NA	Water	PrecSep_0	
MB 160-625311/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-625311/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Client Sample ID: BAC-14-F-A4-20230818-01

Lab Sample ID: 240-190489-1

Date Collected: 08/18/23 09:59

Matrix: Water

Date Received: 08/22/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584878	GK	EET CLE	08/23/23 17:30
Total Recoverable	Analysis	6020B		1	585284	AJC	EET CLE	08/25/23 21:49
Total/NA	Prep	7470A			584877	GK	EET CLE	08/23/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 13:41
Total/NA	Analysis	2320B-1997		1	585670	JWW	EET CLE	08/25/23 17:37
Total/NA	Analysis	300.0-1993 R2.1		1	586790	JWW	EET CLE	09/12/23 05:15
Total/NA	Prep	PrecSep-21			625310	KAC	EET SL	08/24/23 09:39
Total/NA	Analysis	9315		1	628311	SCB	EET SL	09/15/23 07:35
Total/NA	Prep	PrecSep_0			625311	KAC	EET SL	08/24/23 09:42
Total/NA	Analysis	9320		1	627487	SCB	EET SL	09/11/23 12:08
Total/NA	Analysis	Ra226_Ra228		1	629020	SCB	EET SL	09/20/23 14:56

Client Sample ID: BAC-12-F-A4-20230818-01

Lab Sample ID: 240-190489-2

Date Collected: 08/18/23 10:56

Matrix: Water

Date Received: 08/22/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584878	GK	EET CLE	08/23/23 17:30
Total Recoverable	Analysis	6020B		1	585284	AJC	EET CLE	08/25/23 21:57
Total/NA	Prep	7470A			584877	GK	EET CLE	08/23/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 13:44
Total/NA	Analysis	2320B-1997		1	585670	JWW	EET CLE	08/25/23 18:23
Total/NA	Analysis	300.0-1993 R2.1		1	586790	JWW	EET CLE	09/12/23 05:37
Total/NA	Prep	PrecSep-21			625310	KAC	EET SL	08/24/23 09:39
Total/NA	Analysis	9315		1	628311	SCB	EET SL	09/15/23 07:35
Total/NA	Prep	PrecSep_0			625311	KAC	EET SL	08/24/23 09:42
Total/NA	Analysis	9320		1	627487	SCB	EET SL	09/11/23 12:08
Total/NA	Analysis	Ra226_Ra228		1	629020	SCB	EET SL	09/20/23 14:56

Client Sample ID: DUP-002-BAC-12-F-A4-20230818-01

Lab Sample ID: 240-190489-3

Date Collected: 08/18/23 10:56

Matrix: Water

Date Received: 08/22/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584878	GK	EET CLE	08/23/23 17:30
Total Recoverable	Analysis	6020B		1	585284	AJC	EET CLE	08/25/23 21:59
Total/NA	Prep	7470A			584877	GK	EET CLE	08/23/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 13:46
Total/NA	Analysis	2320B-1997		1	585070	JMR	EET CLE	08/23/23 18:16
Total/NA	Analysis	300.0-1993 R2.1		1	586790	JWW	EET CLE	09/12/23 05:59
Total/NA	Prep	PrecSep-21			625310	KAC	EET SL	08/24/23 09:39
Total/NA	Analysis	9315		1	628311	SCB	EET SL	09/15/23 07:35
Total/NA	Prep	PrecSep_0			625311	KAC	EET SL	08/24/23 09:42
Total/NA	Analysis	9320		1	627487	SCB	EET SL	09/11/23 12:08

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

Client Sample ID: DUP-002-BAC-12-F-A4-20230818-01

Lab Sample ID: 240-190489-3

Date Collected: 08/18/23 10:56

Matrix: Water

Date Received: 08/22/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228		1	629020	SCB	EET SL	09/20/23 14:56

Client Sample ID: EB-001-F-A4-20230818-01

Lab Sample ID: 240-190489-4

Date Collected: 08/18/23 11:15

Matrix: Water

Date Received: 08/22/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			584878	GK	EET CLE	08/23/23 17:30
Total Recoverable	Analysis	6020B		1	585284	AJC	EET CLE	08/25/23 22:02
Total/NA	Prep	7470A			584877	GK	EET CLE	08/23/23 14:00
Total/NA	Analysis	7470A		1	585098	DSH	EET CLE	08/24/23 13:48
Total/NA	Analysis	2320B-1997		1	585070	JMR	EET CLE	08/23/23 18:20
Total/NA	Analysis	300.0-1993 R2.1		1	586790	JWW	EET CLE	09/12/23 06:20
Total/NA	Prep	PrecSep-21			625310	KAC	EET SL	08/24/23 09:39
Total/NA	Analysis	9315		1	628177	SCB	EET SL	09/15/23 07:39
Total/NA	Prep	PrecSep_0			625311	KAC	EET SL	08/24/23 09:42
Total/NA	Analysis	9320		1	627487	SCB	EET SL	09/11/23 12:09
Total/NA	Analysis	Ra226_Ra228		1	629020	SCB	EET SL	09/20/23 14:56

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
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

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
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
Virginia	NELAP	460175	09-14-23
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-24
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-24
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-24
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-24
Massachusetts	State	M-MO054	06-30-24
MI - RadChem Recognition	State	9005	06-30-24
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-24
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-190489-1

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	07-31-24
North Dakota	State	R-207	06-30-24
Oregon	NELAP	4157	09-01-24
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23 *
Texas	NELAP	T104704193	07-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO000542021-14	07-31-24
Virginia	NELAP	10310	06-15-25
West Virginia DEP	State	381	10-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Client Information
 Client Contact: Taylor Huffman
 Phone: 740-373-4308
 Email: roxanne.cisneros@Eurofins.com
 Lab PM: Cisneros, Roxanne
 State of Origin: Ohio
 Camer Tracking No(s): 240-93466-34578.1
 Page: Page 1 of 1
 Job #:

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: Federal CCR Wells - App IV
 SOW#: Gavin Plant

Due Date Requested:
 TAT Requested (days):
 Compliance Project: Yes No
 PO #: 2935505
 WO #:
 Project #: 24019633
 SOW#:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Preservation Code:	Matrix (In-water, Suspended, Dissolved, Other)	Field Filtered Sample (Yes or No)	Form Kept (Yes or No)	620, 7470A	300, 0, 28D - Fluoride	2320B - Alkalinity	8315, Ra226, 9320, Ra228, Ra228, Ra228, Ra228, GFCP
BAC-14-F-A4-20230818-c1	8-18-23	0959	G	6	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
BAC-12-F-A4-20230818-c1	8-18-23	1056	G	6	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
DUP-002-BAC-12-F-A4-20230818-c1	8-18-23	1056	G	6	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
EB-001-F-A4-20230818-c1	8-18-23	1115	G	6	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				

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
 Other:
 M - Hexane
 N - None
 O - AsN8O2
 P - Na2O4S
 Q - Na2SO3
 R - Na2S2O3
 S - H2SO4
 T - TSP Dodecahydrate
 U - Acetone
 V - MCAA
 W - pH 4-5
 Z - other (specify)

Special Instructions/Note:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Special Instructions/QC Requirements:

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological
 Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by: _____ Date: _____

Relinquished by: _____ Date: 8-21-23/0833
 Relinquished by: _____ Date: 8-21-23/1700
 Relinquished by: _____ Date/Time:

Company
 Received by: KENNEW... Company: KENNEW...
 Received by: EJA... Company: EJA...
 Received by: _____ Company: _____

Cooler Temperature(s) °C and Other Remarks:

Custody Seal No.: Yes No



Barberton Facility

Client Light Stone Site Name Site Name Cooler unpacked by: Nancy Rye
Cooler Received on 8-22-23 Opened on 8-22-23
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

- Cooler temperature upon receipt
IR GUN # 22 (CF -0.1 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C
- Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity each
 - 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
- Shippers' packing slip attached to the cooler(s)? Yes No
- Did custody papers accompany the sample(s)? Yes No
- Were the custody papers relinquished & signed in the appropriate place? Yes No
- Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
- Did all bottles arrive in good condition (Unbroken)? Yes No
- Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes No
- For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)? Yes No
- Were correct bottle(s) used for the test(s) indicated? Yes No
- Sufficient quantity received to perform indicated analyses? Yes No
- 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.
- Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC312502
- Were VOAs on the COC? Yes No
- Were air bubbles >6 mm in any VOA vials? Larger than this. Yes No NA
- Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # Yes No
- 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: _____


Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-14-F-A4-20230818-01	240-190489-C-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-14-F-A4-20230818-01	240-190489-D-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-14-F-A4-20230818-01	240-190489-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-12-F-A4-20230818-01	240-190489-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-12-F-A4-20230818-01	240-190489-D-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-12-F-A4-20230818-01	240-190489-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-002-BAC-12-F-A4-20230818-01	240-190489-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-002-BAC-12-F-A4-20230818-01	240-190489-D-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-002-BAC-12-F-A4-20230818-01	240-190489-E-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230818-01	240-190489-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230818-01	240-190489-D-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230818-01	240-190489-E-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

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Client Information		Lab PM: Cisneros, Roxanne		Carrier Tracking No(s): 240-93466-34578.1	
Client Contact: Taylor Huffman		E-Mail: roxanne.cisneros@Eurofinset.com		Page: Page 1 of 1	
Company: Lightstone Generation Gavin Power LLC		PWSID:		Job #:	
Address: 7397 OH-7		City: Cheshire		State of Origin:	
State, Zip: OH, 45620		Phone: 740-925-3171(Tel)		PO #:	
Email: taylor.huffman@lightstonegen.com		WO #:		Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Project Name: Federal CCR Wells - App IV		Project #:		TAT Requested (days):	
Site: Gavin Plant		24019633		SSOW#:	

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Spew, Oil, Other)	Field Filtered Sample (Yes or No)	Form Marked (Yes or No)	300.0, 28D - Fluoride		2320B - Alkalinity		9315, Ra226, 9320, Ra228, Ra226Ra228, GPC		Total Number of Containers	Special Instructions/Note:
							D	N	D	N	D	N		
BAC-14-F-A4-20230818-c1	8-18-23	0959	6	Water										
BAC-12-F-A4-20230818-c1	8-18-23	1056	6	Water										
DIP-002-BAC-12-F-A4-20230818-c1	8-18-23	1056	6	Water										
EB-001-F-A4-20230818-c1	8-18-23	1115	6	Water										



240-190489 Chain of Custody

<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Empty Kit Relinquished by: _____ Date: _____		Special Instructions/QC Requirements: _____	
Relinquished by: _____ Date/Time: 8-21-23 / 0833 Relinquished by: _____ Date/Time: 8-21-23 / 1700 Relinquished by: _____ Date/Time: _____		Method of Shipment: _____ Received by: _____ Date/Time: 8-21-23 1130 Received by: _____ Date/Time: 8-22-23 800 Received by: _____ Date/Time: _____	
Custody Seals Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks: _____	

Barberton Facility

Client Light Stone

Site Name _____

Cooler unpacked by:

Cooler Received on 8-22-23

Opened on 8-22-23

Nancy Rye

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 # 22 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity leach 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# HC312502

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: _____

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container		Preservative	
			pH	Temp	Added (mls)	Lot #
BAC-14-F-A4-20230818-01	240-190489-C-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-14-F-A4-20230818-01	240-190489-D-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-14-F-A4-20230818-01	240-190489-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-12-F-A4-20230818-01	240-190489-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-12-F-A4-20230818-01	240-190489-D-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-12-F-A4-20230818-01	240-190489-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-002-BAC-12-F-A4-20230818-01	240-190489-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-002-BAC-12-F-A4-20230818-01	240-190489-D-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-002-BAC-12-F-A4-20230818-01	240-190489-E-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230818-01	240-190489-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230818-01	240-190489-D-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
EB-001-F-A4-20230818-01	240-190489-E-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-190489-1

Login Number: 190489

List Number: 2

Creator: Sharkey-Gonzalez, Briana L

List Source: Eurofins St. Louis

List Creation: 08/23/23 01:57 PM

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





ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 10/26/2023 10:00:39 AM

JOB DESCRIPTION

Federal CCR Wells - App III

JOB NUMBER

240-193489-1

Eurofins Cleveland

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
10/26/2023 10:00:39 AM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.

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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Job ID: 240-193489-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-193489-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample 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 10/12/2023 2:25 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 7 coolers at receipt time were 0.5°C, 0.6°C, 3.5°C, 3.6°C, 3.8°C, 19.8°C and 20.2°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 - App III

Job ID: 240-193489-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
SM 2540C	Solids, Total Dissolved (TDS)	SM	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
Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-193489-1	BAC-23-F-A3-20231010-01	Water	10/10/23 13:08	10/12/23 14:25
240-193489-2	BAC-08-F-A3-20231010-01	Water	10/10/23 14:37	10/12/23 14:25
240-193489-3	BAC-21-F-A3-20231011-01	Water	10/11/23 09:46	10/12/23 14:25
240-193489-4	BAC-22-F-A3-20231011-01	Water	10/11/23 10:59	10/12/23 14:25
240-193489-5	BAC-18-F-A3-20231011-01	Water	10/11/23 12:09	10/12/23 14:25
240-193489-6	DUP-001-F-A3-20231011-01	Water	10/11/23 00:00	10/12/23 14:25
240-193489-7	BAC-10-F-A3-20231011-01	Water	10/11/23 13:17	10/12/23 14:25
240-193489-8	BAC-16-F-A3-20231011-01	Water	10/11/23 14:29	10/12/23 14:25
240-193489-9	EB-001-F-A3-20231011-01	Water	10/11/23 15:00	10/12/23 14:25

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Client Sample ID: BAC-23-F-A3-20231010-01

Lab Sample ID: 240-193489-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	270		100	57	ug/L	1		6010D	Total Recoverable
Calcium	130000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	16000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	20000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	45		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.15		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	150		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	490		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-08-F-A3-20231010-01

Lab Sample ID: 240-193489-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	110		100	57	ug/L	1		6010D	Total Recoverable
Calcium	92000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	12000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	12000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	24		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.14		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	83		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	390		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-21-F-A3-20231011-01

Lab Sample ID: 240-193489-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	370		100	57	ug/L	1		6010D	Total Recoverable
Calcium	130000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	16000	F1	1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2800	F1	1000	220	ug/L	1		6020B	Total Recoverable
Sodium	30000	F1	1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	77		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.10		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	130		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	550		10	7.8	mg/L	1		SM 2540C	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 - App III

Job ID: 240-193489-1

Client Sample ID: BAC-22-F-A3-20231011-01

Lab Sample ID: 240-193489-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	220		100	57	ug/L	1		6010D	Total Recoverable
Calcium	150000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	19000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	19000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	38		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.090		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	240		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	580		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-18-F-A3-20231011-01

Lab Sample ID: 240-193489-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1300		100	57	ug/L	1		6010D	Total Recoverable
Calcium	76000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1200		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	87		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	87		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	25		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.075		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	390		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-001-F-A3-20231011-01

Lab Sample ID: 240-193489-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1400		100	57	ug/L	1		6010D	Total Recoverable
Calcium	77000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	16000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	88		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	88		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	25		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.064		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	380		10	7.8	mg/L	1		SM 2540C	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 - App III

Job ID: 240-193489-1

Client Sample ID: BAC-10-F-A3-20231011-01

Lab Sample ID: 240-193489-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	510		100	57	ug/L	1		6010D	Total Recoverable
Calcium	110000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	27000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	47000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	48		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.17		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	210		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	580		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-16-F-A3-20231011-01

Lab Sample ID: 240-193489-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1500		100	57	ug/L	1		6010D	Total Recoverable
Calcium	97000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	28		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.065		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	560		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-001-F-A3-20231011-01

Lab Sample ID: 240-193489-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	41		10	7.8	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Client Sample ID: BAC-23-F-A3-20231010-01

Lab Sample ID: 240-193489-1

Date Collected: 10/10/23 13:08

Matrix: Water

Date Received: 10/12/23 14:25

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	270		100	57	ug/L		10/16/23 14:00	10/18/23 00:06	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130000		1000	250	ug/L		10/16/23 14:00	10/17/23 21:08	1
Magnesium	16000		1000	61	ug/L		10/16/23 14:00	10/17/23 21:08	1
Potassium	2000		1000	220	ug/L		10/16/23 14:00	10/17/23 21:08	1
Sodium	20000		1000	330	ug/L		10/16/23 14:00	10/17/23 21:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230		5.0	2.6	mg/L			10/13/23 20:19	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230		5.0	2.6	mg/L			10/13/23 20:19	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 20:19	1
Chloride (EPA 300.0)	45		1.0	0.13	mg/L			10/18/23 20:34	1
Fluoride (EPA 300.0)	0.15		0.050	0.024	mg/L			10/18/23 20:34	1
Sulfate (EPA 300.0)	150		1.0	0.35	mg/L			10/18/23 20:34	1
Total Dissolved Solids (SM 2540C)	490		10	7.8	mg/L			10/16/23 14:12	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Client Sample ID: BAC-08-F-A3-20231010-01

Lab Sample ID: 240-193489-2

Date Collected: 10/10/23 14:37

Matrix: Water

Date Received: 10/12/23 14:25

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	110		100	57	ug/L		10/16/23 14:00	10/18/23 00:10	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	92000		1000	250	ug/L		10/16/23 14:00	10/17/23 21:10	1
Magnesium	12000		1000	61	ug/L		10/16/23 14:00	10/17/23 21:10	1
Potassium	1500		1000	220	ug/L		10/16/23 14:00	10/17/23 21:10	1
Sodium	12000		1000	330	ug/L		10/16/23 14:00	10/17/23 21:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	190		5.0	2.6	mg/L			10/13/23 20:32	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	190		5.0	2.6	mg/L			10/13/23 20:32	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 20:32	1
Chloride (EPA 300.0)	24		1.0	0.13	mg/L			10/18/23 17:53	1
Fluoride (EPA 300.0)	0.14		0.050	0.024	mg/L			10/18/23 17:53	1
Sulfate (EPA 300.0)	83		1.0	0.35	mg/L			10/18/23 17:53	1
Total Dissolved Solids (SM 2540C)	390		10	7.8	mg/L			10/16/23 14:12	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Client Sample ID: BAC-21-F-A3-20231011-01

Lab Sample ID: 240-193489-3

Date Collected: 10/11/23 09:46

Matrix: Water

Date Received: 10/12/23 14:25

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	370		100	57	ug/L		10/16/23 14:00	10/17/23 23:28	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130000		1000	250	ug/L		10/16/23 14:00	10/17/23 20:45	1
Magnesium	16000	F1	1000	61	ug/L		10/16/23 14:00	10/17/23 20:45	1
Potassium	2800	F1	1000	220	ug/L		10/16/23 14:00	10/17/23 20:45	1
Sodium	30000	F1	1000	330	ug/L		10/16/23 14:00	10/17/23 20:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			10/13/23 18:11	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			10/13/23 18:11	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 18:11	1
Chloride (EPA 300.0)	77		1.0	0.13	mg/L			10/18/23 23:56	1
Fluoride (EPA 300.0)	0.10		0.050	0.024	mg/L			10/18/23 23:56	1
Sulfate (EPA 300.0)	130		1.0	0.35	mg/L			10/18/23 23:56	1
Total Dissolved Solids (SM 2540C)	550		10	7.8	mg/L			10/18/23 09:05	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Client Sample ID: BAC-22-F-A3-20231011-01

Lab Sample ID: 240-193489-4

Date Collected: 10/11/23 10:59

Matrix: Water

Date Received: 10/12/23 14:25

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	220		100	57	ug/L		10/16/23 14:00	10/18/23 00:15	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	150000		1000	250	ug/L		10/16/23 14:00	10/17/23 21:13	1
Magnesium	19000		1000	61	ug/L		10/16/23 14:00	10/17/23 21:13	1
Potassium	2900		1000	220	ug/L		10/16/23 14:00	10/17/23 21:13	1
Sodium	19000		1000	330	ug/L		10/16/23 14:00	10/17/23 21:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230		5.0	2.6	mg/L			10/13/23 20:37	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230		5.0	2.6	mg/L			10/13/23 20:37	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 20:37	1
Chloride (EPA 300.0)	38		1.0	0.13	mg/L			10/20/23 19:19	1
Fluoride (EPA 300.0)	0.090		0.050	0.024	mg/L			10/20/23 19:19	1
Sulfate (EPA 300.0)	240		5.0	1.7	mg/L			10/20/23 19:39	5
Total Dissolved Solids (SM 2540C)	580		10	7.8	mg/L			10/18/23 09:19	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Client Sample ID: BAC-18-F-A3-20231011-01

Lab Sample ID: 240-193489-5

Date Collected: 10/11/23 12:09

Matrix: Water

Date Received: 10/12/23 14:25

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1300		100	57	ug/L		10/16/23 14:00	10/18/23 00:19	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	76000		1000	250	ug/L		10/16/23 14:00	10/17/23 21:15	1
Magnesium	20000		1000	61	ug/L		10/16/23 14:00	10/17/23 21:15	1
Potassium	1200		1000	220	ug/L		10/16/23 14:00	10/17/23 21:15	1
Sodium	16000		1000	330	ug/L		10/16/23 14:00	10/17/23 21:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	87		5.0	2.6	mg/L			10/13/23 18:51	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	87		5.0	2.6	mg/L			10/13/23 18:51	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 18:51	1
Chloride (EPA 300.0)	25		1.0	0.13	mg/L			10/20/23 14:37	1
Fluoride (EPA 300.0)	0.075		0.050	0.024	mg/L			10/20/23 14:37	1
Sulfate (EPA 300.0)	190		1.0	0.35	mg/L			10/20/23 14:37	1
Total Dissolved Solids (SM 2540C)	390		10	7.8	mg/L			10/18/23 09:19	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Client Sample ID: DUP-001-F-A3-20231011-01

Lab Sample ID: 240-193489-6

Date Collected: 10/11/23 00:00

Matrix: Water

Date Received: 10/12/23 14:25

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1400		100	57	ug/L		10/16/23 14:00	10/18/23 00:23	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	77000		1000	250	ug/L		10/16/23 14:00	10/18/23 15:22	1
Magnesium	20000		1000	61	ug/L		10/16/23 14:00	10/18/23 15:22	1
Potassium	1300		1000	220	ug/L		10/16/23 14:00	10/18/23 15:22	1
Sodium	16000		1000	330	ug/L		10/16/23 14:00	10/18/23 15:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	88		5.0	2.6	mg/L			10/13/23 18:46	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	88		5.0	2.6	mg/L			10/13/23 18:46	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 18:46	1
Chloride (EPA 300.0)	25		1.0	0.13	mg/L			10/20/23 15:37	1
Fluoride (EPA 300.0)	0.064		0.050	0.024	mg/L			10/20/23 15:37	1
Sulfate (EPA 300.0)	190		1.0	0.35	mg/L			10/20/23 15:37	1
Total Dissolved Solids (SM 2540C)	380		10	7.8	mg/L			10/18/23 09:19	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Client Sample ID: BAC-10-F-A3-20231011-01

Lab Sample ID: 240-193489-7

Date Collected: 10/11/23 13:17

Matrix: Water

Date Received: 10/12/23 14:25

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	510		100	57	ug/L		10/16/23 14:00	10/18/23 00:28	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110000		1000	250	ug/L		10/16/23 14:00	10/18/23 15:25	1
Magnesium	27000		1000	61	ug/L		10/16/23 14:00	10/18/23 15:25	1
Potassium	1600		1000	220	ug/L		10/16/23 14:00	10/18/23 15:25	1
Sodium	47000		1000	330	ug/L		10/16/23 14:00	10/18/23 15:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			10/13/23 18:41	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			10/13/23 18:41	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 18:41	1
Chloride (EPA 300.0)	48		1.0	0.13	mg/L			10/20/23 19:59	1
Fluoride (EPA 300.0)	0.17		0.050	0.024	mg/L			10/20/23 19:59	1
Sulfate (EPA 300.0)	210		5.0	1.7	mg/L			10/20/23 20:19	5
Total Dissolved Solids (SM 2540C)	580		10	7.8	mg/L			10/18/23 09:19	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Client Sample ID: BAC-16-F-A3-20231011-01

Lab Sample ID: 240-193489-8

Date Collected: 10/11/23 14:29

Matrix: Water

Date Received: 10/12/23 14:25

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1500		100	57	ug/L		10/16/23 14:00	10/18/23 00:40	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	97000		1000	250	ug/L		10/16/23 14:00	10/18/23 15:27	1
Magnesium	22000		1000	61	ug/L		10/16/23 14:00	10/18/23 15:27	1
Potassium	1800		1000	220	ug/L		10/16/23 14:00	10/18/23 15:27	1
Sodium	15000		1000	330	ug/L		10/16/23 14:00	10/18/23 15:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	160		5.0	2.6	mg/L			10/13/23 19:21	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	160		5.0	2.6	mg/L			10/13/23 19:21	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 19:21	1
Chloride (EPA 300.0)	28		1.0	0.13	mg/L			10/20/23 15:58	1
Fluoride (EPA 300.0)	0.065		0.050	0.024	mg/L			10/20/23 15:58	1
Sulfate (EPA 300.0)	190		1.0	0.35	mg/L			10/20/23 15:58	1
Total Dissolved Solids (SM 2540C)	560		10	7.8	mg/L			10/18/23 09:19	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Client Sample ID: EB-001-F-A3-20231011-01

Lab Sample ID: 240-193489-9

Date Collected: 10/11/23 15:00

Matrix: Water

Date Received: 10/12/23 14:25

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		10/16/23 14:00	10/18/23 00:45	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		10/16/23 14:00	10/18/23 15:30	1
Magnesium	ND		1000	61	ug/L		10/16/23 14:00	10/18/23 15:30	1
Potassium	ND		1000	220	ug/L		10/16/23 14:00	10/18/23 15:30	1
Sodium	ND		1000	330	ug/L		10/16/23 14:00	10/18/23 15:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 19:18	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 19:18	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 19:18	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			10/20/23 16:18	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			10/20/23 16:18	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			10/20/23 16:18	1
Total Dissolved Solids (SM 2540C)	41		10	7.8	mg/L			10/18/23 09:19	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-590940/1-A
Matrix: Water
Analysis Batch: 591127

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 590940

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		10/16/23 14:00	10/17/23 23:19	1

Lab Sample ID: LCS 240-590940/2-A
Matrix: Water
Analysis Batch: 591127

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 590940

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1030		ug/L		103	80 - 120

Lab Sample ID: 240-193489-3 MS
Matrix: Water
Analysis Batch: 591127

Client Sample ID: BAC-21-F-A3-20231011-01
Prep Type: Total Recoverable
Prep Batch: 590940

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	370		1000	1420		ug/L		105	75 - 125

Lab Sample ID: 240-193489-3 MSD
Matrix: Water
Analysis Batch: 591127

Client Sample ID: BAC-21-F-A3-20231011-01
Prep Type: Total Recoverable
Prep Batch: 590940

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Boron	370		1000	1430		ug/L		105	75 - 125	0	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-590940/1-A
Matrix: Water
Analysis Batch: 591232

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 590940

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		10/16/23 14:00	10/17/23 20:40	1
Magnesium	ND		1000	61	ug/L		10/16/23 14:00	10/17/23 20:40	1
Potassium	ND		1000	220	ug/L		10/16/23 14:00	10/17/23 20:40	1
Sodium	ND		1000	330	ug/L		10/16/23 14:00	10/17/23 20:40	1

Lab Sample ID: LCS 240-590940/3-A
Matrix: Water
Analysis Batch: 591232

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 590940

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	23000		ug/L		92	80 - 120
Magnesium	25000	24200		ug/L		97	80 - 120
Potassium	25000	24000		ug/L		96	80 - 120
Sodium	25000	24000		ug/L		96	80 - 120

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

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

Lab Sample ID: 240-193489-3 MS
Matrix: Water
Analysis Batch: 591232

Client Sample ID: BAC-21-F-A3-20231011-01
Prep Type: Total Recoverable
Prep Batch: 590940

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier				Limits	
Calcium	130000		25000	152000	4	ug/L		88	80 - 120	
Magnesium	16000	F1	25000	38600		ug/L		92	80 - 120	
Potassium	2800	F1	25000	26200		ug/L		93	80 - 120	
Sodium	30000	F1	25000	52800		ug/L		91	80 - 120	

Lab Sample ID: 240-193489-3 MSD
Matrix: Water
Analysis Batch: 591232

Client Sample ID: BAC-21-F-A3-20231011-01
Prep Type: Total Recoverable
Prep Batch: 590940

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec		RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits			
Calcium	130000		25000	140000	4	ug/L		39	80 - 120		8	20
Magnesium	16000	F1	25000	34200	F1	ug/L		74	80 - 120		12	20
Potassium	2800	F1	25000	22500	F1	ug/L		79	80 - 120		15	20
Sodium	30000	F1	25000	48300	F1	ug/L		73	80 - 120		9	20

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-590918/30
Matrix: Water
Analysis Batch: 590918

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			10/13/23 20:16	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/13/23 20:16	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/13/23 20:16	1

Lab Sample ID: MB 240-590918/4
Matrix: Water
Analysis Batch: 590918

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			10/13/23 18:07	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/13/23 18:07	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/13/23 18:07	1

Lab Sample ID: LCS 240-590918/29
Matrix: Water
Analysis Batch: 590918

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Total Alkalinity	80.6	80.7		mg/L		100	86 - 123	

Lab Sample ID: LCS 240-590918/3
Matrix: Water
Analysis Batch: 590918

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Total Alkalinity	80.6	82.0		mg/L		102	86 - 123	

Eurofins Cleveland

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Method: 2320B-1997 - Alkalinity, Total (Continued)

Lab Sample ID: 240-193489-1 DU
Matrix: Water
Analysis Batch: 590918

Client Sample ID: BAC-23-F-A3-20231010-01
Prep Type: Total/NA

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	RPD
	Result	Qualifier	Result	Qualifier				
Total Alkalinity	230		230		mg/L		0.3	20
Bicarbonate Alkalinity as CaCO3	230		230		mg/L		0.3	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Lab Sample ID: 240-193489-3 DU
Matrix: Water
Analysis Batch: 590918

Client Sample ID: BAC-21-F-A3-20231011-01
Prep Type: Total/NA

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	RPD
	Result	Qualifier	Result	Qualifier				
Total Alkalinity	240		244		mg/L		0.4	20
Bicarbonate Alkalinity as CaCO3	240		244		mg/L		0.4	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-591263/3
Matrix: Water
Analysis Batch: 591263

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	ND		1.0	0.13	mg/L			10/18/23 11:30	1
Fluoride	ND		0.050	0.024	mg/L			10/18/23 11:30	1
Sulfate	ND		1.0	0.35	mg/L			10/18/23 11:30	1

Lab Sample ID: LCS 240-591263/4
Matrix: Water
Analysis Batch: 591263

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.74		mg/L		109	90 - 110
Sulfate	50.0	53.8		mg/L		108	90 - 110

Lab Sample ID: MB 240-591286/3
Matrix: Water
Analysis Batch: 591286

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	ND		1.0	0.13	mg/L			10/18/23 23:16	1
Fluoride	ND		0.050	0.024	mg/L			10/18/23 23:16	1
Sulfate	ND		1.0	0.35	mg/L			10/18/23 23:16	1

Lab Sample ID: LCS 240-591286/4
Matrix: Water
Analysis Batch: 591286

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.75		mg/L		110	90 - 110
Sulfate	50.0	53.6		mg/L		107	90 - 110

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 240-193489-3 MS
Matrix: Water
Analysis Batch: 591286

Client Sample ID: BAC-21-F-A3-20231011-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	77		50.0	126		mg/L		99	80 - 120
Fluoride	0.10		2.50	2.86		mg/L		111	80 - 120
Sulfate	130		50.0	180		mg/L		96	80 - 120

Lab Sample ID: 240-193489-3 MSD
Matrix: Water
Analysis Batch: 591286

Client Sample ID: BAC-21-F-A3-20231011-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	77		50.0	128		mg/L		102	80 - 120	1	15
Fluoride	0.10		2.50	2.97		mg/L		115	80 - 120	4	15
Sulfate	130		50.0	182		mg/L		100	80 - 120	1	15

Lab Sample ID: MB 240-591603/3
Matrix: Water
Analysis Batch: 591603

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			10/20/23 13:57	1
Fluoride	ND		0.050	0.024	mg/L			10/20/23 13:57	1
Sulfate	ND		1.0	0.35	mg/L			10/20/23 13:57	1

Lab Sample ID: LCS 240-591603/4
Matrix: Water
Analysis Batch: 591603

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.4		mg/L		103	90 - 110
Fluoride	2.50	2.74		mg/L		109	90 - 110
Sulfate	50.0	54.2		mg/L		108	90 - 110

Lab Sample ID: 240-193489-5 MS
Matrix: Water
Analysis Batch: 591603

Client Sample ID: BAC-18-F-A3-20231011-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25		50.0	77.3		mg/L		105	80 - 120
Fluoride	0.075		2.50	2.86		mg/L		111	80 - 120

Lab Sample ID: 240-193489-5 MSD
Matrix: Water
Analysis Batch: 591603

Client Sample ID: BAC-18-F-A3-20231011-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	25		50.0	77.9		mg/L		107	80 - 120	1	15
Fluoride	0.075		2.50	2.91		mg/L		113	80 - 120	2	15

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

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

Lab Sample ID: MB 240-590981/1
Matrix: Water
Analysis Batch: 590981

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			10/16/23 14:12	1

Lab Sample ID: LCS 240-590981/2
Matrix: Water
Analysis Batch: 590981

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	336	317		mg/L		94	80 - 120

Lab Sample ID: MB 240-591231/1
Matrix: Water
Analysis Batch: 591231

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			10/18/23 09:05	1

Lab Sample ID: LCS 240-591231/2
Matrix: Water
Analysis Batch: 591231

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	336	303		mg/L		90	80 - 120

Lab Sample ID: 240-193489-3 DU
Matrix: Water
Analysis Batch: 591231

Client Sample ID: BAC-21-F-A3-20231011-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	550		550		mg/L		0.7	20

Lab Sample ID: MB 240-591249/1
Matrix: Water
Analysis Batch: 591249

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			10/18/23 09:19	1

Lab Sample ID: LCS 240-591249/2
Matrix: Water
Analysis Batch: 591249

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	336	317		mg/L		94	80 - 120

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Metals

Prep Batch: 590940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193489-1	BAC-23-F-A3-20231010-01	Total Recoverable	Water	3005A	
240-193489-2	BAC-08-F-A3-20231010-01	Total Recoverable	Water	3005A	
240-193489-3	BAC-21-F-A3-20231011-01	Total Recoverable	Water	3005A	
240-193489-4	BAC-22-F-A3-20231011-01	Total Recoverable	Water	3005A	
240-193489-5	BAC-18-F-A3-20231011-01	Total Recoverable	Water	3005A	
240-193489-6	DUP-001-F-A3-20231011-01	Total Recoverable	Water	3005A	
240-193489-7	BAC-10-F-A3-20231011-01	Total Recoverable	Water	3005A	
240-193489-8	BAC-16-F-A3-20231011-01	Total Recoverable	Water	3005A	
240-193489-9	EB-001-F-A3-20231011-01	Total Recoverable	Water	3005A	
MB 240-590940/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-590940/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-590940/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-193489-3 MS	BAC-21-F-A3-20231011-01	Total Recoverable	Water	3005A	
240-193489-3 MS	BAC-21-F-A3-20231011-01	Total Recoverable	Water	3005A	
240-193489-3 MSD	BAC-21-F-A3-20231011-01	Total Recoverable	Water	3005A	
240-193489-3 MSD	BAC-21-F-A3-20231011-01	Total Recoverable	Water	3005A	

Analysis Batch: 591127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193489-1	BAC-23-F-A3-20231010-01	Total Recoverable	Water	6010D	590940
240-193489-2	BAC-08-F-A3-20231010-01	Total Recoverable	Water	6010D	590940
240-193489-3	BAC-21-F-A3-20231011-01	Total Recoverable	Water	6010D	590940
240-193489-4	BAC-22-F-A3-20231011-01	Total Recoverable	Water	6010D	590940
240-193489-5	BAC-18-F-A3-20231011-01	Total Recoverable	Water	6010D	590940
240-193489-6	DUP-001-F-A3-20231011-01	Total Recoverable	Water	6010D	590940
240-193489-7	BAC-10-F-A3-20231011-01	Total Recoverable	Water	6010D	590940
240-193489-8	BAC-16-F-A3-20231011-01	Total Recoverable	Water	6010D	590940
240-193489-9	EB-001-F-A3-20231011-01	Total Recoverable	Water	6010D	590940
MB 240-590940/1-A	Method Blank	Total Recoverable	Water	6010D	590940
LCS 240-590940/2-A	Lab Control Sample	Total Recoverable	Water	6010D	590940
240-193489-3 MS	BAC-21-F-A3-20231011-01	Total Recoverable	Water	6010D	590940
240-193489-3 MSD	BAC-21-F-A3-20231011-01	Total Recoverable	Water	6010D	590940

Analysis Batch: 591232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193489-1	BAC-23-F-A3-20231010-01	Total Recoverable	Water	6020B	590940
240-193489-2	BAC-08-F-A3-20231010-01	Total Recoverable	Water	6020B	590940
240-193489-3	BAC-21-F-A3-20231011-01	Total Recoverable	Water	6020B	590940
240-193489-4	BAC-22-F-A3-20231011-01	Total Recoverable	Water	6020B	590940
240-193489-5	BAC-18-F-A3-20231011-01	Total Recoverable	Water	6020B	590940
MB 240-590940/1-A	Method Blank	Total Recoverable	Water	6020B	590940
LCS 240-590940/3-A	Lab Control Sample	Total Recoverable	Water	6020B	590940
240-193489-3 MS	BAC-21-F-A3-20231011-01	Total Recoverable	Water	6020B	590940
240-193489-3 MSD	BAC-21-F-A3-20231011-01	Total Recoverable	Water	6020B	590940

Analysis Batch: 591382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193489-6	DUP-001-F-A3-20231011-01	Total Recoverable	Water	6020B	590940
240-193489-7	BAC-10-F-A3-20231011-01	Total Recoverable	Water	6020B	590940
240-193489-8	BAC-16-F-A3-20231011-01	Total Recoverable	Water	6020B	590940
240-193489-9	EB-001-F-A3-20231011-01	Total Recoverable	Water	6020B	590940

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

General Chemistry

Analysis Batch: 590918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193489-1	BAC-23-F-A3-20231010-01	Total/NA	Water	2320B-1997	
240-193489-2	BAC-08-F-A3-20231010-01	Total/NA	Water	2320B-1997	
240-193489-3	BAC-21-F-A3-20231011-01	Total/NA	Water	2320B-1997	
240-193489-4	BAC-22-F-A3-20231011-01	Total/NA	Water	2320B-1997	
240-193489-5	BAC-18-F-A3-20231011-01	Total/NA	Water	2320B-1997	
240-193489-6	DUP-001-F-A3-20231011-01	Total/NA	Water	2320B-1997	
240-193489-7	BAC-10-F-A3-20231011-01	Total/NA	Water	2320B-1997	
240-193489-8	BAC-16-F-A3-20231011-01	Total/NA	Water	2320B-1997	
240-193489-9	EB-001-F-A3-20231011-01	Total/NA	Water	2320B-1997	
MB 240-590918/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-590918/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-590918/29	Lab Control Sample	Total/NA	Water	2320B-1997	
LCS 240-590918/3	Lab Control Sample	Total/NA	Water	2320B-1997	
240-193489-1 DU	BAC-23-F-A3-20231010-01	Total/NA	Water	2320B-1997	
240-193489-3 DU	BAC-21-F-A3-20231011-01	Total/NA	Water	2320B-1997	

Analysis Batch: 590981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193489-1	BAC-23-F-A3-20231010-01	Total/NA	Water	SM 2540C	
240-193489-2	BAC-08-F-A3-20231010-01	Total/NA	Water	SM 2540C	
MB 240-590981/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-590981/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 591231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193489-3	BAC-21-F-A3-20231011-01	Total/NA	Water	SM 2540C	
MB 240-591231/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-591231/2	Lab Control Sample	Total/NA	Water	SM 2540C	
240-193489-3 DU	BAC-21-F-A3-20231011-01	Total/NA	Water	SM 2540C	

Analysis Batch: 591249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193489-4	BAC-22-F-A3-20231011-01	Total/NA	Water	SM 2540C	
240-193489-5	BAC-18-F-A3-20231011-01	Total/NA	Water	SM 2540C	
240-193489-6	DUP-001-F-A3-20231011-01	Total/NA	Water	SM 2540C	
240-193489-7	BAC-10-F-A3-20231011-01	Total/NA	Water	SM 2540C	
240-193489-8	BAC-16-F-A3-20231011-01	Total/NA	Water	SM 2540C	
240-193489-9	EB-001-F-A3-20231011-01	Total/NA	Water	SM 2540C	
MB 240-591249/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-591249/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 591263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193489-1	BAC-23-F-A3-20231010-01	Total/NA	Water	300.0	
240-193489-2	BAC-08-F-A3-20231010-01	Total/NA	Water	300.0	
MB 240-591263/3	Method Blank	Total/NA	Water	300.0	
LCS 240-591263/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 591286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193489-3	BAC-21-F-A3-20231011-01	Total/NA	Water	300.0	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

General Chemistry (Continued)

Analysis Batch: 591286 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-591286/3	Method Blank	Total/NA	Water	300.0	
LCS 240-591286/4	Lab Control Sample	Total/NA	Water	300.0	
240-193489-3 MS	BAC-21-F-A3-20231011-01	Total/NA	Water	300.0	
240-193489-3 MSD	BAC-21-F-A3-20231011-01	Total/NA	Water	300.0	

Analysis Batch: 591603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193489-4	BAC-22-F-A3-20231011-01	Total/NA	Water	300.0	
240-193489-4	BAC-22-F-A3-20231011-01	Total/NA	Water	300.0	
240-193489-5	BAC-18-F-A3-20231011-01	Total/NA	Water	300.0	
240-193489-6	DUP-001-F-A3-20231011-01	Total/NA	Water	300.0	
240-193489-7	BAC-10-F-A3-20231011-01	Total/NA	Water	300.0	
240-193489-7	BAC-10-F-A3-20231011-01	Total/NA	Water	300.0	
240-193489-8	BAC-16-F-A3-20231011-01	Total/NA	Water	300.0	
240-193489-9	EB-001-F-A3-20231011-01	Total/NA	Water	300.0	
MB 240-591603/3	Method Blank	Total/NA	Water	300.0	
LCS 240-591603/4	Lab Control Sample	Total/NA	Water	300.0	
240-193489-5 MS	BAC-18-F-A3-20231011-01	Total/NA	Water	300.0	
240-193489-5 MSD	BAC-18-F-A3-20231011-01	Total/NA	Water	300.0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Client Sample ID: BAC-23-F-A3-20231010-01

Lab Sample ID: 240-193489-1

Date Collected: 10/10/23 13:08

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6010D		1	591127	KLC	EET CLE	10/18/23 00:06
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 21:08
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 20:19
Total/NA	Analysis	300.0		1	591263	JWW	EET CLE	10/18/23 20:34
Total/NA	Analysis	SM 2540C		1	590981	QUY8	EET CLE	10/16/23 14:12

Client Sample ID: BAC-08-F-A3-20231010-01

Lab Sample ID: 240-193489-2

Date Collected: 10/10/23 14:37

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6010D		1	591127	KLC	EET CLE	10/18/23 00:10
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 21:10
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 20:32
Total/NA	Analysis	300.0		1	591263	JWW	EET CLE	10/18/23 17:53
Total/NA	Analysis	SM 2540C		1	590981	QUY8	EET CLE	10/16/23 14:12

Client Sample ID: BAC-21-F-A3-20231011-01

Lab Sample ID: 240-193489-3

Date Collected: 10/11/23 09:46

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6010D		1	591127	KLC	EET CLE	10/17/23 23:28
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 20:45
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 18:11
Total/NA	Analysis	300.0		1	591286	JWW	EET CLE	10/18/23 23:56
Total/NA	Analysis	SM 2540C		1	591231	QUY8	EET CLE	10/18/23 09:05

Client Sample ID: BAC-22-F-A3-20231011-01

Lab Sample ID: 240-193489-4

Date Collected: 10/11/23 10:59

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6010D		1	591127	KLC	EET CLE	10/18/23 00:15
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 21:13
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 20:37

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Client Sample ID: BAC-22-F-A3-20231011-01

Lab Sample ID: 240-193489-4

Date Collected: 10/11/23 10:59

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	591603	JWW	EET CLE	10/20/23 19:19
Total/NA	Analysis	300.0		5	591603	JWW	EET CLE	10/20/23 19:39
Total/NA	Analysis	SM 2540C		1	591249	QUY8	EET CLE	10/18/23 09:19

Client Sample ID: BAC-18-F-A3-20231011-01

Lab Sample ID: 240-193489-5

Date Collected: 10/11/23 12:09

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6010D		1	591127	KLC	EET CLE	10/18/23 00:19
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 21:15
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 18:51
Total/NA	Analysis	300.0		1	591603	JWW	EET CLE	10/20/23 14:37
Total/NA	Analysis	SM 2540C		1	591249	QUY8	EET CLE	10/18/23 09:19

Client Sample ID: DUP-001-F-A3-20231011-01

Lab Sample ID: 240-193489-6

Date Collected: 10/11/23 00:00

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6010D		1	591127	KLC	EET CLE	10/18/23 00:23
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591382	RKT	EET CLE	10/18/23 15:22
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 18:46
Total/NA	Analysis	300.0		1	591603	JWW	EET CLE	10/20/23 15:37
Total/NA	Analysis	SM 2540C		1	591249	QUY8	EET CLE	10/18/23 09:19

Client Sample ID: BAC-10-F-A3-20231011-01

Lab Sample ID: 240-193489-7

Date Collected: 10/11/23 13:17

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6010D		1	591127	KLC	EET CLE	10/18/23 00:28
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591382	RKT	EET CLE	10/18/23 15:25
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 18:41
Total/NA	Analysis	300.0		1	591603	JWW	EET CLE	10/20/23 19:59
Total/NA	Analysis	300.0		5	591603	JWW	EET CLE	10/20/23 20:19
Total/NA	Analysis	SM 2540C		1	591249	QUY8	EET CLE	10/18/23 09:19

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

Client Sample ID: BAC-16-F-A3-20231011-01

Lab Sample ID: 240-193489-8

Date Collected: 10/11/23 14:29

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6010D		1	591127	KLC	EET CLE	10/18/23 00:40
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591382	RKT	EET CLE	10/18/23 15:27
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 19:21
Total/NA	Analysis	300.0		1	591603	JWW	EET CLE	10/20/23 15:58
Total/NA	Analysis	SM 2540C		1	591249	QUY8	EET CLE	10/18/23 09:19

Client Sample ID: EB-001-F-A3-20231011-01

Lab Sample ID: 240-193489-9

Date Collected: 10/11/23 15:00

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6010D		1	591127	KLC	EET CLE	10/18/23 00:45
Total Recoverable	Prep	3005A			590940	BN	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591382	RKT	EET CLE	10/18/23 15:30
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 19:18
Total/NA	Analysis	300.0		1	591603	JWW	EET CLE	10/20/23 16:18
Total/NA	Analysis	SM 2540C		1	591249	QUY8	EET CLE	10/18/23 09:19

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
Project/Site: Federal CCR Wells - App III

Job ID: 240-193489-1

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
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
Virginia	NELAP	460175	09-14-24
West Virginia DEP	State	210	12-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Chain of Custody Record

Client Information		Sampler: <i>Bobby Ciste</i>		Lab PM: Cisneros, Roxanne		Carrier Tracking No(s):		COC No: 240-93465-34577.1			
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:						Job #:			
Address: 7397 OH-7		City: Cheshire		State, Zip: OH, 45620		Phone: 740-925-3171(Tel)		Preservation Codes:			
Email: taylor.huffman@lightstonegen.com		Project #: 24019633		SSOW#:				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 - EDTA Other:			
Due Date Requested:		TAT Requested (days):		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		PO #: 2935505		Total Number of Containers			
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (Water, Slurried, Other)			
BAC-23-F-A3-20231010-01 BAC-08-F-A3-20231010-01 BAC-21-F-A3-20231011-01 BAC-21-F-A3-20231011-MS-01 BAC-21-F-A3-20231011-MSD-01 BAC-22-F-A3-20231011-01 BAC-18-F-A3-20231011-01 DUP-001-F-A3-20231011-01 BAC-10-F-A3-20231011-01 ISAC-16-F-A3-20231011-01 EB-001-F-A3-20231011-01		10-10-23 10-10-23 10-11-23 10-11-23 10-11-23 10-11-23 10-11-23 10-11-23 10-11-23 10-11-23		1308 1437 0946 0946 1059 1209 - 1317 1429 1500		G G G G G G G G G		W W W W W W W W W		D N N I I I I I I I I I I I I I I I I I I I I I I I I I I I	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Special Instructions/QC Requirements:		Special Instructions/Note:			
Empty Kit Relinquished by: <i>Bobby Ciste</i>		Date: 10-12-23 / 0900		Date/Time: 10-12-23 1230		Date/Time: 10-12-23 1430		Date/Time: 10-12-23 1435			
Relinquished by: <i>Bobby Ciste</i>		Date/Time: 10-12-23 / 0900		Date/Time: 10-12-23 1430		Date/Time: 10-12-23 1435		Date/Time: 10-12-23 1435			
Relinquished by: <i>HL</i>		Date/Time: 10-12-23 1430		Date/Time: 10-12-23 1430		Date/Time: 10-12-23 1435		Date/Time: 10-12-23 1435			
Relinquished by: <i>HL</i>		Date/Time: 10-12-23 1430		Date/Time: 10-12-23 1430		Date/Time: 10-12-23 1435		Date/Time: 10-12-23 1435			
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Company: <i>Lightstone</i>		Company: <i>Lightstone</i>			



Eurofins - Cleveland Sample Receipt Form/Narrative
Barberton Facility

Login # : 193489

Client Lightstone Site Name _____
Cooler Received on 10-12-23 Opened on 10-13-23 Cooler unpacked by: Nancy Rye
FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

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

Eurofins Cooler # E5 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 -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 each
 - 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 NA
 - 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# HC316719
 14. Were VOAs on the COC? Yes No NA
 15. Were air bubbles >6 mm in any VOA vials? Yes No NA Larger than this.
 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: _____

Eurofins - Canton 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 #: _____	0.8	0.6	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____	4.0	3.8	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____	0.7	0.5	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____	3.8	3.6	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____	20.0	19.8	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____	3.7	3.5	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____	20.4	20.2	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	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



Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-23-F-A3-20231010-01	240-193489-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-08-F-A3-20231010-01	240-193489-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-21-F-A3-20231011-01	240-193489-G-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-21-F-A3-20231011-01	240-193489-H-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-21-F-A3-20231011-01	240-193489-I-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-22-F-A3-20231011-01	240-193489-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-18-F-A3-20231011-01	240-193489-C-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-001-F-A3-20231011-01	240-193489-C-6	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-10-F-A3-20231011-01	240-193489-C-7	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-16-F-A3-20231011-01	240-193489-C-8	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
EB-001-F-A3-20231011-01	240-193489-C-9	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____

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ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 11/10/2023 2:09:08 PM

JOB DESCRIPTION

Federal CCR Wells - App IV

JOB NUMBER

240-193490-1

Eurofins Cleveland

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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11/10/2023 2:09:08 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

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.

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.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Job ID: 240-193490-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative
240-193490-1

Receipt

The samples were received on 10/12/2023 2:25 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 7 coolers at receipt time were 0.5° C, 0.6° C, 3.5° C, 3.6° C, 3.8° C, 19.8° C and 20.2° C.

RAD

Methods 9320: Radium-228 prep batch 160-632173: The following sample(s) did not meet the requested limit (RL) due to the reduced sample volume attributed to the presence of matrix interference. During preparation the analyst visually noted matrix effects. The data have been reported with this narrative. BAC-21-F-A4-20231011-01 (240-193490-3)

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

Metals

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

General Chemistry

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



Method Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0-1993 R2.1	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 - App IV

Job ID: 240-193490-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-193490-1	BAC-23-F-A4-20231010-01	Water	10/10/23 13:08	10/12/23 14:25
240-193490-2	BAC-08-F-A4-20231010-01	Water	10/10/23 14:37	10/12/23 14:25
240-193490-3	BAC-21-F-A4-20231011-01	Water	10/11/23 09:46	10/12/23 14:25
240-193490-4	BAC-22-F-A4-20231011-01	Water	10/11/23 10:59	10/12/23 14:25
240-193490-5	BAC-18-F-A4-20231011-01	Water	10/11/23 12:09	10/12/23 14:25
240-193490-6	DUP-001-F-A4-20231011-01	Water	10/11/23 00:00	10/12/23 14:25
240-193490-7	BAC-10-F-A4-20231011-01	Water	10/11/23 13:17	10/12/23 14:25
240-193490-8	BAC-16-F-A4-20231011-01	Water	10/11/23 14:29	10/12/23 14:25
240-193490-9	EB-001-F-A4-20231011-01	Water	10/11/23 15:00	10/12/23 14:25

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-23-F-A4-20231010-01

Lab Sample ID: 240-193490-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.9	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	130		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.94	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	4.9	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	15000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	19000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	0.20	J B	1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.12		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-08-F-A4-20231010-01

Lab Sample ID: 240-193490-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.4	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	110		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.6		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	4.9	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	12000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	12000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	190		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.11		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-21-F-A4-20231011-01

Lab Sample ID: 240-193490-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	6.0		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	170		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	3.8	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.7		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	2.9		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	8.7		8.0	1.7	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 - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-21-F-A4-20231011-01 (Continued)

Lab Sample ID: 240-193490-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Magnesium	15000		1000	61	ug/L			1	6020B	Total Recoverable
Potassium	2400		1000	220	ug/L			1	6020B	Total Recoverable
Sodium	27000		1000	330	ug/L			1	6020B	Total Recoverable
Total Alkalinity	240		5.0	2.6	mg/L			1	2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L			1	2320B-1997	Total/NA
Fluoride	0.10		0.050	0.024	mg/L			1	300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-22-F-A4-20231011-01

Lab Sample ID: 240-193490-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Arsenic	2.3	J	5.0	0.75	ug/L			1	6020B	Total Recoverable
Barium	140		5.0	2.2	ug/L			1	6020B	Total Recoverable
Chromium	1.3	J	5.0	1.2	ug/L			1	6020B	Total Recoverable
Cobalt	1.2		1.0	0.19	ug/L			1	6020B	Total Recoverable
Lead	1.4		1.0	0.45	ug/L			1	6020B	Total Recoverable
Lithium	6.8	J	8.0	1.7	ug/L			1	6020B	Total Recoverable
Magnesium	19000		1000	61	ug/L			1	6020B	Total Recoverable
Potassium	2800		1000	220	ug/L			1	6020B	Total Recoverable
Sodium	19000		1000	330	ug/L			1	6020B	Total Recoverable
Total Alkalinity	230		5.0	2.6	mg/L			1	2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L			1	2320B-1997	Total/NA
Fluoride	0.070		0.050	0.024	mg/L			1	300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-18-F-A4-20231011-01

Lab Sample ID: 240-193490-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Barium	26		5.0	2.2	ug/L			1	6020B	Total Recoverable
Cobalt	1.2		1.0	0.19	ug/L			1	6020B	Total Recoverable
Lithium	8.2		8.0	1.7	ug/L			1	6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L			1	6020B	Total Recoverable
Potassium	1300		1000	220	ug/L			1	6020B	Total Recoverable
Sodium	16000		1000	330	ug/L			1	6020B	Total Recoverable
Total Alkalinity	88		5.0	2.6	mg/L			1	2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	88		5.0	2.6	mg/L			1	2320B-1997	Total/NA
Fluoride	0.030	J	0.050	0.024	mg/L			1	300.0-1993 R2.1	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 - App IV

Job ID: 240-193490-1

Client Sample ID: DUP-001-F-A4-20231011-01

Lab Sample ID: 240-193490-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	24		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	7.4	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	18000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1200		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	88		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	88		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.051		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-10-F-A4-20231011-01

Lab Sample ID: 240-193490-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.4	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	39		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	1.5	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.4		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.2		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	5.9	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	26000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	45000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.15		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-16-F-A4-20231011-01

Lab Sample ID: 240-193490-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.1	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	46		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.6		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.1		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	7.8	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	61	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 - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-16-F-A4-20231011-01 (Continued)

Lab Sample ID: 240-193490-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	1600		1000	220	ug/L	1		6020B	Total
									Recoverable
Sodium	15000		1000	330	ug/L	1		6020B	Total
									Recoverable
Total Alkalinity	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	160		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.044	J	0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: EB-001-F-A4-20231011-01

Lab Sample ID: 240-193490-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity	3.0	J	5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	3.0	J	5.0	2.6	mg/L	1		2320B-1997	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland



Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-23-F-A4-20231010-01

Lab Sample ID: 240-193490-1

Date Collected: 10/10/23 13:08

Matrix: Water

Date Received: 10/12/23 14:25

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		10/13/23 14:00	10/16/23 18:37	1
Arsenic	1.9	J	5.0	0.75	ug/L		10/13/23 14:00	10/16/23 18:37	1
Barium	130		5.0	2.2	ug/L		10/13/23 14:00	10/16/23 18:37	1
Beryllium	ND		1.0	0.62	ug/L		10/13/23 14:00	10/16/23 18:37	1
Cadmium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:37	1
Chromium	ND		5.0	1.2	ug/L		10/13/23 14:00	10/16/23 18:37	1
Cobalt	0.94	J	1.0	0.19	ug/L		10/13/23 14:00	10/16/23 18:37	1
Lead	ND		1.0	0.45	ug/L		10/13/23 14:00	10/16/23 18:37	1
Lithium	4.9	J	8.0	1.7	ug/L		10/13/23 14:00	10/17/23 18:23	1
Magnesium	15000		1000	61	ug/L		10/13/23 14:00	10/16/23 18:37	1
Molybdenum	ND		5.0	1.1	ug/L		10/13/23 14:00	10/16/23 18:37	1
Potassium	1900		1000	220	ug/L		10/13/23 14:00	10/16/23 18:37	1
Selenium	ND		5.0	0.89	ug/L		10/13/23 14:00	10/16/23 18:37	1
Sodium	19000		1000	330	ug/L		10/13/23 14:00	10/16/23 18:37	1
Thallium	0.20	J B	1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:37	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		10/13/23 14:00	10/17/23 13:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230		5.0	2.6	mg/L			10/13/23 18:21	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230		5.0	2.6	mg/L			10/13/23 18:21	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 18:21	1
Fluoride (EPA 300.0-1993 R2.1)	0.12		0.050	0.024	mg/L			10/31/23 17:57	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	0.252		0.105	0.108	1.00	0.103	pCi/L	10/17/23 10:23	11/08/23 13:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.4		30 - 110					10/17/23 10:23	11/08/23 13:28	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	0.729		0.441	0.446	1.00	0.657	pCi/L	10/17/23 10:26	11/03/23 11:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.4		30 - 110					10/17/23 10:26	11/03/23 11:36	1
Y Carrier	75.9		30 - 110					10/17/23 10:26	11/03/23 11:36	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-23-F-A4-20231010-01

Lab Sample ID: 240-193490-1

Date Collected: 10/10/23 13:08

Matrix: Water

Date Received: 10/12/23 14:25

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	0.981		0.453	0.459	5.00	0.657	pCi/L		11/10/23 09:28	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-08-F-A4-20231010-01

Lab Sample ID: 240-193490-2

Date Collected: 10/10/23 14:37

Matrix: Water

Date Received: 10/12/23 14:25

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		10/13/23 14:00	10/16/23 18:40	1
Arsenic	1.4	J	5.0	0.75	ug/L		10/13/23 14:00	10/16/23 18:40	1
Barium	110		5.0	2.2	ug/L		10/13/23 14:00	10/16/23 18:40	1
Beryllium	ND		1.0	0.62	ug/L		10/13/23 14:00	10/16/23 18:40	1
Cadmium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:40	1
Chromium	ND		5.0	1.2	ug/L		10/13/23 14:00	10/16/23 18:40	1
Cobalt	1.6		1.0	0.19	ug/L		10/13/23 14:00	10/16/23 18:40	1
Lead	ND		1.0	0.45	ug/L		10/13/23 14:00	10/16/23 18:40	1
Lithium	4.9	J	8.0	1.7	ug/L		10/13/23 14:00	10/17/23 18:26	1
Magnesium	12000		1000	61	ug/L		10/13/23 14:00	10/16/23 18:40	1
Molybdenum	ND		5.0	1.1	ug/L		10/13/23 14:00	10/16/23 18:40	1
Potassium	1400		1000	220	ug/L		10/13/23 14:00	10/16/23 18:40	1
Selenium	ND		5.0	0.89	ug/L		10/13/23 14:00	10/16/23 18:40	1
Sodium	12000		1000	330	ug/L		10/13/23 14:00	10/16/23 18:40	1
Thallium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:40	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		10/13/23 14:00	10/17/23 13:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	190		5.0	2.6	mg/L			10/13/23 18:26	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	190		5.0	2.6	mg/L			10/13/23 18:26	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 18:26	1
Fluoride (EPA 300.0-1993 R2.1)	0.11		0.050	0.024	mg/L			10/31/23 18:18	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.139	U	0.115	0.115	1.00	0.167	pCi/L	10/17/23 10:23	11/08/23 13:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.4		30 - 110					10/17/23 10:23	11/08/23 13:35	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.375	U	0.498	0.499	1.00	0.832	pCi/L	10/17/23 10:26	11/03/23 11:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.4		30 - 110					10/17/23 10:26	11/03/23 11:36	1
Y Carrier	74.0		30 - 110					10/17/23 10:26	11/03/23 11:36	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-08-F-A4-20231010-01

Lab Sample ID: 240-193490-2

Date Collected: 10/10/23 14:37

Matrix: Water

Date Received: 10/12/23 14:25

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.515	U	0.511	0.512	5.00	0.832	pCi/L		11/10/23 09:28	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-21-F-A4-20231011-01

Lab Sample ID: 240-193490-3

Date Collected: 10/11/23 09:46

Matrix: Water

Date Received: 10/12/23 14:25

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		10/13/23 14:00	10/16/23 18:20	1
Arsenic	6.0		5.0	0.75	ug/L		10/13/23 14:00	10/16/23 18:20	1
Barium	170		5.0	2.2	ug/L		10/13/23 14:00	10/16/23 18:20	1
Beryllium	ND		1.0	0.62	ug/L		10/13/23 14:00	10/16/23 18:20	1
Cadmium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:20	1
Chromium	3.8 J		5.0	1.2	ug/L		10/13/23 14:00	10/16/23 18:20	1
Cobalt	1.7		1.0	0.19	ug/L		10/13/23 14:00	10/16/23 18:20	1
Lead	2.9		1.0	0.45	ug/L		10/13/23 14:00	10/16/23 18:20	1
Lithium	8.7		8.0	1.7	ug/L		10/13/23 14:00	10/17/23 18:08	1
Magnesium	15000		1000	61	ug/L		10/13/23 14:00	10/16/23 18:20	1
Molybdenum	ND		5.0	1.1	ug/L		10/13/23 14:00	10/16/23 18:20	1
Potassium	2400		1000	220	ug/L		10/13/23 14:00	10/16/23 18:20	1
Selenium	ND		5.0	0.89	ug/L		10/13/23 14:00	10/16/23 18:20	1
Sodium	27000		1000	330	ug/L		10/13/23 14:00	10/16/23 18:20	1
Thallium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:20	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		10/13/23 14:00	10/17/23 13:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	240		5.0	2.6	mg/L			10/13/23 19:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	240		5.0	2.6	mg/L			10/13/23 19:06	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 19:06	1
Fluoride (EPA 300.0-1993 R2.1)	0.10		0.050	0.024	mg/L			11/02/23 10:55	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	0.527		0.210	0.215	1.00	0.228	pCi/L	10/17/23 10:23	11/08/23 13:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	70.4		30 - 110					10/17/23 10:23	11/08/23 13:35	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	1.31 G		0.730	0.740	1.00	1.05	pCi/L	10/17/23 10:26	11/03/23 11:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	70.4		30 - 110					10/17/23 10:26	11/03/23 11:36	1
Y Carrier	77.8		30 - 110					10/17/23 10:26	11/03/23 11:36	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-21-F-A4-20231011-01

Lab Sample ID: 240-193490-3

Date Collected: 10/11/23 09:46

Matrix: Water

Date Received: 10/12/23 14:25

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	1.84		0.760	0.771	5.00	1.05	pCi/L		11/10/23 09:28	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-22-F-A4-20231011-01

Lab Sample ID: 240-193490-4

Date Collected: 10/11/23 10:59

Matrix: Water

Date Received: 10/12/23 14:25

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		10/13/23 14:00	10/16/23 18:42	1
Arsenic	2.3	J	5.0	0.75	ug/L		10/13/23 14:00	10/16/23 18:42	1
Barium	140		5.0	2.2	ug/L		10/13/23 14:00	10/16/23 18:42	1
Beryllium	ND		1.0	0.62	ug/L		10/13/23 14:00	10/16/23 18:42	1
Cadmium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:42	1
Chromium	1.3	J	5.0	1.2	ug/L		10/13/23 14:00	10/16/23 18:42	1
Cobalt	1.2		1.0	0.19	ug/L		10/13/23 14:00	10/16/23 18:42	1
Lead	1.4		1.0	0.45	ug/L		10/13/23 14:00	10/16/23 18:42	1
Lithium	6.8	J	8.0	1.7	ug/L		10/13/23 14:00	10/17/23 18:28	1
Magnesium	19000		1000	61	ug/L		10/13/23 14:00	10/16/23 18:42	1
Molybdenum	ND		5.0	1.1	ug/L		10/13/23 14:00	10/16/23 18:42	1
Potassium	2800		1000	220	ug/L		10/13/23 14:00	10/16/23 18:42	1
Selenium	ND		5.0	0.89	ug/L		10/13/23 14:00	10/16/23 18:42	1
Sodium	19000		1000	330	ug/L		10/13/23 14:00	10/16/23 18:42	1
Thallium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:42	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		10/13/23 14:00	10/17/23 13:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	230		5.0	2.6	mg/L			10/13/23 19:36	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	230		5.0	2.6	mg/L			10/13/23 19:36	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 19:36	1
Fluoride (EPA 300.0-1993 R2.1)	0.070		0.050	0.024	mg/L			10/31/23 18:38	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	0.176	U	0.143	0.144	1.00	0.216	pCi/L	10/17/23 10:23	11/08/23 13:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.2		30 - 110					10/17/23 10:23	11/08/23 13:36	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	1.05		0.610	0.618	1.00	0.890	pCi/L	10/17/23 10:26	11/03/23 11:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.2		30 - 110					10/17/23 10:26	11/03/23 11:37	1
Y Carrier	72.1		30 - 110					10/17/23 10:26	11/03/23 11:37	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-22-F-A4-20231011-01

Lab Sample ID: 240-193490-4

Date Collected: 10/11/23 10:59

Matrix: Water

Date Received: 10/12/23 14:25

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	1.23		0.627	0.635	5.00	0.890	pCi/L		11/10/23 09:28	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-18-F-A4-20231011-01

Lab Sample ID: 240-193490-5

Date Collected: 10/11/23 12:09

Matrix: Water

Date Received: 10/12/23 14:25

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		10/13/23 14:00	10/16/23 18:50	1
Arsenic	ND		5.0	0.75	ug/L		10/13/23 14:00	10/16/23 18:50	1
Barium	26		5.0	2.2	ug/L		10/13/23 14:00	10/16/23 18:50	1
Beryllium	ND		1.0	0.62	ug/L		10/13/23 14:00	10/16/23 18:50	1
Cadmium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:50	1
Chromium	ND		5.0	1.2	ug/L		10/13/23 14:00	10/16/23 18:50	1
Cobalt	1.2		1.0	0.19	ug/L		10/13/23 14:00	10/16/23 18:50	1
Lead	ND		1.0	0.45	ug/L		10/13/23 14:00	10/16/23 18:50	1
Lithium	8.2		8.0	1.7	ug/L		10/13/23 14:00	10/17/23 18:31	1
Magnesium	20000		1000	61	ug/L		10/13/23 14:00	10/16/23 18:50	1
Molybdenum	ND		5.0	1.1	ug/L		10/13/23 14:00	10/16/23 18:50	1
Potassium	1300		1000	220	ug/L		10/13/23 14:00	10/16/23 18:50	1
Selenium	ND		5.0	0.89	ug/L		10/13/23 14:00	10/16/23 18:50	1
Sodium	16000		1000	330	ug/L		10/13/23 14:00	10/16/23 18:50	1
Thallium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:50	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		10/13/23 14:00	10/17/23 13:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	88		5.0	2.6	mg/L			10/13/23 19:52	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	88		5.0	2.6	mg/L			10/13/23 19:52	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 19:52	1
Fluoride (EPA 300.0-1993 R2.1)	0.030	J	0.050	0.024	mg/L			10/31/23 19:38	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	-0.00400	U	0.0891	0.0891	1.00	0.178	pCi/L	10/17/23 10:23	11/08/23 13:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.9		30 - 110					10/17/23 10:23	11/08/23 13:36	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.442	U	0.424	0.426	1.00	0.678	pCi/L	10/17/23 10:26	11/03/23 11:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.9		30 - 110					10/17/23 10:26	11/03/23 11:37	1
Y Carrier	72.5		30 - 110					10/17/23 10:26	11/03/23 11:37	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-18-F-A4-20231011-01

Lab Sample ID: 240-193490-5

Date Collected: 10/11/23 12:09

Matrix: Water

Date Received: 10/12/23 14:25

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.438	U	0.433	0.435	5.00	0.678	pCi/L		11/10/23 09:28	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: DUP-001-F-A4-20231011-01

Lab Sample ID: 240-193490-6

Date Collected: 10/11/23 00:00

Matrix: Water

Date Received: 10/12/23 14:25

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		10/13/23 14:00	10/16/23 18:52	1
Arsenic	ND		5.0	0.75	ug/L		10/13/23 14:00	10/16/23 18:52	1
Barium	24		5.0	2.2	ug/L		10/13/23 14:00	10/16/23 18:52	1
Beryllium	ND		1.0	0.62	ug/L		10/13/23 14:00	10/16/23 18:52	1
Cadmium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:52	1
Chromium	ND		5.0	1.2	ug/L		10/13/23 14:00	10/16/23 18:52	1
Cobalt	1.1		1.0	0.19	ug/L		10/13/23 14:00	10/16/23 18:52	1
Lead	ND		1.0	0.45	ug/L		10/13/23 14:00	10/16/23 18:52	1
Lithium	7.4 J		8.0	1.7	ug/L		10/13/23 14:00	10/17/23 18:33	1
Magnesium	18000		1000	61	ug/L		10/13/23 14:00	10/16/23 18:52	1
Molybdenum	ND		5.0	1.1	ug/L		10/13/23 14:00	10/16/23 18:52	1
Potassium	1200		1000	220	ug/L		10/13/23 14:00	10/16/23 18:52	1
Selenium	ND		5.0	0.89	ug/L		10/13/23 14:00	10/16/23 18:52	1
Sodium	15000		1000	330	ug/L		10/13/23 14:00	10/16/23 18:52	1
Thallium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:52	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		10/13/23 14:00	10/17/23 13:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	88		5.0	2.6	mg/L			10/13/23 20:01	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	88		5.0	2.6	mg/L			10/13/23 20:01	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 20:01	1
Fluoride (EPA 300.0-1993 R2.1)	0.051		0.050	0.024	mg/L			11/02/23 11:56	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	0.0855	U	0.0855	0.0858	1.00	0.133	pCi/L	10/17/23 10:23	11/08/23 13:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.8		30 - 110					10/17/23 10:23	11/08/23 13:36	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	0.845		0.439	0.446	1.00	0.610	pCi/L	10/17/23 10:26	11/03/23 11:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.8		30 - 110					10/17/23 10:26	11/03/23 11:37	1
Y Carrier	76.6		30 - 110					10/17/23 10:26	11/03/23 11:37	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: DUP-001-F-A4-20231011-01

Lab Sample ID: 240-193490-6

Date Collected: 10/11/23 00:00

Matrix: Water

Date Received: 10/12/23 14:25

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.930		0.447	0.454	5.00	0.610	pCi/L		11/10/23 09:28	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-10-F-A4-20231011-01

Lab Sample ID: 240-193490-7

Date Collected: 10/11/23 13:17

Matrix: Water

Date Received: 10/12/23 14:25

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		10/13/23 14:00	10/16/23 18:54	1
Arsenic	1.4	J	5.0	0.75	ug/L		10/13/23 14:00	10/16/23 18:54	1
Barium	39		5.0	2.2	ug/L		10/13/23 14:00	10/16/23 18:54	1
Beryllium	ND		1.0	0.62	ug/L		10/13/23 14:00	10/16/23 18:54	1
Cadmium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:54	1
Chromium	1.5	J	5.0	1.2	ug/L		10/13/23 14:00	10/16/23 18:54	1
Cobalt	1.4		1.0	0.19	ug/L		10/13/23 14:00	10/16/23 18:54	1
Lead	1.2		1.0	0.45	ug/L		10/13/23 14:00	10/16/23 18:54	1
Lithium	5.9	J	8.0	1.7	ug/L		10/13/23 14:00	10/17/23 18:36	1
Magnesium	26000		1000	61	ug/L		10/13/23 14:00	10/16/23 18:54	1
Molybdenum	ND		5.0	1.1	ug/L		10/13/23 14:00	10/16/23 18:54	1
Potassium	1600		1000	220	ug/L		10/13/23 14:00	10/16/23 18:54	1
Selenium	ND		5.0	0.89	ug/L		10/13/23 14:00	10/16/23 18:54	1
Sodium	45000		1000	330	ug/L		10/13/23 14:00	10/16/23 18:54	1
Thallium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:54	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		10/13/23 14:00	10/17/23 13:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	220		5.0	2.6	mg/L			10/13/23 20:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	220		5.0	2.6	mg/L			10/13/23 20:06	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 20:06	1
Fluoride (EPA 300.0-1993 R2.1)	0.15		0.050	0.024	mg/L			11/02/23 12:16	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0435	U	0.0937	0.0938	1.00	0.171	pCi/L	10/17/23 10:23	11/08/23 13:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.6		30 - 110					10/17/23 10:23	11/08/23 13:36	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.608	U	0.437	0.441	1.00	0.652	pCi/L	10/17/23 10:26	11/03/23 11:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.6		30 - 110					10/17/23 10:26	11/03/23 11:37	1
Y Carrier	75.1		30 - 110					10/17/23 10:26	11/03/23 11:37	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-10-F-A4-20231011-01

Lab Sample ID: 240-193490-7

Date Collected: 10/11/23 13:17

Matrix: Water

Date Received: 10/12/23 14:25

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	0.652		0.447	0.451	5.00	0.652	pCi/L		11/10/23 09:28	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-16-F-A4-20231011-01

Lab Sample ID: 240-193490-8

Date Collected: 10/11/23 14:29

Matrix: Water

Date Received: 10/12/23 14:25

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		10/13/23 14:00	10/16/23 18:57	1
Arsenic	1.1	J	5.0	0.75	ug/L		10/13/23 14:00	10/16/23 18:57	1
Barium	46		5.0	2.2	ug/L		10/13/23 14:00	10/16/23 18:57	1
Beryllium	ND		1.0	0.62	ug/L		10/13/23 14:00	10/16/23 18:57	1
Cadmium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:57	1
Chromium	ND		5.0	1.2	ug/L		10/13/23 14:00	10/16/23 18:57	1
Cobalt	1.6		1.0	0.19	ug/L		10/13/23 14:00	10/16/23 18:57	1
Lead	1.1		1.0	0.45	ug/L		10/13/23 14:00	10/16/23 18:57	1
Lithium	7.8	J	8.0	1.7	ug/L		10/13/23 14:00	10/17/23 18:38	1
Magnesium	22000		1000	61	ug/L		10/13/23 14:00	10/16/23 18:57	1
Molybdenum	ND		5.0	1.1	ug/L		10/13/23 14:00	10/16/23 18:57	1
Potassium	1600		1000	220	ug/L		10/13/23 14:00	10/16/23 18:57	1
Selenium	ND		5.0	0.89	ug/L		10/13/23 14:00	10/16/23 18:57	1
Sodium	15000		1000	330	ug/L		10/13/23 14:00	10/16/23 18:57	1
Thallium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:57	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		10/13/23 14:00	10/17/23 14:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	160		5.0	2.6	mg/L			10/13/23 18:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	160		5.0	2.6	mg/L			10/13/23 18:31	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 18:31	1
Fluoride (EPA 300.0-1993 R2.1)	0.044	J	0.050	0.024	mg/L			11/02/23 12:36	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.111	U	0.106	0.107	1.00	0.162	pCi/L	10/17/23 10:23	11/08/23 13:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.3		30 - 110					10/17/23 10:23	11/08/23 13:36	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.679	U	0.528	0.532	1.00	0.816	pCi/L	10/17/23 10:26	11/03/23 11:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.3		30 - 110					10/17/23 10:26	11/03/23 11:37	1
Y Carrier	77.8		30 - 110					10/17/23 10:26	11/03/23 11:37	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-16-F-A4-20231011-01

Lab Sample ID: 240-193490-8

Date Collected: 10/11/23 14:29

Matrix: Water

Date Received: 10/12/23 14:25

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.790	U	0.539	0.543	5.00	0.816	pCi/L		11/10/23 09:28	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: EB-001-F-A4-20231011-01

Lab Sample ID: 240-193490-9

Date Collected: 10/11/23 15:00

Matrix: Water

Date Received: 10/12/23 14:25

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		10/13/23 14:00	10/16/23 18:59	1
Arsenic	ND		5.0	0.75	ug/L		10/13/23 14:00	10/16/23 18:59	1
Barium	ND		5.0	2.2	ug/L		10/13/23 14:00	10/16/23 18:59	1
Beryllium	ND		1.0	0.62	ug/L		10/13/23 14:00	10/16/23 18:59	1
Cadmium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:59	1
Chromium	ND		5.0	1.2	ug/L		10/13/23 14:00	10/16/23 18:59	1
Cobalt	ND		1.0	0.19	ug/L		10/13/23 14:00	10/16/23 18:59	1
Lead	ND		1.0	0.45	ug/L		10/13/23 14:00	10/16/23 18:59	1
Lithium	ND		8.0	1.7	ug/L		10/13/23 14:00	10/17/23 18:41	1
Magnesium	ND		1000	61	ug/L		10/13/23 14:00	10/16/23 18:59	1
Molybdenum	ND		5.0	1.1	ug/L		10/13/23 14:00	10/16/23 18:59	1
Potassium	ND		1000	220	ug/L		10/13/23 14:00	10/16/23 18:59	1
Selenium	ND		5.0	0.89	ug/L		10/13/23 14:00	10/16/23 18:59	1
Sodium	ND		1000	330	ug/L		10/13/23 14:00	10/16/23 18:59	1
Thallium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:59	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		10/13/23 14:00	10/17/23 14:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	3.0	J	5.0	2.6	mg/L			10/13/23 18:38	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	3.0	J	5.0	2.6	mg/L			10/13/23 18:38	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/13/23 18:38	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			10/31/23 20:59	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.0408	U	0.0674	0.0675	1.00	0.118	pCi/L	10/17/23 10:23	11/08/23 13:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.9		30 - 110					10/17/23 10:23	11/08/23 13:36	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.792		0.409	0.415	1.00	0.567	pCi/L	10/17/23 10:26	11/03/23 11:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.9		30 - 110					10/17/23 10:26	11/03/23 11:37	1
Y Carrier	75.9		30 - 110					10/17/23 10:26	11/03/23 11:37	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: EB-001-F-A4-20231011-01

Lab Sample ID: 240-193490-9

Date Collected: 10/11/23 15:00

Matrix: Water

Date Received: 10/12/23 14:25

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	0.833		0.415	0.420	5.00	0.567	pCi/L		11/10/23 14:59	1

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Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
240-193490-1	BAC-23-F-A4-20231010-01	95.4	
240-193490-2	BAC-08-F-A4-20231010-01	92.4	
240-193490-3	BAC-21-F-A4-20231011-01	70.4	
240-193490-3 MS	BAC-21-F-A4-20231011-01	63.6	
240-193490-3 MSD	BAC-21-F-A4-20231011-01	54.8	
240-193490-4	BAC-22-F-A4-20231011-01	92.2	
240-193490-5	BAC-18-F-A4-20231011-01	83.9	
240-193490-6	DUP-001-F-A4-20231011-01	84.8	
240-193490-7	BAC-10-F-A4-20231011-01	93.6	
240-193490-8	BAC-16-F-A4-20231011-01	87.3	
240-193490-9	EB-001-F-A4-20231011-01	93.9	
LCS 160-632172/A	Lab Control Sample	98.5	
MB 160-632172/1-A	Method Blank	96.1	

Tracer/Carrier Legend
 Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-193490-1	BAC-23-F-A4-20231010-01	95.4	75.9
240-193490-2	BAC-08-F-A4-20231010-01	92.4	74.0
240-193490-3	BAC-21-F-A4-20231011-01	70.4	77.8
240-193490-3 MS	BAC-21-F-A4-20231011-01	63.6	76.3
240-193490-3 MSD	BAC-21-F-A4-20231011-01	54.8	71.0
240-193490-4	BAC-22-F-A4-20231011-01	92.2	72.1
240-193490-5	BAC-18-F-A4-20231011-01	83.9	72.5
240-193490-6	DUP-001-F-A4-20231011-01	84.8	76.6
240-193490-7	BAC-10-F-A4-20231011-01	93.6	75.1
240-193490-8	BAC-16-F-A4-20231011-01	87.3	77.8
240-193490-9	EB-001-F-A4-20231011-01	93.9	75.9
LCS 160-632173/A	Lab Control Sample	98.5	88.6
MB 160-632173/1-A	Method Blank	96.1	75.9

Tracer/Carrier Legend
 Ba = Ba Carrier
 Y = Y Carrier

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-590775/1-A
Matrix: Water
Analysis Batch: 591036

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 590775

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	ND		2.0	0.57	ug/L		10/13/23 14:00	10/16/23 18:10	1
Arsenic	ND		5.0	0.75	ug/L		10/13/23 14:00	10/16/23 18:10	1
Barium	ND		5.0	2.2	ug/L		10/13/23 14:00	10/16/23 18:10	1
Beryllium	ND		1.0	0.62	ug/L		10/13/23 14:00	10/16/23 18:10	1
Cadmium	ND		1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:10	1
Chromium	ND		5.0	1.2	ug/L		10/13/23 14:00	10/16/23 18:10	1
Cobalt	ND		1.0	0.19	ug/L		10/13/23 14:00	10/16/23 18:10	1
Lead	ND		1.0	0.45	ug/L		10/13/23 14:00	10/16/23 18:10	1
Lithium	ND		8.0	1.7	ug/L		10/13/23 14:00	10/16/23 18:10	1
Magnesium	ND		1000	61	ug/L		10/13/23 14:00	10/16/23 18:10	1
Molybdenum	ND		5.0	1.1	ug/L		10/13/23 14:00	10/16/23 18:10	1
Potassium	ND		1000	220	ug/L		10/13/23 14:00	10/16/23 18:10	1
Selenium	ND		5.0	0.89	ug/L		10/13/23 14:00	10/16/23 18:10	1
Sodium	ND		1000	330	ug/L		10/13/23 14:00	10/16/23 18:10	1
Thallium	0.405	J	1.0	0.20	ug/L		10/13/23 14:00	10/16/23 18:10	1

Lab Sample ID: LCS 240-590775/2-A
Matrix: Water
Analysis Batch: 591036

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 590775

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Antimony	100	102		ug/L		102	80 - 120
Arsenic	1000	927		ug/L		93	80 - 120
Barium	1000	929		ug/L		93	80 - 120
Beryllium	500	486		ug/L		97	80 - 120
Cadmium	500	476		ug/L		95	80 - 120
Chromium	500	463		ug/L		93	80 - 120
Cobalt	500	475		ug/L		95	80 - 120
Lead	500	468		ug/L		94	80 - 120
Lithium	500	484		ug/L		97	80 - 120
Magnesium	25000	24000		ug/L		96	80 - 120
Molybdenum	500	476		ug/L		95	80 - 120
Potassium	25000	23900		ug/L		95	80 - 120
Selenium	1000	941		ug/L		94	80 - 120
Sodium	25000	23800		ug/L		95	80 - 120
Thallium	1000	923		ug/L		92	80 - 120

Lab Sample ID: 240-193490-3 MS
Matrix: Water
Analysis Batch: 591036

Client Sample ID: BAC-21-F-A4-20231011-01
Prep Type: Total Recoverable
Prep Batch: 590775

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
Antimony	ND		100	103		ug/L		103	80 - 120
Arsenic	6.0		1000	951		ug/L		95	80 - 120
Barium	170		1000	1110		ug/L		94	80 - 120
Beryllium	ND		500	492		ug/L		98	80 - 120
Cadmium	ND		500	475		ug/L		95	80 - 120
Chromium	3.8	J	500	480		ug/L		95	80 - 120
Cobalt	1.7		500	482		ug/L		96	80 - 120

Eurofins Cleveland

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

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

Lab Sample ID: 240-193490-3 MS
Matrix: Water
Analysis Batch: 591036

Client Sample ID: BAC-21-F-A4-20231011-01
Prep Type: Total Recoverable
Prep Batch: 590775

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier				Limits	
Lead	2.9		500	474		ug/L		94	80 - 120	
Magnesium	15000		25000	38200		ug/L		93	80 - 120	
Molybdenum	ND		500	497		ug/L		99	80 - 120	
Potassium	2400		25000	26500		ug/L		97	80 - 120	
Selenium	ND		1000	956		ug/L		96	80 - 120	
Sodium	27000		25000	50200		ug/L		92	80 - 120	
Thallium	ND		1000	935		ug/L		93	80 - 120	

Lab Sample ID: 240-193490-3 MS
Matrix: Water
Analysis Batch: 591232

Client Sample ID: BAC-21-F-A4-20231011-01
Prep Type: Total Recoverable
Prep Batch: 590775

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier				Limits	
Lithium	8.7		500	492		ug/L		97	80 - 120	

Lab Sample ID: 240-193490-3 MSD
Matrix: Water
Analysis Batch: 591036

Client Sample ID: BAC-21-F-A4-20231011-01
Prep Type: Total Recoverable
Prep Batch: 590775

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec		RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit	
Antimony	ND		100	104		ug/L		104	80 - 120		1	20
Arsenic	6.0		1000	933		ug/L		93	80 - 120		2	20
Barium	170		1000	1120		ug/L		95	80 - 120		0	20
Beryllium	ND		500	487		ug/L		97	80 - 120		1	20
Cadmium	ND		500	475		ug/L		95	80 - 120		0	20
Chromium	3.8	J	500	477		ug/L		95	80 - 120		1	20
Cobalt	1.7		500	474		ug/L		94	80 - 120		2	20
Lead	2.9		500	474		ug/L		94	80 - 120		0	20
Magnesium	15000		25000	38600		ug/L		95	80 - 120		1	20
Molybdenum	ND		500	488		ug/L		98	80 - 120		2	20
Potassium	2400		25000	26500		ug/L		97	80 - 120		0	20
Selenium	ND		1000	940		ug/L		94	80 - 120		2	20
Sodium	27000		25000	50800		ug/L		95	80 - 120		1	20
Thallium	ND		1000	942		ug/L		94	80 - 120		1	20

Lab Sample ID: 240-193490-3 MSD
Matrix: Water
Analysis Batch: 591232

Client Sample ID: BAC-21-F-A4-20231011-01
Prep Type: Total Recoverable
Prep Batch: 590775

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec		RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit	
Lithium	8.7		500	494		ug/L		97	80 - 120		0	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-590777/1-A
Matrix: Water
Analysis Batch: 591097

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 590777

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.20	0.13	ug/L		10/13/23 14:00	10/17/23 13:29	1

Eurofins Cleveland

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: LCS 240-590777/2-A
Matrix: Water
Analysis Batch: 591097

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 590777

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.42		ug/L		108	80 - 120

Lab Sample ID: 240-193490-3 MS
Matrix: Water
Analysis Batch: 591097

Client Sample ID: BAC-21-F-A4-20231011-01
Prep Type: Total/NA
Prep Batch: 590777

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		1.00	1.18		ug/L		118	80 - 120

Lab Sample ID: 240-193490-3 MSD
Matrix: Water
Analysis Batch: 591097

Client Sample ID: BAC-21-F-A4-20231011-01
Prep Type: Total/NA
Prep Batch: 590777

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	16	20

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-590918/4
Matrix: Water
Analysis Batch: 590918

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			10/13/23 18:07	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/13/23 18:07	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/13/23 18:07	1

Lab Sample ID: LCS 240-590918/3
Matrix: Water
Analysis Batch: 590918

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	82.0		mg/L		102	86 - 123

Lab Sample ID: 240-193490-3 DU
Matrix: Water
Analysis Batch: 590918

Client Sample ID: BAC-21-F-A4-20231011-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	240		241		mg/L		0.3	20
Bicarbonate Alkalinity as CaCO3	240		241		mg/L		0.3	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-592910/3
Matrix: Water
Analysis Batch: 592910

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			10/31/23 15:36	1

Lab Sample ID: LCS 240-592910/4
Matrix: Water
Analysis Batch: 592910

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.56		mg/L		102	90 - 110

Lab Sample ID: 240-193490-9 MS
Matrix: Water
Analysis Batch: 592910

Client Sample ID: EB-001-F-A4-20231011-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	ND		2.50	2.66		mg/L		106	80 - 120

Lab Sample ID: 240-193490-9 MSD
Matrix: Water
Analysis Batch: 592910

Client Sample ID: EB-001-F-A4-20231011-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	ND		2.50	2.63		mg/L		105	80 - 120	1	15

Lab Sample ID: MB 240-593006/3
Matrix: Water
Analysis Batch: 593006

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			11/02/23 10:15	1

Lab Sample ID: LCS 240-593006/4
Matrix: Water
Analysis Batch: 593006

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.62		mg/L		105	90 - 110

Lab Sample ID: 240-193490-3 MS
Matrix: Water
Analysis Batch: 593006

Client Sample ID: BAC-21-F-A4-20231011-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.10		2.50	2.68		mg/L		103	80 - 120

Lab Sample ID: 240-193490-3 MSD
Matrix: Water
Analysis Batch: 593006

Client Sample ID: BAC-21-F-A4-20231011-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.10		2.50	2.81		mg/L		108	80 - 120	5	15

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-632172/1-A
Matrix: Water
Analysis Batch: 635814

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 632172

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.01014	U	0.0528	0.0528	1.00	0.107	pCi/L	10/17/23 10:23	11/08/23 13:26	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	96.1		30 - 110		10/17/23 10:23	11/08/23 13:26	1			

Lab Sample ID: LCS 160-632172/2-A
Matrix: Water
Analysis Batch: 635814

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 632172

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	10.47		1.12	1.00	0.117	pCi/L	92	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	98.5		30 - 110						

Lab Sample ID: 240-193490-3 MS
Matrix: Water
Analysis Batch: 635860

Client Sample ID: BAC-21-F-A4-20231011-01
Prep Type: Total/NA
Prep Batch: 632172

Analyte	Sample	Sample	Spike Added	MS	MS	Total	RL	MDC	Unit	%Rec	%Rec Limits
	Result	Qual		Result	Qual	Uncert. (2σ+/-)					
Radium-226	0.527		15.1	12.98		1.51	1.00	0.287	pCi/L	82	60 - 140
Carrier	MS %Yield	MS Qualifier	Limits								
Ba Carrier	63.6		30 - 110								

Lab Sample ID: 240-193490-3 MSD
Matrix: Water
Analysis Batch: 635860

Client Sample ID: BAC-21-F-A4-20231011-01
Prep Type: Total/NA
Prep Batch: 632172

Analyte	Sample	Sample	Spike Added	MSD	MSD	Total	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
	Result	Qual		Result	Qual	Uncert. (2σ+/-)							
Radium-226	0.527		14.9	12.71		1.51	1.00	0.299	pCi/L	82	60 - 140	0.09	1
Carrier	MSD %Yield	MSD Qualifier	Limits										
Ba Carrier	54.8		30 - 110										

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-632173/1-A
Matrix: Water
Analysis Batch: 635024

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 632173

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.2967	U	0.481	0.481	1.00	0.820	pCi/L	10/17/23 10:26	11/03/23 14:55	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

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

Carrier	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Yield	Qualifier				
Ba Carrier	96.1		30 - 110	10/17/23 10:26	11/03/23 14:55	1
Y Carrier	75.9		30 - 110	10/17/23 10:26	11/03/23 14:55	1

Lab Sample ID: LCS 160-632173/2-A
 Matrix: Water
 Analysis Batch: 635024

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 632173

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	7.75	7.753		1.08	1.00	0.454	pCi/L	100	75 - 125

Carrier	LCS LCS		Limits
	%Yield	Qualifier	
Ba Carrier	98.5		30 - 110
Y Carrier	88.6		30 - 110

Lab Sample ID: 240-193490-3 MS
 Matrix: Water
 Analysis Batch: 635114

Client Sample ID: BAC-21-F-A4-20231011-01
 Prep Type: Total/NA
 Prep Batch: 632173

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	1.31	G	10.4	14.33		2.18	1.00	1.13	pCi/L	126	60 - 140

Carrier	MS MS		Limits
	%Yield	Qualifier	
Ba Carrier	63.6		30 - 110
Y Carrier	76.3		30 - 110

Lab Sample ID: 240-193490-3 MSD
 Matrix: Water
 Analysis Batch: 635114

Client Sample ID: BAC-21-F-A4-20231011-01
 Prep Type: Total/NA
 Prep Batch: 632173

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	Limit
Radium-228	1.31	G	10.2	12.07		2.12	1.00	1.36	pCi/L	105	60 - 140	0.53	1

Carrier	MSD MSD		Limits
	%Yield	Qualifier	
Ba Carrier	54.8		30 - 110
Y Carrier	71.0		30 - 110

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Metals

Prep Batch: 590775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193490-1	BAC-23-F-A4-20231010-01	Total Recoverable	Water	3005A	
240-193490-2	BAC-08-F-A4-20231010-01	Total Recoverable	Water	3005A	
240-193490-3	BAC-21-F-A4-20231011-01	Total Recoverable	Water	3005A	
240-193490-4	BAC-22-F-A4-20231011-01	Total Recoverable	Water	3005A	
240-193490-5	BAC-18-F-A4-20231011-01	Total Recoverable	Water	3005A	
240-193490-6	DUP-001-F-A4-20231011-01	Total Recoverable	Water	3005A	
240-193490-7	BAC-10-F-A4-20231011-01	Total Recoverable	Water	3005A	
240-193490-8	BAC-16-F-A4-20231011-01	Total Recoverable	Water	3005A	
240-193490-9	EB-001-F-A4-20231011-01	Total Recoverable	Water	3005A	
MB 240-590775/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-590775/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-193490-3 MS	BAC-21-F-A4-20231011-01	Total Recoverable	Water	3005A	
240-193490-3 MSD	BAC-21-F-A4-20231011-01	Total Recoverable	Water	3005A	

Prep Batch: 590777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193490-1	BAC-23-F-A4-20231010-01	Total/NA	Water	7470A	
240-193490-2	BAC-08-F-A4-20231010-01	Total/NA	Water	7470A	
240-193490-3	BAC-21-F-A4-20231011-01	Total/NA	Water	7470A	
240-193490-4	BAC-22-F-A4-20231011-01	Total/NA	Water	7470A	
240-193490-5	BAC-18-F-A4-20231011-01	Total/NA	Water	7470A	
240-193490-6	DUP-001-F-A4-20231011-01	Total/NA	Water	7470A	
240-193490-7	BAC-10-F-A4-20231011-01	Total/NA	Water	7470A	
240-193490-8	BAC-16-F-A4-20231011-01	Total/NA	Water	7470A	
240-193490-9	EB-001-F-A4-20231011-01	Total/NA	Water	7470A	
MB 240-590777/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-590777/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-193490-3 MS	BAC-21-F-A4-20231011-01	Total/NA	Water	7470A	
240-193490-3 MSD	BAC-21-F-A4-20231011-01	Total/NA	Water	7470A	

Analysis Batch: 591036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193490-1	BAC-23-F-A4-20231010-01	Total Recoverable	Water	6020B	590775
240-193490-2	BAC-08-F-A4-20231010-01	Total Recoverable	Water	6020B	590775
240-193490-3	BAC-21-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-4	BAC-22-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-5	BAC-18-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-6	DUP-001-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-7	BAC-10-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-8	BAC-16-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-9	EB-001-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
MB 240-590775/1-A	Method Blank	Total Recoverable	Water	6020B	590775
LCS 240-590775/2-A	Lab Control Sample	Total Recoverable	Water	6020B	590775
240-193490-3 MS	BAC-21-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-3 MSD	BAC-21-F-A4-20231011-01	Total Recoverable	Water	6020B	590775

Analysis Batch: 591097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193490-1	BAC-23-F-A4-20231010-01	Total/NA	Water	7470A	590777
240-193490-2	BAC-08-F-A4-20231010-01	Total/NA	Water	7470A	590777
240-193490-3	BAC-21-F-A4-20231011-01	Total/NA	Water	7470A	590777

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Metals (Continued)

Analysis Batch: 591097 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193490-4	BAC-22-F-A4-20231011-01	Total/NA	Water	7470A	590777
240-193490-5	BAC-18-F-A4-20231011-01	Total/NA	Water	7470A	590777
240-193490-6	DUP-001-F-A4-20231011-01	Total/NA	Water	7470A	590777
240-193490-7	BAC-10-F-A4-20231011-01	Total/NA	Water	7470A	590777
240-193490-8	BAC-16-F-A4-20231011-01	Total/NA	Water	7470A	590777
240-193490-9	EB-001-F-A4-20231011-01	Total/NA	Water	7470A	590777
MB 240-590777/1-A	Method Blank	Total/NA	Water	7470A	590777
LCS 240-590777/2-A	Lab Control Sample	Total/NA	Water	7470A	590777
240-193490-3 MS	BAC-21-F-A4-20231011-01	Total/NA	Water	7470A	590777
240-193490-3 MSD	BAC-21-F-A4-20231011-01	Total/NA	Water	7470A	590777

Analysis Batch: 591232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193490-1	BAC-23-F-A4-20231010-01	Total Recoverable	Water	6020B	590775
240-193490-2	BAC-08-F-A4-20231010-01	Total Recoverable	Water	6020B	590775
240-193490-3	BAC-21-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-4	BAC-22-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-5	BAC-18-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-6	DUP-001-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-7	BAC-10-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-8	BAC-16-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-9	EB-001-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-3 MS	BAC-21-F-A4-20231011-01	Total Recoverable	Water	6020B	590775
240-193490-3 MSD	BAC-21-F-A4-20231011-01	Total Recoverable	Water	6020B	590775

General Chemistry

Analysis Batch: 590918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193490-1	BAC-23-F-A4-20231010-01	Total/NA	Water	2320B-1997	
240-193490-2	BAC-08-F-A4-20231010-01	Total/NA	Water	2320B-1997	
240-193490-3	BAC-21-F-A4-20231011-01	Total/NA	Water	2320B-1997	
240-193490-4	BAC-22-F-A4-20231011-01	Total/NA	Water	2320B-1997	
240-193490-5	BAC-18-F-A4-20231011-01	Total/NA	Water	2320B-1997	
240-193490-6	DUP-001-F-A4-20231011-01	Total/NA	Water	2320B-1997	
240-193490-7	BAC-10-F-A4-20231011-01	Total/NA	Water	2320B-1997	
240-193490-8	BAC-16-F-A4-20231011-01	Total/NA	Water	2320B-1997	
240-193490-9	EB-001-F-A4-20231011-01	Total/NA	Water	2320B-1997	
MB 240-590918/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-590918/3	Lab Control Sample	Total/NA	Water	2320B-1997	
240-193490-3 DU	BAC-21-F-A4-20231011-01	Total/NA	Water	2320B-1997	

Analysis Batch: 592910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193490-1	BAC-23-F-A4-20231010-01	Total/NA	Water	300.0-1993 R2.1	
240-193490-2	BAC-08-F-A4-20231010-01	Total/NA	Water	300.0-1993 R2.1	
240-193490-4	BAC-22-F-A4-20231011-01	Total/NA	Water	300.0-1993 R2.1	
240-193490-5	BAC-18-F-A4-20231011-01	Total/NA	Water	300.0-1993 R2.1	
240-193490-9	EB-001-F-A4-20231011-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-592910/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-592910/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

General Chemistry (Continued)

Analysis Batch: 592910 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193490-9 MS	EB-001-F-A4-20231011-01	Total/NA	Water	300.0-1993 R2.1	
240-193490-9 MSD	EB-001-F-A4-20231011-01	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 593006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193490-3	BAC-21-F-A4-20231011-01	Total/NA	Water	300.0-1993 R2.1	
240-193490-6	DUP-001-F-A4-20231011-01	Total/NA	Water	300.0-1993 R2.1	
240-193490-7	BAC-10-F-A4-20231011-01	Total/NA	Water	300.0-1993 R2.1	
240-193490-8	BAC-16-F-A4-20231011-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-593006/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-593006/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-193490-3 MS	BAC-21-F-A4-20231011-01	Total/NA	Water	300.0-1993 R2.1	
240-193490-3 MSD	BAC-21-F-A4-20231011-01	Total/NA	Water	300.0-1993 R2.1	

Rad

Prep Batch: 632172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193490-1	BAC-23-F-A4-20231010-01	Total/NA	Water	PrecSep-21	
240-193490-2	BAC-08-F-A4-20231010-01	Total/NA	Water	PrecSep-21	
240-193490-3	BAC-21-F-A4-20231011-01	Total/NA	Water	PrecSep-21	
240-193490-4	BAC-22-F-A4-20231011-01	Total/NA	Water	PrecSep-21	
240-193490-5	BAC-18-F-A4-20231011-01	Total/NA	Water	PrecSep-21	
240-193490-6	DUP-001-F-A4-20231011-01	Total/NA	Water	PrecSep-21	
240-193490-7	BAC-10-F-A4-20231011-01	Total/NA	Water	PrecSep-21	
240-193490-8	BAC-16-F-A4-20231011-01	Total/NA	Water	PrecSep-21	
240-193490-9	EB-001-F-A4-20231011-01	Total/NA	Water	PrecSep-21	
MB 160-632172/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-632172/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
240-193490-3 MS	BAC-21-F-A4-20231011-01	Total/NA	Water	PrecSep-21	
240-193490-3 MSD	BAC-21-F-A4-20231011-01	Total/NA	Water	PrecSep-21	

Prep Batch: 632173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193490-1	BAC-23-F-A4-20231010-01	Total/NA	Water	PrecSep_0	
240-193490-2	BAC-08-F-A4-20231010-01	Total/NA	Water	PrecSep_0	
240-193490-3	BAC-21-F-A4-20231011-01	Total/NA	Water	PrecSep_0	
240-193490-4	BAC-22-F-A4-20231011-01	Total/NA	Water	PrecSep_0	
240-193490-5	BAC-18-F-A4-20231011-01	Total/NA	Water	PrecSep_0	
240-193490-6	DUP-001-F-A4-20231011-01	Total/NA	Water	PrecSep_0	
240-193490-7	BAC-10-F-A4-20231011-01	Total/NA	Water	PrecSep_0	
240-193490-8	BAC-16-F-A4-20231011-01	Total/NA	Water	PrecSep_0	
240-193490-9	EB-001-F-A4-20231011-01	Total/NA	Water	PrecSep_0	
MB 160-632173/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-632173/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
240-193490-3 MS	BAC-21-F-A4-20231011-01	Total/NA	Water	PrecSep_0	
240-193490-3 MSD	BAC-21-F-A4-20231011-01	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-23-F-A4-20231010-01

Lab Sample ID: 240-193490-1

Date Collected: 10/10/23 13:08

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591036	RKT	EET CLE	10/16/23 18:37
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 18:23
Total/NA	Prep	7470A			590777	BN	EET CLE	10/13/23 14:00
Total/NA	Analysis	7470A		1	591097	GK	EET CLE	10/17/23 13:44
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 18:21
Total/NA	Analysis	300.0-1993 R2.1		1	592910	JWW	EET CLE	10/31/23 17:57
Total/NA	Prep	PrecSep-21			632172	KAC	EET SL	10/17/23 10:23
Total/NA	Analysis	9315		1	635814	SCB	EET SL	11/08/23 13:28
Total/NA	Prep	PrecSep_0			632173	KAC	EET SL	10/17/23 10:26
Total/NA	Analysis	9320		1	635114	SCB	EET SL	11/03/23 11:36
Total/NA	Analysis	Ra226_Ra228		1	636194	EMH	EET SL	11/10/23 09:28

Client Sample ID: BAC-08-F-A4-20231010-01

Lab Sample ID: 240-193490-2

Date Collected: 10/10/23 14:37

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591036	RKT	EET CLE	10/16/23 18:40
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 18:26
Total/NA	Prep	7470A			590777	BN	EET CLE	10/13/23 14:00
Total/NA	Analysis	7470A		1	591097	GK	EET CLE	10/17/23 13:46
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 18:26
Total/NA	Analysis	300.0-1993 R2.1		1	592910	JWW	EET CLE	10/31/23 18:18
Total/NA	Prep	PrecSep-21			632172	KAC	EET SL	10/17/23 10:23
Total/NA	Analysis	9315		1	635860	SCB	EET SL	11/08/23 13:35
Total/NA	Prep	PrecSep_0			632173	KAC	EET SL	10/17/23 10:26
Total/NA	Analysis	9320		1	635114	SCB	EET SL	11/03/23 11:36
Total/NA	Analysis	Ra226_Ra228		1	636194	EMH	EET SL	11/10/23 09:28

Client Sample ID: BAC-21-F-A4-20231011-01

Lab Sample ID: 240-193490-3

Date Collected: 10/11/23 09:46

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591036	RKT	EET CLE	10/16/23 18:20
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 18:08
Total/NA	Prep	7470A			590777	BN	EET CLE	10/13/23 14:00
Total/NA	Analysis	7470A		1	591097	GK	EET CLE	10/17/23 13:33

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-21-F-A4-20231011-01

Lab Sample ID: 240-193490-3

Date Collected: 10/11/23 09:46

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 19:06
Total/NA	Analysis	300.0-1993 R2.1		1	593006	JWW	EET CLE	11/02/23 10:55
Total/NA	Prep	PrecSep-21			632172	KAC	EET SL	10/17/23 10:23
Total/NA	Analysis	9315		1	635860	SCB	EET SL	11/08/23 13:35
Total/NA	Prep	PrecSep_0			632173	KAC	EET SL	10/17/23 10:26
Total/NA	Analysis	9320		1	635114	SCB	EET SL	11/03/23 11:36
Total/NA	Analysis	Ra226_Ra228		1	636194	EMH	EET SL	11/10/23 09:28

Client Sample ID: BAC-22-F-A4-20231011-01

Lab Sample ID: 240-193490-4

Date Collected: 10/11/23 10:59

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591036	RKT	EET CLE	10/16/23 18:42
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 18:28
Total/NA	Prep	7470A			590777	BN	EET CLE	10/13/23 14:00
Total/NA	Analysis	7470A		1	591097	GK	EET CLE	10/17/23 13:52
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 19:36
Total/NA	Analysis	300.0-1993 R2.1		1	592910	JWW	EET CLE	10/31/23 18:38
Total/NA	Prep	PrecSep-21			632172	KAC	EET SL	10/17/23 10:23
Total/NA	Analysis	9315		1	635860	SCB	EET SL	11/08/23 13:36
Total/NA	Prep	PrecSep_0			632173	KAC	EET SL	10/17/23 10:26
Total/NA	Analysis	9320		1	635114	SCB	EET SL	11/03/23 11:37
Total/NA	Analysis	Ra226_Ra228		1	636194	EMH	EET SL	11/10/23 09:28

Client Sample ID: BAC-18-F-A4-20231011-01

Lab Sample ID: 240-193490-5

Date Collected: 10/11/23 12:09

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591036	RKT	EET CLE	10/16/23 18:50
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 18:31
Total/NA	Prep	7470A			590777	BN	EET CLE	10/13/23 14:00
Total/NA	Analysis	7470A		1	591097	GK	EET CLE	10/17/23 13:54
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 19:52
Total/NA	Analysis	300.0-1993 R2.1		1	592910	JWW	EET CLE	10/31/23 19:38
Total/NA	Prep	PrecSep-21			632172	KAC	EET SL	10/17/23 10:23
Total/NA	Analysis	9315		1	635860	SCB	EET SL	11/08/23 13:36
Total/NA	Prep	PrecSep_0			632173	KAC	EET SL	10/17/23 10:26
Total/NA	Analysis	9320		1	635114	SCB	EET SL	11/03/23 11:37

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-18-F-A4-20231011-01

Lab Sample ID: 240-193490-5

Date Collected: 10/11/23 12:09

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228		1	636194	EMH	EET SL	11/10/23 09:28

Client Sample ID: DUP-001-F-A4-20231011-01

Lab Sample ID: 240-193490-6

Date Collected: 10/11/23 00:00

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591036	RKT	EET CLE	10/16/23 18:52
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 18:33
Total/NA	Prep	7470A			590777	BN	EET CLE	10/13/23 14:00
Total/NA	Analysis	7470A		1	591097	GK	EET CLE	10/17/23 13:56
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 20:01
Total/NA	Analysis	300.0-1993 R2.1		1	593006	JWW	EET CLE	11/02/23 11:56
Total/NA	Prep	PrecSep-21			632172	KAC	EET SL	10/17/23 10:23
Total/NA	Analysis	9315		1	635860	SCB	EET SL	11/08/23 13:36
Total/NA	Prep	PrecSep_0			632173	KAC	EET SL	10/17/23 10:26
Total/NA	Analysis	9320		1	635114	SCB	EET SL	11/03/23 11:37
Total/NA	Analysis	Ra226_Ra228		1	636194	EMH	EET SL	11/10/23 09:28

Client Sample ID: BAC-10-F-A4-20231011-01

Lab Sample ID: 240-193490-7

Date Collected: 10/11/23 13:17

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591036	RKT	EET CLE	10/16/23 18:54
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 18:36
Total/NA	Prep	7470A			590777	BN	EET CLE	10/13/23 14:00
Total/NA	Analysis	7470A		1	591097	GK	EET CLE	10/17/23 13:58
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 20:06
Total/NA	Analysis	300.0-1993 R2.1		1	593006	JWW	EET CLE	11/02/23 12:16
Total/NA	Prep	PrecSep-21			632172	KAC	EET SL	10/17/23 10:23
Total/NA	Analysis	9315		1	635860	SCB	EET SL	11/08/23 13:36
Total/NA	Prep	PrecSep_0			632173	KAC	EET SL	10/17/23 10:26
Total/NA	Analysis	9320		1	635114	SCB	EET SL	11/03/23 11:37
Total/NA	Analysis	Ra226_Ra228		1	636194	EMH	EET SL	11/10/23 09:28

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

Client Sample ID: BAC-16-F-A4-20231011-01

Lab Sample ID: 240-193490-8

Date Collected: 10/11/23 14:29

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591036	RKT	EET CLE	10/16/23 18:57
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 18:38
Total/NA	Prep	7470A			590777	BN	EET CLE	10/13/23 14:00
Total/NA	Analysis	7470A		1	591097	GK	EET CLE	10/17/23 14:00
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 18:31
Total/NA	Analysis	300.0-1993 R2.1		1	593006	JWW	EET CLE	11/02/23 12:36
Total/NA	Prep	PrecSep-21			632172	KAC	EET SL	10/17/23 10:23
Total/NA	Analysis	9315		1	635860	SCB	EET SL	11/08/23 13:36
Total/NA	Prep	PrecSep_0			632173	KAC	EET SL	10/17/23 10:26
Total/NA	Analysis	9320		1	635114	SCB	EET SL	11/03/23 11:37
Total/NA	Analysis	Ra226_Ra228		1	636194	EMH	EET SL	11/10/23 09:28

Client Sample ID: EB-001-F-A4-20231011-01

Lab Sample ID: 240-193490-9

Date Collected: 10/11/23 15:00

Matrix: Water

Date Received: 10/12/23 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591036	RKT	EET CLE	10/16/23 18:59
Total Recoverable	Prep	3005A			590775	BN	EET CLE	10/13/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 18:41
Total/NA	Prep	7470A			590777	BN	EET CLE	10/13/23 14:00
Total/NA	Analysis	7470A		1	591097	GK	EET CLE	10/17/23 14:02
Total/NA	Analysis	2320B-1997		1	590918	QUY8	EET CLE	10/13/23 18:38
Total/NA	Analysis	300.0-1993 R2.1		1	592910	JWW	EET CLE	10/31/23 20:59
Total/NA	Prep	PrecSep-21			632172	KAC	EET SL	10/17/23 10:23
Total/NA	Analysis	9315		1	635860	SCB	EET SL	11/08/23 13:36
Total/NA	Prep	PrecSep_0			632173	KAC	EET SL	10/17/23 10:26
Total/NA	Analysis	9320		1	635114	SCB	EET SL	11/03/23 11:37
Total/NA	Analysis	Ra226_Ra228		1	636194	EMH	EET SL	11/10/23 14:59

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
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193490-1

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
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
Virginia	NELAP	460175	09-14-24
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-24
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-24
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-24
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-24
Massachusetts	State	M-MO054	06-30-24
MI - RadChem Recognition	State	9005	06-30-24
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-24
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

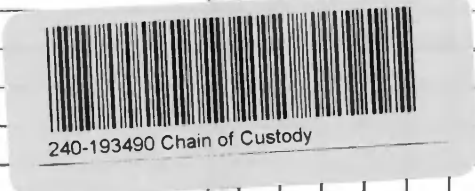
Job ID: 240-193490-1

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 Dakota	State	R-207	06-30-24
Oklahoma	NELAP	9997	08-31-24
Oregon	NELAP	4157	09-01-24
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-24
Texas	NELAP	T104704193	07-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO000542021-14	07-31-24
Virginia	NELAP	10310	06-15-25
Washington	State	C592	08-30-24
West Virginia DEP	State	381	12-31-23

Chain of Custody Record

Client Information		Lab PM: Cisneros, Roxanne		Camer Tracking No(s): 240-93466-34578.1																																																																																																																																					
Client Contact: Taylor Huffman		E-Mail: roxanne.cisneros@Eurofinel.com		Page: Page 1 of 1																																																																																																																																					
Company: Lightstone Generation Gavin Power LLC		PWSID:		Job #:																																																																																																																																					
Address: 7397 OH-7		City: Cheshire		State of Origin:																																																																																																																																					
State, Zip: OH, 45620		Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Preservation Codes:																																																																																																																																					
Phone: 740-925-3171(Tel)		PO #: 2935505		M - Hexane																																																																																																																																					
Email: taylor.huffman@lightstonegen.com		WO #: 24019633		N - None																																																																																																																																					
Project Name: Federal CCR Wells - App IV		SSOW#: 63UH		O - AHA02																																																																																																																																					
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				Special Instructions/Note:																																																																																																																																					
																																																																																																																																									
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Empty Kit Relinquished by:		Date:		Method of Shipment:																																																																																																																																					
Relinquished by: <i>Taylor Huffman</i>		10-12-23 / 0900		Company: <i>Kempira</i>																																																																																																																																					
Relinquished by: <i>Hull</i>		10-12-23 / 1430		Company: <i>Auto Optics</i>																																																																																																																																					
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Custody Seals Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:																																																																																																																																					

Eurofins - Cleveland Sample Receipt Form/Narrative
Barberton Facility

Login # : 193490

Client Lightstone Site Name _____ Cooler unpacked by: Vanny Rye
Cooler Received on 10-12-23 Opened on 10-13-23
FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

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

Eurofins Cooler # EE 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 -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 each
 - 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# HC316719
 14. Were VOAs on the COC? Yes No
 15. Were air bubbles >6 mm in any VOA vials? Yes No NA Larger than this.
 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: _____

Eurofins - Canton 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 #: _____	0.8	0.6	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____	4.0	3.8	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____	0.7	0.5	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____	3.8	3.6	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____	20.0	19.8	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____	3.7	3.5	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____	20.4	20.2	Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
							Water	None	
EC	Client	Box	Other	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



Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container		Preservative	
			pH	Temp	Added (mls)	Lot #
BAC-23-F-A4-20231010-01	240-193490-C-1	Plastic 500ml - with Nitric Acid				
BAC-23-F-A4-20231010-01	240-193490-D-1	Plastic 1 liter - Nitric Acid	<2			
BAC-23-F-A4-20231010-01	240-193490-E-1	Plastic 1 liter - Nitric Acid	<2			
BAC-08-F-A4-20231010-01	240-193490-C-2	Plastic 500ml - with Nitric Acid				
BAC-08-F-A4-20231010-01	240-193490-D-2	Plastic 1 liter - Nitric Acid	<2			
BAC-08-F-A4-20231010-01	240-193490-E-2	Plastic 1 liter - Nitric Acid	<2			
BAC-21-F-A4-20231011-01	240-193490-G-3	Plastic 500ml - with Nitric Acid	<2			
BAC-21-F-A4-20231011-01	240-193490-H-3	Plastic 500ml - with Nitric Acid	<2			
BAC-21-F-A4-20231011-01	240-193490-I-3	Plastic 500ml - with Nitric Acid	<2			
BAC-21-F-A4-20231011-01	240-193490-J-3	Plastic 1 liter - Nitric Acid	<2			
BAC-21-F-A4-20231011-01	240-193490-K-3	Plastic 1 liter - Nitric Acid	<2			
BAC-21-F-A4-20231011-01	240-193490-L-3	Plastic 1 liter - Nitric Acid	<2			
BAC-21-F-A4-20231011-01	240-193490-M-3	Plastic 1 liter - Nitric Acid	<2			
BAC-21-F-A4-20231011-01	240-193490-N-3	Plastic 1 liter - Nitric Acid	<2			
BAC-21-F-A4-20231011-01	240-193490-O-3	Plastic 1 liter - Nitric Acid	<2			
BAC-22-F-A4-20231011-01	240-193490-C-4	Plastic 500ml - with Nitric Acid				
BAC-22-F-A4-20231011-01	240-193490-D-4	Plastic 1 liter - Nitric Acid	<2			
BAC-22-F-A4-20231011-01	240-193490-E-4	Plastic 1 liter - Nitric Acid	<2			
BAC-18-F-A4-20231011-01	240-193490-C-5	Plastic 500ml - with Nitric Acid				
BAC-18-F-A4-20231011-01	240-193490-D-5	Plastic 1 liter - Nitric Acid	<2			
BAC-18-F-A4-20231011-01	240-193490-E-5	Plastic 1 liter - Nitric Acid	<2			
DUP-001-F-A4-20231011-01	240-193490-C-6	Plastic 500ml - with Nitric Acid				
DUP-001-F-A4-20231011-01	240-193490-D-6	Plastic 1 liter - Nitric Acid	<2			
DUP-001-F-A4-20231011-01	240-193490-E-6	Plastic 1 liter - Nitric Acid	<2			
BAC-10-F-A4-20231011-01	240-193490-C-7	Plastic 500ml - with Nitric Acid				
BAC-10-F-A4-20231011-01	240-193490-D-7	Plastic 1 liter - Nitric Acid	<2			
BAC-10-F-A4-20231011-01	240-193490-E-7	Plastic 1 liter - Nitric Acid	<2			
BAC-16-F-A4-20231011-01	240-193490-C-8	Plastic 500ml - with Nitric Acid				
BAC-16-F-A4-20231011-01	240-193490-D-8	Plastic 1 liter - Nitric Acid	<2			
BAC-16-F-A4-20231011-01	240-193490-E-8	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-A4-20231011-01	240-193490-C-9	Plastic 500ml - with Nitric Acid				
EB-001-F-A4-20231011-01	240-193490-D-9	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-A4-20231011-01	240-193490-E-9	Plastic 1 liter - Nitric Acid	<2			

Chain of Custody Record



Client Information (Sub Contract Lab)		Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No: 240-175262.1
Client Contact: Test/America Laboratories, Inc.		E-Mail: roxanne.cisneros@et.eurofins.com	State of Origin: Ohio	Page 1 of 2
Shipping/Receiving		Job #: 240-193490-1		
Company: Test/America Laboratories, Inc.		Preservation Codes: M - Hexane N - None 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 Other:		
Address: 13715 Rider Trail North,		Analysis Requested		
City: Earth City		Total Number of Containers		
State, Zip: MO, 63045		9315_Ra226/Presep_21 Radium-226 (GFP)		
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		9320_Ra228/Presep_0 Radium-228 (GFP)		
Email:		9326Ra228_GFP/Combined Radium-226 and		
Project Name: Federal GWM Wells		Field Filtered Sample (Yes or No)		
Site:		Perform MS/MSD (Yes or No)		
Due Date Requested: 10/25/2023		Special Instructions/Note:		
TAT Requested (days):		Recount of TAR after 21 day ingrowth if > action limit; save planchet		
PO #:		Recount of TAR after 21 day ingrowth if > action limit; save planchet		
WO #:		Recount of TAR after 21 day ingrowth if > action limit; save planchet		
Project #: 24019633		Recount of TAR after 21 day ingrowth if > action limit; save planchet		
SSOW#:		Recount of TAR after 21 day ingrowth if > action limit; save planchet		
Sample Identification - Client ID (Lab ID)		Recount of TAR after 21 day ingrowth if > action limit; save planchet		
BAC-23-F-A4-20231010-01 (240-193490-1)	Sample Date: 10/10/23	Sample Time: 13:08 Eastern	Sample Type (C=Comp, G=grab):	Matrix (W=water, S=solid, O=soil, BR=Tissue, Ash):
BAC-08-F-A4-20231010-01 (240-193490-2)	Sample Date: 10/10/23	Sample Time: 14:37 Eastern		Water
BAC-21-F-A4-20231011-01 (240-193490-3)	Sample Date: 10/11/23	Sample Time: 09:46 Eastern		Water
BAC-21-F-A4-20231011-01 (240-193490-3MS)	Sample Date: 10/11/23	Sample Time: 09:46 Eastern	MS	Water
BAC-21-F-A4-20231011-01 (240-193490-3MSD)	Sample Date: 10/11/23	Sample Time: 09:46 Eastern	MSD	Water
BAC-22-F-A4-20231011-01 (240-193490-4)	Sample Date: 10/11/23	Sample Time: 10:59 Eastern		Water
BAC-18-F-A4-20231011-01 (240-193490-5)	Sample Date: 10/11/23	Sample Time: 12:09 Eastern		Water
DUP-001-F-A4-20231011-01 (240-193490-6)	Sample Date: 10/11/23	Sample Time: Eastern		Water
BAC-10-F-A4-20231011-01 (240-193490-7)	Sample Date: 10/11/23	Sample Time: 13:17 Eastern		Water

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/test/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
 Deliverable Requested: I, II, III, IV, Other (specify) _____
 Primary Deliverable Rank: 2
 Date: _____ Time: _____
 Empty Kit Relinquished by: _____ Date: _____ Time: _____
 Relinquished by: _____ Date/Time: _____ Company: _____
 Relinquished by: _____ Date/Time: _____ Company: _____
 Relinquished by: _____ Date/Time: _____ Company: _____
 Custody Seals Intact: _____ Custody Seal No.: _____
 Δ Yes Δ No

Received by: *[Signature]* Date/Time: 10/16/23 09:50 Company: *[Signature]*
 Received by: _____ Date/Time: _____ Company: _____
 Received by: _____ Date/Time: _____ Company: _____

Special Instructions/QC Requirements:
 Return To Client Disposal By Lab Archive For _____ Months
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-193490-1

Login Number: 193490

List Number: 2

Creator: Pinette, Meadow L

List Source: Eurofins St. Louis

List Creation: 10/16/23 03:23 PM

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



 **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 - App III

JOB NUMBER

240-193601-1

Eurofins Cleveland

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



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Job ID: 240-193601-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-193601-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample 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 10/14/2023 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 0.7°C and 14.5°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 - App III

Job ID: 240-193601-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
SM 2540C	Solids, Total Dissolved (TDS)	SM	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
Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-193601-1	BAC-14-F-A3-20231012-01	Water	10/12/23 10:09	10/14/23 08:00
240-193601-2	DUP-002-F-A3-20231012-01	Water	10/12/23 00:00	10/14/23 08:00
240-193601-3	BAC-12-F-A3-20231012-01	Water	10/12/23 11:11	10/14/23 08:00
240-193601-4	FIELD BLANK-001-F-A3-20231012-01	Water	10/12/23 11:30	10/14/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Client Sample ID: BAC-14-F-A3-20231012-01

Lab Sample ID: 240-193601-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2700		100	57	ug/L	1		6010D	Total Recoverable
Calcium	75000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	23000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	82		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	82		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	33		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.066		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	220		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	430		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-002-F-A3-20231012-01

Lab Sample ID: 240-193601-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2800		100	57	ug/L	1		6010D	Total Recoverable
Calcium	76000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	23000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	82		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	82		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	33		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.070		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	230		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	440		10	7.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BAC-12-F-A3-20231012-01

Lab Sample ID: 240-193601-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1900		100	57	ug/L	1		6010D	Total Recoverable
Calcium	82000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	3100		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	32000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	86		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	86		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	64		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.095		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	190		5.0	1.7	mg/L	5		300.0	Total/NA
Total Dissolved Solids	500		10	7.8	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Client Sample ID: FIELD BLANK-001-F-A3-20231012-01

Lab Sample ID: 240-193601-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	59		10	7.8	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Client Sample ID: BAC-14-F-A3-20231012-01

Lab Sample ID: 240-193601-1

Date Collected: 10/12/23 10:09

Matrix: Water

Date Received: 10/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2700		100	57	ug/L		10/16/23 14:00	10/17/23 23:01	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	75000		1000	250	ug/L		10/16/23 14:00	10/17/23 16:16	1
Magnesium	22000		1000	61	ug/L		10/16/23 14:00	10/17/23 16:16	1
Potassium	1600		1000	220	ug/L		10/16/23 14:00	10/17/23 16:16	1
Sodium	23000		1000	330	ug/L		10/16/23 14:00	10/17/23 16:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	82		5.0	2.6	mg/L			10/16/23 13:50	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	82		5.0	2.6	mg/L			10/16/23 13:50	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/16/23 13:50	1
Chloride (EPA 300.0)	33		1.0	0.13	mg/L			10/20/23 20:40	1
Fluoride (EPA 300.0)	0.066		0.050	0.024	mg/L			10/20/23 20:40	1
Sulfate (EPA 300.0)	220		5.0	1.7	mg/L			10/30/23 18:47	5
Total Dissolved Solids (SM 2540C)	430		10	7.8	mg/L			10/18/23 09:19	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Client Sample ID: DUP-002-F-A3-20231012-01

Lab Sample ID: 240-193601-2

Date Collected: 10/12/23 00:00

Matrix: Water

Date Received: 10/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2800		100	57	ug/L		10/16/23 14:00	10/17/23 23:06	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	76000		1000	250	ug/L		10/16/23 14:00	10/17/23 16:23	1
Magnesium	22000		1000	61	ug/L		10/16/23 14:00	10/17/23 16:23	1
Potassium	1700		1000	220	ug/L		10/16/23 14:00	10/17/23 16:23	1
Sodium	23000		1000	330	ug/L		10/16/23 14:00	10/17/23 16:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	82		5.0	2.6	mg/L			10/16/23 13:55	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	82		5.0	2.6	mg/L			10/16/23 13:55	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/16/23 13:55	1
Chloride (EPA 300.0)	33		1.0	0.13	mg/L			10/20/23 22:20	1
Fluoride (EPA 300.0)	0.070		0.050	0.024	mg/L			10/20/23 22:20	1
Sulfate (EPA 300.0)	230		5.0	1.7	mg/L			10/30/23 19:07	5
Total Dissolved Solids (SM 2540C)	440		10	7.8	mg/L			10/18/23 09:19	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Client Sample ID: BAC-12-F-A3-20231012-01

Lab Sample ID: 240-193601-3

Date Collected: 10/12/23 11:11

Matrix: Water

Date Received: 10/14/23 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1900		100	57	ug/L		10/16/23 14:00	10/17/23 23:10	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	82000		1000	250	ug/L		10/16/23 14:00	10/17/23 16:26	1
Magnesium	20000		1000	61	ug/L		10/16/23 14:00	10/17/23 16:26	1
Potassium	3100		1000	220	ug/L		10/16/23 14:00	10/17/23 16:26	1
Sodium	32000		1000	330	ug/L		10/16/23 14:00	10/17/23 16:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	86		5.0	2.6	mg/L			10/16/23 14:00	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	86		5.0	2.6	mg/L			10/16/23 14:00	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/16/23 14:00	1
Chloride (EPA 300.0)	64		1.0	0.13	mg/L			10/21/23 02:02	1
Fluoride (EPA 300.0)	0.095		0.050	0.024	mg/L			10/21/23 02:02	1
Sulfate (EPA 300.0)	190		5.0	1.7	mg/L			10/30/23 19:27	5
Total Dissolved Solids (SM 2540C)	500		10	7.8	mg/L			10/18/23 09:19	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Client Sample ID: FIELD BLANK-001-F-A3-20231012-01

Lab Sample ID: 240-193601-4

Date Collected: 10/12/23 11:30

Matrix: Water

Date Received: 10/14/23 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		10/16/23 14:00	10/17/23 23:15	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		10/16/23 14:00	10/17/23 16:28	1
Magnesium	ND		1000	61	ug/L		10/16/23 14:00	10/17/23 16:28	1
Potassium	ND		1000	220	ug/L		10/16/23 14:00	10/17/23 16:28	1
Sodium	ND		1000	330	ug/L		10/16/23 14:00	10/17/23 16:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/16/23 14:04	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/16/23 14:04	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/16/23 14:04	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			10/21/23 09:45	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			10/21/23 09:45	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			10/21/23 09:45	1
Total Dissolved Solids (SM 2540C)	59		10	7.8	mg/L			10/18/23 09:19	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-590942/1-A
 Matrix: Water
 Analysis Batch: 591127

Client Sample ID: Method Blank
 Prep Type: Total Recoverable
 Prep Batch: 590942

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		10/16/23 14:00	10/17/23 20:51	1

Lab Sample ID: LCS 240-590942/2-A
 Matrix: Water
 Analysis Batch: 591127

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 590942

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 240-590942/1-A
 Matrix: Water
 Analysis Batch: 591232

Client Sample ID: Method Blank
 Prep Type: Total Recoverable
 Prep Batch: 590942

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		10/16/23 14:00	10/17/23 15:26	1
Magnesium	ND		1000	61	ug/L		10/16/23 14:00	10/17/23 15:26	1
Potassium	ND		1000	220	ug/L		10/16/23 14:00	10/17/23 15:26	1
Sodium	ND		1000	330	ug/L		10/16/23 14:00	10/17/23 15:26	1

Lab Sample ID: LCS 240-590942/3-A
 Matrix: Water
 Analysis Batch: 591232

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 590942

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	23600		ug/L		94	80 - 120
Magnesium	25000	24400		ug/L		97	80 - 120
Potassium	25000	24400		ug/L		97	80 - 120
Sodium	25000	24000		ug/L		96	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-590996/4
 Matrix: Water
 Analysis Batch: 590996

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			10/16/23 12:17	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/16/23 12:17	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/16/23 12:17	1

Lab Sample ID: LCS 240-590996/3
 Matrix: Water
 Analysis Batch: 590996

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	82.1		mg/L		102	86 - 123

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-591603/3
Matrix: Water
Analysis Batch: 591603

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			10/20/23 13:57	1
Fluoride	ND		0.050	0.024	mg/L			10/20/23 13:57	1
Sulfate	ND		1.0	0.35	mg/L			10/20/23 13:57	1

Lab Sample ID: LCS 240-591603/4
Matrix: Water
Analysis Batch: 591603

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.4		mg/L		103	90 - 110
Fluoride	2.50	2.74		mg/L		109	90 - 110
Sulfate	50.0	54.2		mg/L		108	90 - 110

Lab Sample ID: 240-193601-1 MS
Matrix: Water
Analysis Batch: 591603

Client Sample ID: BAC-14-F-A3-20231012-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	33		50.0	84.8		mg/L		104	80 - 120
Fluoride	0.066		2.50	2.82		mg/L		110	80 - 120

Lab Sample ID: 240-193601-1 MSD
Matrix: Water
Analysis Batch: 591603

Client Sample ID: BAC-14-F-A3-20231012-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	33		50.0	85.5		mg/L		105	80 - 120	1	15
Fluoride	0.066		2.50	2.85		mg/L		111	80 - 120	1	15

Lab Sample ID: MB 240-591640/3
Matrix: Water
Analysis Batch: 591640

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			10/21/23 01:22	1
Fluoride	ND		0.050	0.024	mg/L			10/21/23 01:22	1
Sulfate	ND		1.0	0.35	mg/L			10/21/23 01:22	1

Lab Sample ID: LCS 240-591640/4
Matrix: Water
Analysis Batch: 591640

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.7		mg/L		103	90 - 110
Fluoride	2.50	2.74		mg/L		110	90 - 110
Sulfate	50.0	54.2		mg/L		108	90 - 110

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-193601-3 MS
Matrix: Water
Analysis Batch: 591640

Client Sample ID: BAC-12-F-A3-20231012-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	64		50.0	113		mg/L		99	80 - 120
Fluoride	0.095		2.50	2.83		mg/L		109	80 - 120

Lab Sample ID: 240-193601-3 MSD
Matrix: Water
Analysis Batch: 591640

Client Sample ID: BAC-12-F-A3-20231012-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	64		50.0	112		mg/L		96	80 - 120	2	15
Fluoride	0.095		2.50	2.74		mg/L		106	80 - 120	3	15

Lab Sample ID: 240-193601-4 MS
Matrix: Water
Analysis Batch: 591640

Client Sample ID: FIELD BLANK-001-F-A3-20231012-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	ND		50.0	54.1		mg/L		108	80 - 120
Fluoride	ND		2.50	2.87		mg/L		115	80 - 120
Sulfate	ND		50.0	55.7		mg/L		111	80 - 120

Lab Sample ID: 240-193601-4 MSD
Matrix: Water
Analysis Batch: 591640

Client Sample ID: FIELD BLANK-001-F-A3-20231012-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND		50.0	55.2		mg/L		110	80 - 120	2	15
Fluoride	ND		2.50	2.92		mg/L		117	80 - 120	2	15
Sulfate	ND		50.0	56.9		mg/L		114	80 - 120	2	15

Lab Sample ID: MB 240-592755/3
Matrix: Water
Analysis Batch: 592755

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			10/30/23 13:33	1
Fluoride	ND		0.050	0.024	mg/L			10/30/23 13:33	1
Sulfate	ND		1.0	0.35	mg/L			10/30/23 13:33	1

Lab Sample ID: LCS 240-592755/4
Matrix: Water
Analysis Batch: 592755

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	50.3		mg/L		101	90 - 110
Fluoride	2.50	2.60		mg/L		104	90 - 110
Sulfate	50.0	51.8		mg/L		104	90 - 110

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

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

Lab Sample ID: MB 240-591249/1
 Matrix: Water
 Analysis Batch: 591249

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			10/18/23 09:19	1

Lab Sample ID: LCS 240-591249/2
 Matrix: Water
 Analysis Batch: 591249

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	336	317		mg/L		94	80 - 120

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Metals

Prep Batch: 590942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193601-1	BAC-14-F-A3-20231012-01	Total Recoverable	Water	3005A	
240-193601-2	DUP-002-F-A3-20231012-01	Total Recoverable	Water	3005A	
240-193601-3	BAC-12-F-A3-20231012-01	Total Recoverable	Water	3005A	
240-193601-4	FIELD BLANK-001-F-A3-20231012-01	Total Recoverable	Water	3005A	
MB 240-590942/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-590942/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-590942/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 591127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193601-1	BAC-14-F-A3-20231012-01	Total Recoverable	Water	6010D	590942
240-193601-2	DUP-002-F-A3-20231012-01	Total Recoverable	Water	6010D	590942
240-193601-3	BAC-12-F-A3-20231012-01	Total Recoverable	Water	6010D	590942
240-193601-4	FIELD BLANK-001-F-A3-20231012-01	Total Recoverable	Water	6010D	590942
MB 240-590942/1-A	Method Blank	Total Recoverable	Water	6010D	590942
LCS 240-590942/2-A	Lab Control Sample	Total Recoverable	Water	6010D	590942

Analysis Batch: 591232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193601-1	BAC-14-F-A3-20231012-01	Total Recoverable	Water	6020B	590942
240-193601-2	DUP-002-F-A3-20231012-01	Total Recoverable	Water	6020B	590942
240-193601-3	BAC-12-F-A3-20231012-01	Total Recoverable	Water	6020B	590942
240-193601-4	FIELD BLANK-001-F-A3-20231012-01	Total Recoverable	Water	6020B	590942
MB 240-590942/1-A	Method Blank	Total Recoverable	Water	6020B	590942
LCS 240-590942/3-A	Lab Control Sample	Total Recoverable	Water	6020B	590942

General Chemistry

Analysis Batch: 590996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193601-1	BAC-14-F-A3-20231012-01	Total/NA	Water	2320B-1997	
240-193601-2	DUP-002-F-A3-20231012-01	Total/NA	Water	2320B-1997	
240-193601-3	BAC-12-F-A3-20231012-01	Total/NA	Water	2320B-1997	
240-193601-4	FIELD BLANK-001-F-A3-20231012-01	Total/NA	Water	2320B-1997	
MB 240-590996/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-590996/3	Lab Control Sample	Total/NA	Water	2320B-1997	

Analysis Batch: 591249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193601-1	BAC-14-F-A3-20231012-01	Total/NA	Water	SM 2540C	
240-193601-2	DUP-002-F-A3-20231012-01	Total/NA	Water	SM 2540C	
240-193601-3	BAC-12-F-A3-20231012-01	Total/NA	Water	SM 2540C	
240-193601-4	FIELD BLANK-001-F-A3-20231012-01	Total/NA	Water	SM 2540C	
MB 240-591249/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-591249/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 591603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193601-1	BAC-14-F-A3-20231012-01	Total/NA	Water	300.0	
240-193601-2	DUP-002-F-A3-20231012-01	Total/NA	Water	300.0	
MB 240-591603/3	Method Blank	Total/NA	Water	300.0	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

General Chemistry (Continued)

Analysis Batch: 591603 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-591603/4	Lab Control Sample	Total/NA	Water	300.0	
240-193601-1 MS	BAC-14-F-A3-20231012-01	Total/NA	Water	300.0	
240-193601-1 MSD	BAC-14-F-A3-20231012-01	Total/NA	Water	300.0	

Analysis Batch: 591640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193601-3	BAC-12-F-A3-20231012-01	Total/NA	Water	300.0	
240-193601-4	FIELD BLANK-001-F-A3-20231012-01	Total/NA	Water	300.0	
MB 240-591640/3	Method Blank	Total/NA	Water	300.0	
LCS 240-591640/4	Lab Control Sample	Total/NA	Water	300.0	
240-193601-3 MS	BAC-12-F-A3-20231012-01	Total/NA	Water	300.0	
240-193601-3 MSD	BAC-12-F-A3-20231012-01	Total/NA	Water	300.0	
240-193601-4 MS	FIELD BLANK-001-F-A3-20231012-01	Total/NA	Water	300.0	
240-193601-4 MSD	FIELD BLANK-001-F-A3-20231012-01	Total/NA	Water	300.0	

Analysis Batch: 592755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193601-1	BAC-14-F-A3-20231012-01	Total/NA	Water	300.0	
240-193601-2	DUP-002-F-A3-20231012-01	Total/NA	Water	300.0	
240-193601-3	BAC-12-F-A3-20231012-01	Total/NA	Water	300.0	
MB 240-592755/3	Method Blank	Total/NA	Water	300.0	
LCS 240-592755/4	Lab Control Sample	Total/NA	Water	300.0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Client Sample ID: BAC-14-F-A3-20231012-01

Lab Sample ID: 240-193601-1

Date Collected: 10/12/23 10:09

Matrix: Water

Date Received: 10/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590942	S4FJ	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6010D		1	591127	KLC	EET CLE	10/17/23 23:01
Total Recoverable	Prep	3005A			590942	S4FJ	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 16:16
Total/NA	Analysis	2320B-1997		1	590996	QUY8	EET CLE	10/16/23 13:50
Total/NA	Analysis	300.0		1	591603	JWW	EET CLE	10/20/23 20:40
Total/NA	Analysis	300.0		5	592755	JWW	EET CLE	10/30/23 18:47
Total/NA	Analysis	SM 2540C		1	591249	QUY8	EET CLE	10/18/23 09:19

Client Sample ID: DUP-002-F-A3-20231012-01

Lab Sample ID: 240-193601-2

Date Collected: 10/12/23 00:00

Matrix: Water

Date Received: 10/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590942	S4FJ	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6010D		1	591127	KLC	EET CLE	10/17/23 23:06
Total Recoverable	Prep	3005A			590942	S4FJ	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 16:23
Total/NA	Analysis	2320B-1997		1	590996	QUY8	EET CLE	10/16/23 13:55
Total/NA	Analysis	300.0		1	591603	JWW	EET CLE	10/20/23 22:20
Total/NA	Analysis	300.0		5	592755	JWW	EET CLE	10/30/23 19:07
Total/NA	Analysis	SM 2540C		1	591249	QUY8	EET CLE	10/18/23 09:19

Client Sample ID: BAC-12-F-A3-20231012-01

Lab Sample ID: 240-193601-3

Date Collected: 10/12/23 11:11

Matrix: Water

Date Received: 10/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590942	S4FJ	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6010D		1	591127	KLC	EET CLE	10/17/23 23:10
Total Recoverable	Prep	3005A			590942	S4FJ	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 16:26
Total/NA	Analysis	2320B-1997		1	590996	QUY8	EET CLE	10/16/23 14:00
Total/NA	Analysis	300.0		1	591640	JWW	EET CLE	10/21/23 02:02
Total/NA	Analysis	300.0		5	592755	JWW	EET CLE	10/30/23 19:27
Total/NA	Analysis	SM 2540C		1	591249	QUY8	EET CLE	10/18/23 09:19

Client Sample ID: FIELD BLANK-001-F-A3-20231012-01

Lab Sample ID: 240-193601-4

Date Collected: 10/12/23 11:30

Matrix: Water

Date Received: 10/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590942	S4FJ	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6010D		1	591127	KLC	EET CLE	10/17/23 23:15

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Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

Client Sample ID: FIELD BLANK-001-F-A3-20231012-01

Lab Sample ID: 240-193601-4

Date Collected: 10/12/23 11:30

Matrix: Water

Date Received: 10/14/23 08:00

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
Total Recoverable	Prep	3005A			590942	S4FJ	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 16:28
Total/NA	Analysis	2320B-1997		1	590996	QUY8	EET CLE	10/16/23 14:04
Total/NA	Analysis	300.0		1	591640	JWW	EET CLE	10/21/23 09:45
Total/NA	Analysis	SM 2540C		1	591249	QUY8	EET CLE	10/18/23 09:19

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
Project/Site: Federal CCR Wells - App III

Job ID: 240-193601-1

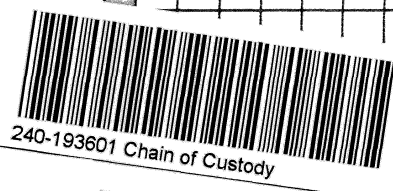
Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
Virginia	NELAP	460175	09-14-24
West Virginia DEP	State	210	12-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Client Information		Sampler: <i>Bobby Caste</i>		Lab PM		Carrier Tracking No(s)		COC No	
Taylor Huffman		Phone: <i>740-373-4308</i>		E-Mail: <i>roxanne.cisneros@Eurofins.com</i>		State of Origin:		Page: <i>1 of 1</i>	
Company: Lightstone Generation Gavin Power LLC		Address: <i>7397 OH-7</i>		City: <i>Cheshire</i>		State, Zip: <i>OH, 45620</i>		Job #	
Phone: <i>740-925-3171 (Tel)</i>		PO #: <i>2935505</i>		WO #: <i>24019633</i>		Project #: <i>24019633</i>		SSOW#: <i>69uh</i>	
E-mail: <i>taylor.huffman@lightstonegen.com</i>		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		TAT Requested (days):		Due Date Requested:		Analysis Requested	
Federal CCR Wells - App III		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (Water, Swab, On-water, Air)	
Site: <i>69uh</i>		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (Water, Swab, On-water, Air)	
Field Blanks - <i>ccj-F-A3-20231012-c1</i>		10-12-23		1130		G		W	
BAC-12-F-A3-20231012-01		10-12-23		1111		G		W	
DUP-02-F-A3-20231012-c1		10-12-23		-		G		W	
BAC-14-F-A3-20231012-c1		10-12-23		1009		G		W	
Perform MS/MSD (Yes or No)		Field Filtered Sample (Yes or No)		2540C_Calcd, 300.0, 28D		2320B - Alkalinity		Total Number of Containers	
<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Special Instructions/Note:		Special Instructions/Note:		Special Instructions/Note:		Special Instructions/Note:		Special Instructions/Note:	
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months	
Possible Hazard Identification		Possible Hazard Identification		Possible Hazard Identification		Possible Hazard Identification		Possible Hazard Identification	
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological	
Deliverable Requested: I, II, III, IV, Other (specify)		Deliverable Requested: I, II, III, IV, Other (specify)		Deliverable Requested: I, II, III, IV, Other (specify)		Deliverable Requested: I, II, III, IV, Other (specify)		Deliverable Requested: I, II, III, IV, Other (specify)	
Empty Kit Relinquished by:		Empty Kit Relinquished by:		Empty Kit Relinquished by:		Empty Kit Relinquished by:		Empty Kit Relinquished by:	
Relinquished by: <i>Yuan Smith</i>		Relinquished by: <i>Yuan Smith</i>		Relinquished by: <i>Yuan Smith</i>		Relinquished by: <i>Yuan Smith</i>		Relinquished by: <i>Yuan Smith</i>	
Date/Time: <i>10-13-23 10915</i>		Date/Time: <i>10-13-23 1700</i>		Date/Time: <i>10-13-23 1700</i>		Date/Time: <i>10-13-23 1700</i>		Date/Time: <i>10-13-23 1700</i>	
Relinquished by: <i>Asney Deal</i>		Relinquished by: <i>Asney Deal</i>		Relinquished by: <i>Asney Deal</i>		Relinquished by: <i>Asney Deal</i>		Relinquished by: <i>Asney Deal</i>	
Date/Time: <i>10-13-23 1700</i>		Date/Time: <i>10-13-23 1700</i>		Date/Time: <i>10-13-23 1700</i>		Date/Time: <i>10-13-23 1700</i>		Date/Time: <i>10-13-23 1700</i>	
Company: <i>ETA</i>		Company: <i>ETA</i>		Company: <i>ETA</i>		Company: <i>ETA</i>		Company: <i>ETA</i>	
Custody Seal No.:		Custody Seal No.:		Custody Seal No.:		Custody Seal No.:		Custody Seal No.:	
<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	



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193601

Eurofins - Cleveland Sample Receipt Form/Narrative

Login # : _____

Barberton Facility

Client Lightstone

Site Name _____

Cooler unpacked by:

Cooler Received on 10-14-23

Opened on 10-14-23

Nancy Rye

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

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

Eurofins Cooler # ES ~~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 # 22 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C


- 2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity leach 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 NA
- Were tamper/custody seals intact and uncompromised? Yes No NA

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

- 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# HC316719
- 14. Were VOAs on the COC? Yes No NA
- 15. Were air bubbles >6 mm in any VOA vials? Yes No NA  ← Larger than this.
- 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: _____

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Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-14-F-A3-20231012-01	240-193601-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-002-F-A3-20231012-01	240-193601-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-12-F-A3-20231012-01	240-193601-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
FIELD BLANK-001-F-A3-20231012-01	240-193601-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____

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ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 11/13/2023 4:18:32 PM

JOB DESCRIPTION

Federal CCR Wells - App IV

JOB NUMBER

240-193603-1

Eurofins Cleveland

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
11/13/2023 4:18:32 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

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
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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Job ID: 240-193603-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-193603-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample 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 10/14/2023 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 0.7°C and 14.5°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 160-632483: The following sample(s) did not meet the requested limit (RL) due to the reduced sample volume attributed to the presence of matrix interference. During preparation the analyst visually noted matrix effects. The data have been reported with this narrative. BAC-14-F-A4-20231012-01 (240-193603-1) and BAC-12-F-A4-20231012-01 (240-193603-3)

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
Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0-1993 R2.1	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 - App IV

Job ID: 240-193603-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-193603-1	BAC-14-F-A4-20231012-01	Water	10/12/23 10:09	10/14/23 08:00
240-193603-2	DUP-002-F-A4-20231012-01	Water	10/12/23 00:00	10/14/23 08:00
240-193603-3	BAC-12-F-A4-20231012-01	Water	10/12/23 11:11	10/14/23 08:00
240-193603-4	FIELD BLANK-001-F-A4-20231012-01	Water	10/12/23 11:13	10/14/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Client Sample ID: BAC-14-F-A4-20231012-01

Lab Sample ID: 240-193603-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.9	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	99		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	1.5	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.0		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.93	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	7.4	J B	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	22000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	82		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	82		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.056	F2	0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: DUP-002-F-A4-20231012-01

Lab Sample ID: 240-193603-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.1	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	100		5.0	2.2	ug/L	1		6020B	Total Recoverable
Chromium	1.6	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.0		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.99	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	7.9	J B	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	23000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	81		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	81		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.046	J	0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: BAC-12-F-A4-20231012-01

Lab Sample ID: 240-193603-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	6.0		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	110		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.21	J	1.0	0.20	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 - App IV

Job ID: 240-193603-1

Client Sample ID: BAC-12-F-A4-20231012-01 (Continued)

Lab Sample ID: 240-193603-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	2.9	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	8.0		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	4.5		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	11	B	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	3000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	32000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	86		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	86		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.061		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: FIELD BLANK-001-F-A4-20231012-01

Lab Sample ID: 240-193603-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	1.9	J B	8.0	1.7	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Client Sample ID: BAC-14-F-A4-20231012-01

Lab Sample ID: 240-193603-1

Date Collected: 10/12/23 10:09

Matrix: Water

Date Received: 10/14/23 08:00

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		10/16/23 14:00	10/17/23 19:43	1
Arsenic	1.9	J	5.0	0.75	ug/L		10/16/23 14:00	10/17/23 19:43	1
Barium	99		5.0	2.2	ug/L		10/16/23 14:00	10/17/23 19:43	1
Beryllium	ND		1.0	0.62	ug/L		10/16/23 14:00	10/17/23 19:43	1
Cadmium	ND		1.0	0.20	ug/L		10/16/23 14:00	10/17/23 19:43	1
Chromium	1.5	J	5.0	1.2	ug/L		10/16/23 14:00	10/17/23 19:43	1
Cobalt	2.0		1.0	0.19	ug/L		10/16/23 14:00	10/17/23 19:43	1
Lead	0.93	J	1.0	0.45	ug/L		10/16/23 14:00	10/17/23 19:43	1
Lithium	7.4	J B	8.0	1.7	ug/L		10/16/23 14:00	10/17/23 19:43	1
Magnesium	21000		1000	61	ug/L		10/16/23 14:00	10/17/23 19:43	1
Molybdenum	ND		5.0	1.1	ug/L		10/16/23 14:00	10/17/23 19:43	1
Potassium	1600		1000	220	ug/L		10/16/23 14:00	10/17/23 19:43	1
Selenium	ND		5.0	0.89	ug/L		10/16/23 14:00	10/17/23 19:43	1
Sodium	22000		1000	330	ug/L		10/16/23 14:00	10/17/23 19:43	1
Thallium	ND		1.0	0.20	ug/L		10/16/23 14:00	10/17/23 19:43	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		10/16/23 14:00	10/18/23 16:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	82		5.0	2.6	mg/L			10/16/23 14:08	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	82		5.0	2.6	mg/L			10/16/23 14:08	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/16/23 14:08	1
Fluoride (EPA 300.0-1993 R2.1)	0.056	F2	0.050	0.024	mg/L			11/06/23 16:28	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.250	U	0.192	0.193	1.00	0.278	pCi/L	10/18/23 09:10	11/09/23 21:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.2		30 - 110					10/18/23 09:10	11/09/23 21:08	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.745	U G	0.671	0.674	1.00	1.07	pCi/L	10/18/23 09:12	11/07/23 11:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.2		30 - 110					10/18/23 09:12	11/07/23 11:18	1
Y Carrier	73.3		30 - 110					10/18/23 09:12	11/07/23 11:18	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Client Sample ID: BAC-14-F-A4-20231012-01

Lab Sample ID: 240-193603-1

Date Collected: 10/12/23 10:09

Matrix: Water

Date Received: 10/14/23 08:00

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	0.995	U	0.698	0.701	5.00	1.07	pCi/L		11/10/23 17:32	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Client Sample ID: DUP-002-F-A4-20231012-01

Lab Sample ID: 240-193603-2

Date Collected: 10/12/23 00:00

Matrix: Water

Date Received: 10/14/23 08:00

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		10/16/23 14:00	10/17/23 19:46	1
Arsenic	2.1	J	5.0	0.75	ug/L		10/16/23 14:00	10/17/23 19:46	1
Barium	100		5.0	2.2	ug/L		10/16/23 14:00	10/17/23 19:46	1
Beryllium	ND		1.0	0.62	ug/L		10/16/23 14:00	10/17/23 19:46	1
Cadmium	ND		1.0	0.20	ug/L		10/16/23 14:00	10/17/23 19:46	1
Chromium	1.6	J	5.0	1.2	ug/L		10/16/23 14:00	10/17/23 19:46	1
Cobalt	2.0		1.0	0.19	ug/L		10/16/23 14:00	10/17/23 19:46	1
Lead	0.99	J	1.0	0.45	ug/L		10/16/23 14:00	10/17/23 19:46	1
Lithium	7.9	J B	8.0	1.7	ug/L		10/16/23 14:00	10/17/23 19:46	1
Magnesium	22000		1000	61	ug/L		10/16/23 14:00	10/17/23 19:46	1
Molybdenum	ND		5.0	1.1	ug/L		10/16/23 14:00	10/17/23 19:46	1
Potassium	1600		1000	220	ug/L		10/16/23 14:00	10/17/23 19:46	1
Selenium	ND		5.0	0.89	ug/L		10/16/23 14:00	10/17/23 19:46	1
Sodium	23000		1000	330	ug/L		10/16/23 14:00	10/17/23 19:46	1
Thallium	ND		1.0	0.20	ug/L		10/16/23 14:00	10/17/23 19:46	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		10/16/23 14:00	10/18/23 16:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	81		5.0	2.6	mg/L			10/16/23 14:12	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	81		5.0	2.6	mg/L			10/16/23 14:12	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/16/23 14:12	1
Fluoride (EPA 300.0-1993 R2.1)	0.046	J	0.050	0.024	mg/L			11/06/23 22:58	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	0.382		0.172	0.176	1.00	0.160	pCi/L	10/18/23 09:10	11/09/23 21:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.5		30 - 110					10/18/23 09:10	11/09/23 21:08	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	1.01		0.503	0.511	1.00	0.693	pCi/L	10/18/23 09:12	11/07/23 11:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.5		30 - 110					10/18/23 09:12	11/07/23 11:18	1
Y Carrier	84.5		30 - 110					10/18/23 09:12	11/07/23 11:18	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Client Sample ID: DUP-002-F-A4-20231012-01

Lab Sample ID: 240-193603-2

Date Collected: 10/12/23 00:00

Matrix: Water

Date Received: 10/14/23 08:00

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	1.39		0.532	0.540	5.00	0.693	pCi/L		11/10/23 17:32	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Client Sample ID: BAC-12-F-A4-20231012-01

Lab Sample ID: 240-193603-3

Date Collected: 10/12/23 11:11

Matrix: Water

Date Received: 10/14/23 08:00

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		10/16/23 14:00	10/17/23 19:53	1
Arsenic	6.0		5.0	0.75	ug/L		10/16/23 14:00	10/17/23 19:53	1
Barium	110		5.0	2.2	ug/L		10/16/23 14:00	10/17/23 19:53	1
Beryllium	ND		1.0	0.62	ug/L		10/16/23 14:00	10/17/23 19:53	1
Cadmium	0.21	J	1.0	0.20	ug/L		10/16/23 14:00	10/17/23 19:53	1
Chromium	2.9	J	5.0	1.2	ug/L		10/16/23 14:00	10/17/23 19:53	1
Cobalt	8.0		1.0	0.19	ug/L		10/16/23 14:00	10/17/23 19:53	1
Lead	4.5		1.0	0.45	ug/L		10/16/23 14:00	10/17/23 19:53	1
Lithium	11	B	8.0	1.7	ug/L		10/16/23 14:00	10/17/23 19:53	1
Magnesium	20000		1000	61	ug/L		10/16/23 14:00	10/17/23 19:53	1
Molybdenum	ND		5.0	1.1	ug/L		10/16/23 14:00	10/17/23 19:53	1
Potassium	3000		1000	220	ug/L		10/16/23 14:00	10/17/23 19:53	1
Selenium	ND		5.0	0.89	ug/L		10/16/23 14:00	10/17/23 19:53	1
Sodium	32000		1000	330	ug/L		10/16/23 14:00	10/17/23 19:53	1
Thallium	ND		1.0	0.20	ug/L		10/16/23 14:00	10/17/23 19:53	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		10/16/23 14:00	10/18/23 16:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	86		5.0	2.6	mg/L			10/16/23 14:25	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	86		5.0	2.6	mg/L			10/16/23 14:25	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/16/23 14:25	1
Fluoride (EPA 300.0-1993 R2.1)	0.061		0.050	0.024	mg/L			10/20/23 16:38	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.245	U	0.254	0.254	1.00	0.401	pCi/L	10/18/23 09:10	11/09/23 21:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.5		30 - 110					10/18/23 09:10	11/09/23 21:08	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.902	U G	0.745	0.750	1.00	1.16	pCi/L	10/18/23 09:12	11/07/23 11:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.5		30 - 110					10/18/23 09:12	11/07/23 11:18	1
Y Carrier	83.0		30 - 110					10/18/23 09:12	11/07/23 11:18	1

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Client Sample ID: BAC-12-F-A4-20231012-01

Lab Sample ID: 240-193603-3

Date Collected: 10/12/23 11:11

Matrix: Water

Date Received: 10/14/23 08:00

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	0.787	0.792	5.00	1.16	pCi/L		11/10/23 17:32	1

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Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Client Sample ID: FIELD BLANK-001-F-A4-20231012-01

Lab Sample ID: 240-193603-4

Date Collected: 10/12/23 11:13

Matrix: Water

Date Received: 10/14/23 08:00

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		10/16/23 14:00	10/17/23 19:55	1
Arsenic	ND		5.0	0.75	ug/L		10/16/23 14:00	10/17/23 19:55	1
Barium	ND		5.0	2.2	ug/L		10/16/23 14:00	10/17/23 19:55	1
Beryllium	ND		1.0	0.62	ug/L		10/16/23 14:00	10/17/23 19:55	1
Cadmium	ND		1.0	0.20	ug/L		10/16/23 14:00	10/17/23 19:55	1
Chromium	ND		5.0	1.2	ug/L		10/16/23 14:00	10/17/23 19:55	1
Cobalt	ND		1.0	0.19	ug/L		10/16/23 14:00	10/17/23 19:55	1
Lead	ND		1.0	0.45	ug/L		10/16/23 14:00	10/17/23 19:55	1
Lithium	1.9	J B	8.0	1.7	ug/L		10/16/23 14:00	10/17/23 19:55	1
Magnesium	ND		1000	61	ug/L		10/16/23 14:00	10/17/23 19:55	1
Molybdenum	ND		5.0	1.1	ug/L		10/16/23 14:00	10/17/23 19:55	1
Potassium	ND		1000	220	ug/L		10/16/23 14:00	10/17/23 19:55	1
Selenium	ND		5.0	0.89	ug/L		10/16/23 14:00	10/17/23 19:55	1
Sodium	ND		1000	330	ug/L		10/16/23 14:00	10/17/23 19:55	1
Thallium	ND		1.0	0.20	ug/L		10/16/23 14:00	10/17/23 19:55	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		10/16/23 14:00	10/18/23 16:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/16/23 14:36	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/16/23 14:36	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			10/16/23 14:36	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			10/20/23 16:58	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.00334	U	0.0904	0.0904	1.00	0.181	pCi/L	10/18/23 09:10	11/09/23 21:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		30 - 110					10/18/23 09:10	11/09/23 21:08	1

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.963		0.363	0.373	1.00	0.437	pCi/L	10/18/23 09:12	11/07/23 11:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		30 - 110					10/18/23 09:12	11/07/23 11:20	1
Y Carrier	86.7		30 - 110					10/18/23 09:12	11/07/23 11:20	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Client Sample ID: FIELD BLANK-001-F-A4-20231012-01

Lab Sample ID: 240-193603-4

Date Collected: 10/12/23 11:13

Matrix: Water

Date Received: 10/14/23 08:00

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	0.966		0.374	0.384	5.00	0.437	pCi/L		11/10/23 17:32	1

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Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
240-193603-1	BAC-14-F-A4-20231012-01	78.2	
240-193603-2	DUP-002-F-A4-20231012-01	90.5	
240-193603-3	BAC-12-F-A4-20231012-01	78.5	
240-193603-4	FIELD BLANK-001-F-A4-20231012-01	92.9	
LCS 160-632482/2-A	Lab Control Sample	88.0	
MB 160-632482/1-A	Method Blank	92.7	

Tracer/Carrier Legend
Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-193603-1	BAC-14-F-A4-20231012-01	78.2	73.3
240-193603-2	DUP-002-F-A4-20231012-01	90.5	84.5
240-193603-3	BAC-12-F-A4-20231012-01	78.5	83.0
240-193603-4	FIELD BLANK-001-F-A4-20231012-01	92.9	86.7
LCS 160-632483/2-A	Lab Control Sample	88.0	83.4
MB 160-632483/1-A	Method Blank	92.7	84.9

Tracer/Carrier Legend
Ba = Ba Carrier
Y = Y Carrier

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-590936/1-A
Matrix: Water
Analysis Batch: 591232

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 590936

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		10/16/23 14:00	10/17/23 19:01	1
Arsenic	ND		5.0	0.75	ug/L		10/16/23 14:00	10/17/23 19:01	1
Barium	ND		5.0	2.2	ug/L		10/16/23 14:00	10/17/23 19:01	1
Beryllium	ND		1.0	0.62	ug/L		10/16/23 14:00	10/17/23 19:01	1
Cadmium	ND		1.0	0.20	ug/L		10/16/23 14:00	10/17/23 19:01	1
Chromium	ND		5.0	1.2	ug/L		10/16/23 14:00	10/17/23 19:01	1
Cobalt	ND		1.0	0.19	ug/L		10/16/23 14:00	10/17/23 19:01	1
Lead	ND		1.0	0.45	ug/L		10/16/23 14:00	10/17/23 19:01	1
Lithium	2.11	J	8.0	1.7	ug/L		10/16/23 14:00	10/17/23 19:01	1
Magnesium	ND		1000	61	ug/L		10/16/23 14:00	10/17/23 19:01	1
Molybdenum	ND		5.0	1.1	ug/L		10/16/23 14:00	10/17/23 19:01	1
Potassium	ND		1000	220	ug/L		10/16/23 14:00	10/17/23 19:01	1
Selenium	ND		5.0	0.89	ug/L		10/16/23 14:00	10/17/23 19:01	1
Sodium	ND		1000	330	ug/L		10/16/23 14:00	10/17/23 19:01	1
Thallium	ND		1.0	0.20	ug/L		10/16/23 14:00	10/17/23 19:01	1

Lab Sample ID: LCS 240-590936/2-A
Matrix: Water
Analysis Batch: 591232

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 590936

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	102		ug/L		102	80 - 120
Arsenic	1000	951		ug/L		95	80 - 120
Barium	1000	944		ug/L		94	80 - 120
Beryllium	500	494		ug/L		99	80 - 120
Cadmium	500	479		ug/L		96	80 - 120
Chromium	500	485		ug/L		97	80 - 120
Cobalt	500	477		ug/L		95	80 - 120
Lead	500	490		ug/L		98	80 - 120
Lithium	500	470		ug/L		94	80 - 120
Magnesium	25000	23500		ug/L		94	80 - 120
Molybdenum	500	478		ug/L		96	80 - 120
Potassium	25000	23700		ug/L		95	80 - 120
Selenium	1000	949		ug/L		95	80 - 120
Sodium	25000	23800		ug/L		95	80 - 120
Thallium	1000	929		ug/L		93	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-590941/1-A
Matrix: Water
Analysis Batch: 591320

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 590941

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		10/16/23 14:00	10/18/23 15:35	1

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-590941/2-A
Matrix: Water
Analysis Batch: 591320

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 590941

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.85		ug/L		97	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-590996/30
Matrix: Water
Analysis Batch: 590996

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			10/16/23 14:22	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/16/23 14:22	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/16/23 14:22	1

Lab Sample ID: MB 240-590996/4
Matrix: Water
Analysis Batch: 590996

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			10/16/23 12:17	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/16/23 12:17	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/16/23 12:17	1

Lab Sample ID: LCS 240-590996/29
Matrix: Water
Analysis Batch: 590996

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	80.4		mg/L		100	86 - 123

Lab Sample ID: LCS 240-590996/3
Matrix: Water
Analysis Batch: 590996

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	82.1		mg/L		102	86 - 123

Lab Sample ID: 240-193603-3 DU
Matrix: Water
Analysis Batch: 590996

Client Sample ID: BAC-12-F-A4-20231012-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	86		86.0		mg/L		0.5	20
Bicarbonate Alkalinity as CaCO3	86		86.0		mg/L		0.5	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-591603/3
Matrix: Water
Analysis Batch: 591603

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			10/20/23 13:57	1

Lab Sample ID: LCS 240-591603/4
Matrix: Water
Analysis Batch: 591603

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.74		mg/L		109	90 - 110

Lab Sample ID: MB 240-593596/3
Matrix: Water
Analysis Batch: 593596

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			11/06/23 15:45	1

Lab Sample ID: LCS 240-593596/4
Matrix: Water
Analysis Batch: 593596

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.67		mg/L		107	90 - 110

Lab Sample ID: 240-193603-1 MS
Matrix: Water
Analysis Batch: 593596

Client Sample ID: BAC-14-F-A4-20231012-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.056	F2	2.50	2.65		mg/L		104	80 - 120

Lab Sample ID: 240-193603-1 MSD
Matrix: Water
Analysis Batch: 593596

Client Sample ID: BAC-14-F-A4-20231012-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.056	F2	2.50	2.19	F2	mg/L		85	80 - 120	19	15

Lab Sample ID: 240-193603-2 MS
Matrix: Water
Analysis Batch: 593596

Client Sample ID: DUP-002-F-A4-20231012-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.046	J	2.50	2.56		mg/L		101	80 - 120

Lab Sample ID: 240-193603-2 MSD
Matrix: Water
Analysis Batch: 593596

Client Sample ID: DUP-002-F-A4-20231012-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.046	J	2.50	2.56		mg/L		101	80 - 120	0	15

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QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-632482/1-A
Matrix: Water
Analysis Batch: 636166

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 632482

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.06510	U	0.108	0.108	1.00	0.188	pCi/L	10/18/23 09:10	11/09/23 21:08	1
Carrier	MB %Yield	MB Qualifier	Limits				Prepared		Analyzed	
Ba Carrier	92.7		30 - 110				10/18/23 09:10		11/09/23 21:08	

Lab Sample ID: LCS 160-632482/2-A
Matrix: Water
Analysis Batch: 636166

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 632482

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	10.88		1.24	1.00	0.229	pCi/L	96	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	88.0		30 - 110						

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-632483/1-A
Matrix: Water
Analysis Batch: 635681

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 632483

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.6466		0.328	0.334	1.00	0.446	pCi/L	10/18/23 09:12	11/07/23 11:15	1
Carrier	MB %Yield	MB Qualifier	Limits				Prepared		Analyzed	
Ba Carrier	92.7		30 - 110				10/18/23 09:12		11/07/23 11:15	
Y Carrier	84.9		30 - 110				10/18/23 09:12		11/07/23 11:15	

Lab Sample ID: LCS 160-632483/2-A
Matrix: Water
Analysis Batch: 635681

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 632483

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-228	7.74	8.655		1.21	1.00	0.462	pCi/L	112	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	88.0		30 - 110						
Y Carrier	83.4		30 - 110						

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Metals

Prep Batch: 590936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193603-1	BAC-14-F-A4-20231012-01	Total Recoverable	Water	3005A	
240-193603-2	DUP-002-F-A4-20231012-01	Total Recoverable	Water	3005A	
240-193603-3	BAC-12-F-A4-20231012-01	Total Recoverable	Water	3005A	
240-193603-4	FIELD BLANK-001-F-A4-20231012-01	Total Recoverable	Water	3005A	
MB 240-590936/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-590936/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 590941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193603-1	BAC-14-F-A4-20231012-01	Total/NA	Water	7470A	
240-193603-2	DUP-002-F-A4-20231012-01	Total/NA	Water	7470A	
240-193603-3	BAC-12-F-A4-20231012-01	Total/NA	Water	7470A	
240-193603-4	FIELD BLANK-001-F-A4-20231012-01	Total/NA	Water	7470A	
MB 240-590941/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-590941/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 591232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193603-1	BAC-14-F-A4-20231012-01	Total Recoverable	Water	6020B	590936
240-193603-2	DUP-002-F-A4-20231012-01	Total Recoverable	Water	6020B	590936
240-193603-3	BAC-12-F-A4-20231012-01	Total Recoverable	Water	6020B	590936
240-193603-4	FIELD BLANK-001-F-A4-20231012-01	Total Recoverable	Water	6020B	590936
MB 240-590936/1-A	Method Blank	Total Recoverable	Water	6020B	590936
LCS 240-590936/2-A	Lab Control Sample	Total Recoverable	Water	6020B	590936

Analysis Batch: 591320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193603-1	BAC-14-F-A4-20231012-01	Total/NA	Water	7470A	590941
240-193603-2	DUP-002-F-A4-20231012-01	Total/NA	Water	7470A	590941
240-193603-3	BAC-12-F-A4-20231012-01	Total/NA	Water	7470A	590941
240-193603-4	FIELD BLANK-001-F-A4-20231012-01	Total/NA	Water	7470A	590941
MB 240-590941/1-A	Method Blank	Total/NA	Water	7470A	590941
LCS 240-590941/2-A	Lab Control Sample	Total/NA	Water	7470A	590941

General Chemistry

Analysis Batch: 590996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193603-1	BAC-14-F-A4-20231012-01	Total/NA	Water	2320B-1997	
240-193603-2	DUP-002-F-A4-20231012-01	Total/NA	Water	2320B-1997	
240-193603-3	BAC-12-F-A4-20231012-01	Total/NA	Water	2320B-1997	
240-193603-4	FIELD BLANK-001-F-A4-20231012-01	Total/NA	Water	2320B-1997	
MB 240-590996/30	Method Blank	Total/NA	Water	2320B-1997	
MB 240-590996/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-590996/29	Lab Control Sample	Total/NA	Water	2320B-1997	
LCS 240-590996/3	Lab Control Sample	Total/NA	Water	2320B-1997	
240-193603-3 DU	BAC-12-F-A4-20231012-01	Total/NA	Water	2320B-1997	

Analysis Batch: 591603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193603-3	BAC-12-F-A4-20231012-01	Total/NA	Water	300.0-1993 R2.1	

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QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

General Chemistry (Continued)

Analysis Batch: 591603 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193603-4	FIELD BLANK-001-F-A4-20231012-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-591603/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-591603/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 593596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193603-1	BAC-14-F-A4-20231012-01	Total/NA	Water	300.0-1993 R2.1	
240-193603-2	DUP-002-F-A4-20231012-01	Total/NA	Water	300.0-1993 R2.1	
MB 240-593596/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-593596/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-193603-1 MS	BAC-14-F-A4-20231012-01	Total/NA	Water	300.0-1993 R2.1	
240-193603-1 MSD	BAC-14-F-A4-20231012-01	Total/NA	Water	300.0-1993 R2.1	
240-193603-2 MS	DUP-002-F-A4-20231012-01	Total/NA	Water	300.0-1993 R2.1	
240-193603-2 MSD	DUP-002-F-A4-20231012-01	Total/NA	Water	300.0-1993 R2.1	

Rad

Prep Batch: 632482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193603-1	BAC-14-F-A4-20231012-01	Total/NA	Water	PrecSep-21	
240-193603-2	DUP-002-F-A4-20231012-01	Total/NA	Water	PrecSep-21	
240-193603-3	BAC-12-F-A4-20231012-01	Total/NA	Water	PrecSep-21	
240-193603-4	FIELD BLANK-001-F-A4-20231012-01	Total/NA	Water	PrecSep-21	
MB 160-632482/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-632482/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 632483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-193603-1	BAC-14-F-A4-20231012-01	Total/NA	Water	PrecSep_0	
240-193603-2	DUP-002-F-A4-20231012-01	Total/NA	Water	PrecSep_0	
240-193603-3	BAC-12-F-A4-20231012-01	Total/NA	Water	PrecSep_0	
240-193603-4	FIELD BLANK-001-F-A4-20231012-01	Total/NA	Water	PrecSep_0	
MB 160-632483/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-632483/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Client Sample ID: BAC-14-F-A4-20231012-01

Lab Sample ID: 240-193603-1

Date Collected: 10/12/23 10:09

Matrix: Water

Date Received: 10/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590936	S4FJ	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 19:43
Total/NA	Prep	7470A			590941	S4FJ	EET CLE	10/16/23 14:00
Total/NA	Analysis	7470A		1	591320	GK	EET CLE	10/18/23 16:11
Total/NA	Analysis	2320B-1997		1	590996	QUY8	EET CLE	10/16/23 14:08
Total/NA	Analysis	300.0-1993 R2.1		1	593596	JWW	EET CLE	11/06/23 16:28
Total/NA	Prep	PrecSep-21			632482	KAC	EET SL	10/18/23 09:10
Total/NA	Analysis	9315		1	636168	SCB	EET SL	11/09/23 21:08
Total/NA	Prep	PrecSep_0			632483	KAC	EET SL	10/18/23 09:12
Total/NA	Analysis	9320		1	635643	CMM	EET SL	11/07/23 11:18
Total/NA	Analysis	Ra226_Ra228		1	636395	EMH	EET SL	11/10/23 17:32

Client Sample ID: DUP-002-F-A4-20231012-01

Lab Sample ID: 240-193603-2

Date Collected: 10/12/23 00:00

Matrix: Water

Date Received: 10/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590936	S4FJ	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 19:46
Total/NA	Prep	7470A			590941	S4FJ	EET CLE	10/16/23 14:00
Total/NA	Analysis	7470A		1	591320	GK	EET CLE	10/18/23 16:13
Total/NA	Analysis	2320B-1997		1	590996	QUY8	EET CLE	10/16/23 14:12
Total/NA	Analysis	300.0-1993 R2.1		1	593596	JWW	EET CLE	11/06/23 22:58
Total/NA	Prep	PrecSep-21			632482	KAC	EET SL	10/18/23 09:10
Total/NA	Analysis	9315		1	636168	SCB	EET SL	11/09/23 21:08
Total/NA	Prep	PrecSep_0			632483	KAC	EET SL	10/18/23 09:12
Total/NA	Analysis	9320		1	635643	CMM	EET SL	11/07/23 11:18
Total/NA	Analysis	Ra226_Ra228		1	636395	EMH	EET SL	11/10/23 17:32

Client Sample ID: BAC-12-F-A4-20231012-01

Lab Sample ID: 240-193603-3

Date Collected: 10/12/23 11:11

Matrix: Water

Date Received: 10/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590936	S4FJ	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 19:53
Total/NA	Prep	7470A			590941	S4FJ	EET CLE	10/16/23 14:00
Total/NA	Analysis	7470A		1	591320	GK	EET CLE	10/18/23 16:15
Total/NA	Analysis	2320B-1997		1	590996	QUY8	EET CLE	10/16/23 14:25
Total/NA	Analysis	300.0-1993 R2.1		1	591603	JWW	EET CLE	10/20/23 16:38
Total/NA	Prep	PrecSep-21			632482	KAC	EET SL	10/18/23 09:10
Total/NA	Analysis	9315		1	636168	SCB	EET SL	11/09/23 21:08
Total/NA	Prep	PrecSep_0			632483	KAC	EET SL	10/18/23 09:12
Total/NA	Analysis	9320		1	635643	CMM	EET SL	11/07/23 11:18

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

Client Sample ID: BAC-12-F-A4-20231012-01

Lab Sample ID: 240-193603-3

Date Collected: 10/12/23 11:11

Matrix: Water

Date Received: 10/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228		1	636395	EMH	EET SL	11/10/23 17:32

Client Sample ID: FIELD BLANK-001-F-A4-20231012-01

Lab Sample ID: 240-193603-4

Date Collected: 10/12/23 11:13

Matrix: Water

Date Received: 10/14/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			590936	S4FJ	EET CLE	10/16/23 14:00
Total Recoverable	Analysis	6020B		1	591232	RKT	EET CLE	10/17/23 19:55
Total/NA	Prep	7470A			590941	S4FJ	EET CLE	10/16/23 14:00
Total/NA	Analysis	7470A		1	591320	GK	EET CLE	10/18/23 16:17
Total/NA	Analysis	2320B-1997		1	590996	QUY8	EET CLE	10/16/23 14:36
Total/NA	Analysis	300.0-1993 R2.1		1	591603	JWW	EET CLE	10/20/23 16:58
Total/NA	Prep	PrecSep-21			632482	KAC	EET SL	10/18/23 09:10
Total/NA	Analysis	9315		1	636168	SCB	EET SL	11/09/23 21:08
Total/NA	Prep	PrecSep_0			632483	KAC	EET SL	10/18/23 09:12
Total/NA	Analysis	9320		1	635643	CMM	EET SL	11/07/23 11:20
Total/NA	Analysis	Ra226_Ra228		1	636395	EMH	EET SL	11/10/23 17:32

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
 Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

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
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
Virginia	NELAP	460175	09-14-24
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-24
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-24
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-24
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-24
Massachusetts	State	M-MO054	06-30-24
MI - RadChem Recognition	State	9005	06-30-24
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-24
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells - App IV

Job ID: 240-193603-1

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 Dakota	State	R-207	06-30-24
Oklahoma	NELAP	9997	08-31-24
Oregon	NELAP	4157	09-01-24
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-24
Texas	NELAP	T104704193	07-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO000542021-14	07-31-24
Virginia	NELAP	10310	06-15-25
Washington	State	C592	08-30-24
West Virginia DEP	State	381	12-31-23

Client Information		Lab PM		Carrier Tracking No(s)		COC No.							
Client Contact Taylor Huffman		Cisneros, Roxanne		240-93466-34578.1		240-93466-34578.1							
Company Lightstone Generation Gavin Power LLC		E-Mail roxanne.cisneros@Eurolfinset.com		State of Origin		Page: Page 1 of 1							
Address: 7397 OH-7		Due Date Requested:		Job #		Preservation Codes:							
City Cheshire		TAT Requested (days):		A - HCL		M - Hexane							
State, Zip OH, 45620		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		B - NaOH		N - None							
Phone 740-925-3171(Tel)		PO # 2935505		C - Zn Acetate		O - AsNaO2							
Email: taylor.huffman@lightstonegen.com		WO #		D - Nitric Acid		P - Na2O4S							
Project Name: Federal CCR Wells - App IV		Project #: 24019633		E - NaHSO4		Q - Na2SO3							
Site Gvuh		SSOW#		F - MeOH		R - Na2S2O3							
				G - Amchlor		S - H2SO4							
				H - Ascorbic Acid		T - TSP Dodecahydrate							
				I - Ice		U - Acetone							
				J - DI Water		V - MCAA							
				K - EDTA		W - pH 4-5							
				L - EDA		Z - other (specify)							
				Other:									
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Seawater, Urine, etc.)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020, 7470A	300, 28D - Fluoride	2220B - Alkalinity	9315, Ra226, 9320, Ra228, Ra226Ra228_GFP	Analysis Requested	Special Instructions/Note:	
BAC-14-F-A4-20231012-01	10-12-23	1009	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>							
DUP-02-Z-F-A4-20231012-01	10-12-23	-	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>							
BAC-12-F-A4-20231012-01	10-12-23	1111	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>							
Field Blanks-col-F-A4-20231012-01	10-12-23	1130	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>							
				Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>							
<p>Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)</p> <p>Empty Kit Relinquished by: _____ Date: _____ Time: _____ Method of Shipment: _____</p> <p>Relinquished by: <i>Ashley Peal</i> Date/Time: 10/13/23 1700 Company: EJA Relinquished by: <i>Ashley Peal</i> Date/Time: 10/13/23 1700 Company: EJA Relinquished by: <i>Ashley Peal</i> Date/Time: 10/13/23 1700 Company: EJA</p> <p>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months</p> <p>Special Instructions/QC Requirements:</p>													
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:									



240-193603 Chain of Custody

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Eurofins - Cleveland Sample Receipt Form/Narrative
 Barberton Facility
 Client Lightstone Site Name _____
 Cooler Received on 10-14-23 Opened on 10-14-23 Cooler unpacked by: Nancy Rye
 FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____
 Receipt After-hours: Drop-off Date/Time _____ Storage Location _____
 Eurofins Cooler # ES 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 # 22 (CF -0.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity leach 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 NA
 -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# HC316719
 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 _____

Tests that are not checked for pH by Receiving:
 VOAs
 Oil and Grease
 TOC

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: _____

Eurofins - Canton 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 #: 22	14.6	14.5	Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: 22	0.8	0.7	Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
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EC	Client	Box	Other	IR GUN #: _____			Water	None	
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EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Water	None	

See Temperature Excursion Form

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservative</u>	
			<u>pH</u>	<u>Temp</u>	<u>Added (mls)</u>	<u>Lot #</u>
BAC-14-F-A4-20231012-01	240-193603-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-14-F-A4-20231012-01	240-193603-D-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-14-F-A4-20231012-01	240-193603-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-002-F-A4-20231012-01	240-193603-C-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
DUP-002-F-A4-20231012-01	240-193603-D-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
DUP-002-F-A4-20231012-01	240-193603-E-2	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-12-F-A4-20231012-01	240-193603-C-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
BAC-12-F-A4-20231012-01	240-193603-D-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
BAC-12-F-A4-20231012-01	240-193603-E-3	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
FIELD BLANK-001-F-A4-20231012-01	240-193603-C-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
FIELD BLANK-001-F-A4-20231012-01	240-193603-D-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
FIELD BLANK-001-F-A4-20231012-01	240-193603-E-4	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

Chain of Custody Record



Client Information (Sub Contract Lab)		Lab PM:		Carrier Tracking No(s):		COC No:																																																																		
Client Contact: TestAmerica Laboratories, Inc.		Cisneros, Roxanne		State of Origin: Ohio		240-175339-1																																																																		
Shipping/Receiving		E-Mail: roxanne.cisneros@et.eurofinsus.com		Page: Page 1 of 1		Job #:																																																																		
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #:		240-193603-1																																																																		
Address: 13715 Rider Trail North,		Due Date Requested: 10/30/2023		Analysis Requested																																																																				
City: Earth City		TAT Requested (days):																																																																						
State, Zip: MO, 63045		PO #:		<table border="1"> <thead> <tr> <th>Sample ID (Lab ID)</th> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=Comp, G=grab)</th> <th>Matrix (W=water, S=solid, O=on-site, B=biological, A=air)</th> <th>Preservation Code:</th> <th>Field Filtered Sample (Yes or No)</th> <th>Perform MS/MSD (Yes or No)</th> <th>9315_Ra226/PreSep_21 Radium-226 (GFC)</th> <th>9320_Ra226/PreSep_0 Radium-226 (GFC)</th> <th>Ra226a228_GFC/ Combined Radium-226 and Radium-228</th> <th>Total Number of Containers</th> <th>Special Instructions/Note:</th> </tr> </thead> <tbody> <tr> <td>BAC-14-F-A4-20231012-01 (240-193603-1)</td> <td>10/12/23</td> <td>10:09 Eastern</td> <td>Water</td> <td>Water</td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>2</td> <td>Recount of TAR after 21 day ingrowth if > action limit; save planchet</td> </tr> <tr> <td>DUP-002-F-A4-20231012-01 (240-193603-2)</td> <td>10/12/23</td> <td>11:11 Eastern</td> <td>Water</td> <td>Water</td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>2</td> <td>Recount of TAR after 21 day ingrowth if > action limit; save planchet</td> </tr> <tr> <td>BAC-12-F-A4-20231012-01 (240-193603-3)</td> <td>10/12/23</td> <td>11:13 Eastern</td> <td>Water</td> <td>Water</td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>2</td> <td>Recount of TAR after 21 day ingrowth if > action limit; save planchet</td> </tr> <tr> <td>FIELD BLANK-001-F-A4-20231012-01 (240-193603-4)</td> <td>10/12/23</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				Sample ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=on-site, B=biological, A=air)	Preservation Code:	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PreSep_21 Radium-226 (GFC)	9320_Ra226/PreSep_0 Radium-226 (GFC)	Ra226a228_GFC/ Combined Radium-226 and Radium-228	Total Number of Containers	Special Instructions/Note:	BAC-14-F-A4-20231012-01 (240-193603-1)	10/12/23	10:09 Eastern	Water	Water		X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet	DUP-002-F-A4-20231012-01 (240-193603-2)	10/12/23	11:11 Eastern	Water	Water		X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet	BAC-12-F-A4-20231012-01 (240-193603-3)	10/12/23	11:13 Eastern	Water	Water		X	X	X	X	X	2	Recount of TAR after 21 day ingrowth if > action limit; save planchet	FIELD BLANK-001-F-A4-20231012-01 (240-193603-4)	10/12/23											
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FIELD BLANK-001-F-A4-20231012-01 (240-193603-4)	10/12/23																																																																							
Project Name: Federal GWM Wells		Project #: 24019633		Preservation Codes: 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)																																																																				
Site: SSOW#		SSOW#:																																																																						

Possible Hazard Identification
 Unconfirmed
 Deliverable Requested: I, II, III, IV, Other (specify) **Primary Deliverable Rank: 2**

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: Michelle Hargis	Date/Time: 10/10/23 9:40	Company: FEDEX	Received by: Feelex
Relinquished by: Fedex	Date/Time: 10/17/2023 08:45	Company: Company	Received by: M. Curlette
Relinquished by:	Date/Time:	Company:	Received by:

Cooler Temperature(s) °C and Other Remarks:



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-193603-1

Login Number: 193603

List Number: 2

Creator: Pinette, Meadow L

List Source: Eurofins St. Louis

List Creation: 10/17/23 03:05 PM

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



 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 12/11/2023 4:48:06 PM

JOB DESCRIPTION

Federal CCR Wells Appendix III

JOB NUMBER

240-195797-1

Eurofins Cleveland

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
(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells Appendix III

Job ID: 240-195797-1

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.
α	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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells Appendix III

Job ID: 240-195797-1

Job ID: 240-195797-1

Laboratory: Eurofins Cleveland

Narrative

Job Narrative 240-195797-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample 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 11/18/2023 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 5.4°C and 16.3°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 Appendix III

Job ID: 240-195797-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
SM 2540C	Solids, Total Dissolved (TDS)	SM	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
Project/Site: Federal CCR Wells Appendix III

Job ID: 240-195797-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-195797-1	OHIO RIVER	Water	11/16/23 10:05	11/18/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix III

Job ID: 240-195797-1

Client Sample ID: OHIO RIVER

Lab Sample ID: 240-195797-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	81	J	100	57	ug/L	1		6010D	Total Recoverable
Calcium	40000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	11000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	3200		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	33000		1000	330	ug/L	1		6020B	Total Recoverable
Total Alkalinity	79		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	79		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Chloride	38		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	79		1.0	0.35	mg/L	1		300.0	Total/NA
Total Dissolved Solids	240		10	7.8	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix III

Job ID: 240-195797-1

Client Sample ID: OHIO RIVER

Lab Sample ID: 240-195797-1

Date Collected: 11/16/23 10:05

Matrix: Water

Date Received: 11/18/23 08:00

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		11/21/23 14:00	11/22/23 10:12	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	40000		1000	250	ug/L		11/21/23 14:00	11/22/23 11:05	1
Magnesium	11000		1000	61	ug/L		11/21/23 14:00	11/22/23 11:05	1
Potassium	3200		1000	220	ug/L		11/21/23 14:00	11/22/23 11:05	1
Sodium	33000		1000	330	ug/L		11/21/23 14:00	11/22/23 11:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	79		5.0	2.6	mg/L			11/22/23 14:20	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	79		5.0	2.6	mg/L			11/22/23 14:20	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			11/22/23 14:20	1
Chloride (EPA 300.0)	38		1.0	0.13	mg/L			12/02/23 00:14	1
Fluoride (EPA 300.0)	0.11		0.050	0.024	mg/L			12/08/23 14:59	1
Sulfate (EPA 300.0)	79		1.0	0.35	mg/L			12/02/23 00:14	1
Total Dissolved Solids (SM 2540C)	240		10	7.8	mg/L			11/22/23 16:45	1

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix III

Job ID: 240-195797-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-595403/1-A
 Matrix: Water
 Analysis Batch: 595603

Client Sample ID: Method Blank
 Prep Type: Total Recoverable
 Prep Batch: 595403

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		11/21/23 14:00	11/22/23 07:53	1

Lab Sample ID: LCS 240-595403/3-A
 Matrix: Water
 Analysis Batch: 595603

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 595403

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1020		ug/L		102	80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-595403/1-A
 Matrix: Water
 Analysis Batch: 595723

Client Sample ID: Method Blank
 Prep Type: Total Recoverable
 Prep Batch: 595403

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		11/21/23 14:00	11/22/23 11:00	1
Magnesium	ND		1000	61	ug/L		11/21/23 14:00	11/22/23 11:00	1
Potassium	ND		1000	220	ug/L		11/21/23 14:00	11/22/23 11:00	1
Sodium	ND		1000	330	ug/L		11/21/23 14:00	11/22/23 11:00	1

Lab Sample ID: LCS 240-595403/2-A
 Matrix: Water
 Analysis Batch: 595723

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 595403

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	25200		ug/L		101	80 - 120
Magnesium	25000	25600		ug/L		102	80 - 120
Potassium	25000	25100		ug/L		100	80 - 120
Sodium	25000	24900		ug/L		100	80 - 120

Lab Sample ID: 240-195797-1 MS
 Matrix: Water
 Analysis Batch: 595723

Client Sample ID: OHIO RIVER
 Prep Type: Total Recoverable
 Prep Batch: 595403

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	40000		25000	66200		ug/L		105	80 - 120
Magnesium	11000		25000	37300		ug/L		105	80 - 120
Potassium	3200		25000	29200		ug/L		104	80 - 120
Sodium	33000		25000	58800		ug/L		105	80 - 120

Lab Sample ID: 240-195797-1 MSD
 Matrix: Water
 Analysis Batch: 595723

Client Sample ID: OHIO RIVER
 Prep Type: Total Recoverable
 Prep Batch: 595403

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	40000		25000	65300		ug/L		101	80 - 120	1	20
Magnesium	11000		25000	36700		ug/L		102	80 - 120	2	20
Potassium	3200		25000	29100		ug/L		104	80 - 120	0	20
Sodium	33000		25000	57600		ug/L		100	80 - 120	2	20

Eurofins Cleveland

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix III

Job ID: 240-195797-1

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-595656/4
 Matrix: Water
 Analysis Batch: 595656

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity	ND		5.0	2.6	mg/L			11/22/23 13:47	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			11/22/23 13:47	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			11/22/23 13:47	1

Lab Sample ID: LCS 240-595656/3
 Matrix: Water
 Analysis Batch: 595656

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Total Alkalinity	80.6	82.1		mg/L		102	86 - 123

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-596336/3
 Matrix: Water
 Analysis Batch: 596336

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	ND		1.0	0.13	mg/L			12/01/23 21:13	1
Sulfate	ND		1.0	0.35	mg/L			12/01/23 21:13	1

Lab Sample ID: LCS 240-596336/4
 Matrix: Water
 Analysis Batch: 596336

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Chloride	50.0	51.3		mg/L		103	90 - 110
Sulfate	50.0	53.5		mg/L		107	90 - 110

Lab Sample ID: MB 240-597010/3
 Matrix: Water
 Analysis Batch: 597010

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	ND		1.0	0.13	mg/L			12/08/23 11:44	1
Fluoride	ND		0.050	0.024	mg/L			12/08/23 11:44	1
Sulfate	ND		1.0	0.35	mg/L			12/08/23 11:44	1

Lab Sample ID: LCS 240-597010/4
 Matrix: Water
 Analysis Batch: 597010

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Chloride	50.0	46.3		mg/L		93	90 - 110
Fluoride	2.50	2.34		mg/L		94	90 - 110
Sulfate	50.0	47.9		mg/L		96	90 - 110

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix III

Job ID: 240-195797-1

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

Lab Sample ID: MB 240-595655/1

Matrix: Water

Analysis Batch: 595655

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			11/22/23 16:45	1

Lab Sample ID: LCS 240-595655/2

Matrix: Water

Analysis Batch: 595655

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	564	528		mg/L		94	80 - 120



QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix III

Job ID: 240-195797-1

Metals

Prep Batch: 595403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195797-1	OHIO RIVER	Total Recoverable	Water	3005A	
MB 240-595403/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-595403/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-595403/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-195797-1 MS	OHIO RIVER	Total Recoverable	Water	3005A	
240-195797-1 MSD	OHIO RIVER	Total Recoverable	Water	3005A	

Analysis Batch: 595603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195797-1	OHIO RIVER	Total Recoverable	Water	6010D	595403
MB 240-595403/1-A	Method Blank	Total Recoverable	Water	6010D	595403
LCS 240-595403/3-A	Lab Control Sample	Total Recoverable	Water	6010D	595403

Analysis Batch: 595723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195797-1	OHIO RIVER	Total Recoverable	Water	6020B	595403
MB 240-595403/1-A	Method Blank	Total Recoverable	Water	6020B	595403
LCS 240-595403/2-A	Lab Control Sample	Total Recoverable	Water	6020B	595403
240-195797-1 MS	OHIO RIVER	Total Recoverable	Water	6020B	595403
240-195797-1 MSD	OHIO RIVER	Total Recoverable	Water	6020B	595403

General Chemistry

Analysis Batch: 595655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195797-1	OHIO RIVER	Total/NA	Water	SM 2540C	
MB 240-595655/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 240-595655/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 595656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195797-1	OHIO RIVER	Total/NA	Water	2320B-1997	
MB 240-595656/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-595656/3	Lab Control Sample	Total/NA	Water	2320B-1997	

Analysis Batch: 596336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195797-1	OHIO RIVER	Total/NA	Water	300.0	
MB 240-596336/3	Method Blank	Total/NA	Water	300.0	
LCS 240-596336/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 597010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195797-1	OHIO RIVER	Total/NA	Water	300.0	
MB 240-597010/3	Method Blank	Total/NA	Water	300.0	
LCS 240-597010/4	Lab Control Sample	Total/NA	Water	300.0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix III

Job ID: 240-195797-1

Client Sample ID: OHIO RIVER

Lab Sample ID: 240-195797-1

Date Collected: 11/16/23 10:05

Matrix: Water

Date Received: 11/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			595403	S4FJ	EET CLE	11/21/23 14:00
Total Recoverable	Analysis	6010D		1	595603	KLC	EET CLE	11/22/23 10:12
Total Recoverable	Prep	3005A			595403	S4FJ	EET CLE	11/21/23 14:00
Total Recoverable	Analysis	6020B		1	595723	RKT	EET CLE	11/22/23 11:05
Total/NA	Analysis	2320B-1997		1	595656	QUY8	EET CLE	11/22/23 14:20
Total/NA	Analysis	300.0		1	597010	JWW	EET CLE	12/08/23 14:59
Total/NA	Analysis	300.0		1	596336	JWW	EET CLE	12/02/23 00:14
Total/NA	Analysis	SM 2540C		1	595655	C5SV	EET CLE	11/22/23 16:45

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
 Project/Site: Federal CCR Wells Appendix III

Job ID: 240-195797-1

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
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
Virginia	NELAP	460175	09-14-24
West Virginia DEP	State	210	12-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.



Client Information		Lab PM:		Carrier Tracking No(s):		COC No:	
Client Contact: Taylor Huffman		Cisneros, Roxanne		240-93018-34502		240-93018-34502	
Company: Lightstone Generation Gavin Power LLC		E-Mail: roxanne.cisneros@Eurofinset.com		State or Origin:		Page 1 of 1	
Address: 7397 OH-7		[PWSID]:		Job #:			
City: Cheshire		TAT Requested (days):		Preservation Codes:		M - Hexane N - None O - AsNaO2 P - Na2SO4 Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - PH 4-5 Z - other (specify)	
State, Zip: OH, 45620		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		Total Number of Containers		Special Instructions/Note: Appendix III Parameters	
Phone: 740-925-3171(Tel)		PO #: 2935505		6010B, 7470, 6020(See Metals List)			
Email: taylor.huffman@lightstonegen.com		WO #: 24019633		2540C, Caled, 300.0, 280(Chloride, Fluoride, Sulfate)			
Project Name: Federal - CCR Wells Appendix 3		Site: Ohio		Perform MS/MSD (Yes or No)			
Sample Identification		Sample Date		Field Filtered Sample (Yes or No)			
Ohio River		11-16-23 1005		X			
Sample Type (C=Comp, G=grab)		Sample Time		Matrix (Water, Sediment, Swill, Other)			
G		1005		W			
Preservation Code:		Sample Date		Sample Type			
		11-16-23 1005		G			
Possible Hazard Identification		Sample Time		Sample Type			
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Date		Sample Type			
Deliverable Requested: I, II, III, IV, Other (specify)		Sample Time		Sample Type			
		11-16-23 1005		G			
Empty Kit Relinquished by:		Date:		Time:			
Relinquished by:		11/17/23		08:00			
Relinquished by:		Date/Time:		Date/Time:			
Relinquished by:		Date/Time:		Date/Time:			
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Method of Shipment:			
				Received by:		Date/Time:	
				Received by:		Date/Time:	
				Received by:		Date/Time:	
				Cooler Temperature(s) °C and Other Remarks			

Barberton Facility

Client Light Stone

Site Name _____

Cooler unpacked by: _____

Cooler Received on 11-18-23

Opened on 11-18-23

Wang Page

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 # 22 (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 lead 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 NA

-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# HC316719

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 _____

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

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: _____

Eurofins - Canton Sample Receipt Multiple Cooler Form

Cooler Description (Circle)				IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)		
<u>EC</u>	Client	Box	Other	IR GUN #: <u>22</u>	<u>15.2</u>	<u>16.3</u>	Wet Ice	Blue Ice	Dry Ice
<u>EC</u>	Client	Box	Other	IR GUN #: <u>22</u>	<u>4.3</u>	<u>5.4</u>	Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice
EC	Client	Box	Other	IR GUN #: _____			Wet Ice	Blue Ice	Dry Ice

See Temperature Excursion Form

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u> <u>pH</u>	<u>Temp</u>	<u>Preservation</u> <u>Added</u>	<u>Preservation</u> <u>Lot Number</u>
OHIO RIVER	240-195797-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____

 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 12/22/2023 4:58:20 PM

JOB DESCRIPTION

Federal CCR Wells Appendix IV

JOB NUMBER

240-195798-1

Eurofins Cleveland

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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12/22/2023 4:58:20 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
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(615)301-5761



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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

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

Case Narrative

Client: Lightstone Generation Gavin Power LLC
Project: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

Job ID: 240-195798-1

Eurofins Cleveland

Job Narrative 240-195798-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample 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 11/18/2023 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 5.4°C and 16.3°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.

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Method Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320B-1997	Alkalinity, Total	SM	EET CLE
300.0-1993 R2.1	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 Appendix IV

Job ID: 240-195798-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-195798-1	OHIO RIVER	Water	11/16/23 10:05	11/18/23 08:00

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Detection Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

Client Sample ID: OHIO RIVER

Lab Sample ID: 240-195798-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.86	J	2.0	0.57	ug/L	1		6020B	Total Recoverable
Arsenic	1.2	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	43		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	0.22	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Calcium	40000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	0.49	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.60	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	7.5	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Magnesium	11000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	2.9	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	3200		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	33000		1000	330	ug/L	1		6020B	Total Recoverable
Thallium	1.3		1.0	0.20	ug/L	1		6020B	Total Recoverable
Total Alkalinity	81		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Bicarbonate Alkalinity as CaCO3	81		5.0	2.6	mg/L	1		2320B-1997	Total/NA
Fluoride	0.12		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

Client Sample ID: OHIO RIVER

Lab Sample ID: 240-195798-1

Date Collected: 11/16/23 10:05

Matrix: Water

Date Received: 11/18/23 08:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.86	J	2.0	0.57	ug/L		11/21/23 14:00	11/22/23 11:21	1
Arsenic	1.2	J	5.0	0.75	ug/L		11/21/23 14:00	11/22/23 11:21	1
Barium	43		5.0	2.2	ug/L		11/21/23 14:00	11/22/23 11:21	1
Beryllium	ND		1.0	0.62	ug/L		11/21/23 14:00	11/22/23 11:21	1
Cadmium	0.22	J	1.0	0.20	ug/L		11/21/23 14:00	11/22/23 11:21	1
Calcium	40000		1000	250	ug/L		11/21/23 14:00	11/22/23 11:21	1
Chromium	ND		5.0	1.2	ug/L		11/21/23 14:00	11/22/23 11:21	1
Cobalt	0.49	J	1.0	0.19	ug/L		11/21/23 14:00	11/22/23 11:21	1
Lead	0.60	J	1.0	0.45	ug/L		11/21/23 14:00	11/22/23 11:21	1
Lithium	7.5	J	8.0	1.7	ug/L		11/21/23 14:00	11/22/23 11:21	1
Magnesium	11000		1000	61	ug/L		11/21/23 14:00	11/22/23 11:21	1
Molybdenum	2.9	J	5.0	1.1	ug/L		11/21/23 14:00	11/22/23 11:21	1
Potassium	3200		1000	220	ug/L		11/21/23 14:00	11/22/23 11:21	1
Selenium	ND		5.0	0.89	ug/L		11/21/23 14:00	11/22/23 11:21	1
Sodium	33000		1000	330	ug/L		11/21/23 14:00	11/22/23 11:21	1
Thallium	1.3		1.0	0.20	ug/L		11/21/23 14:00	11/22/23 11:21	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		11/21/23 14:00	11/22/23 13:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320B-1997)	81		5.0	2.6	mg/L			11/22/23 14:25	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-1997)	81		5.0	2.6	mg/L			11/22/23 14:25	1
Carbonate Alkalinity as CaCO3 (SM 2320B-1997)	ND		5.0	2.6	mg/L			11/22/23 14:25	1
Fluoride (EPA 300.0-1993 R2.1)	0.12		0.050	0.024	mg/L			12/05/23 21:13	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	0.179	U	0.195	0.195	1.00	0.313	pCi/L	11/27/23 10:49	12/22/23 14:27	1
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Ba Carrier</i>	89.5		30 - 110					11/27/23 10:49	12/22/23 14:27	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	0.0746	U	0.413	0.413	1.00	0.757	pCi/L	11/27/23 10:59	12/19/23 16:30	1
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Ba Carrier</i>	89.5		30 - 110					11/27/23 10:59	12/19/23 16:30	1
<i>Y Carrier</i>	80.0		30 - 110					11/27/23 10:59	12/19/23 16:30	1

Eurofins Cleveland

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

Client Sample ID: OHIO RIVER

Lab Sample ID: 240-195798-1

Date Collected: 11/16/23 10:05

Matrix: Water

Date Received: 11/18/23 08:00

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.254	U	0.457	0.457	5.00	0.757	pCi/L		12/22/23 17:49	1

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Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
240-195798-1	OHIO RIVER	89.5	
LCS 160-638356/2-A	Lab Control Sample	96.4	
MB 160-638356/1-A	Method Blank	102	
Tracer/Carrier Legend			
Ba = Ba Carrier			

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-195798-1	OHIO RIVER	89.5	80.0
LCS 160-638358/2-A	Lab Control Sample	96.4	83.4
MB 160-638358/1-A	Method Blank	102	85.6
Tracer/Carrier Legend			
Ba = Ba Carrier			
Y = Y Carrier			

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-595403/1-A
Matrix: Water
Analysis Batch: 595723

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 595403

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	ND		2.0	0.57	ug/L		11/21/23 14:00	11/22/23 11:00	1
Arsenic	ND		5.0	0.75	ug/L		11/21/23 14:00	11/22/23 11:00	1
Barium	ND		5.0	2.2	ug/L		11/21/23 14:00	11/22/23 11:00	1
Beryllium	ND		1.0	0.62	ug/L		11/21/23 14:00	11/22/23 11:00	1
Cadmium	ND		1.0	0.20	ug/L		11/21/23 14:00	11/22/23 11:00	1
Calcium	ND		1000	250	ug/L		11/21/23 14:00	11/22/23 11:00	1
Chromium	ND		5.0	1.2	ug/L		11/21/23 14:00	11/22/23 11:00	1
Cobalt	ND		1.0	0.19	ug/L		11/21/23 14:00	11/22/23 11:00	1
Lead	ND		1.0	0.45	ug/L		11/21/23 14:00	11/22/23 11:00	1
Lithium	ND		8.0	1.7	ug/L		11/21/23 14:00	11/22/23 11:00	1
Magnesium	ND		1000	61	ug/L		11/21/23 14:00	11/22/23 11:00	1
Molybdenum	ND		5.0	1.1	ug/L		11/21/23 14:00	11/22/23 11:00	1
Potassium	ND		1000	220	ug/L		11/21/23 14:00	11/22/23 11:00	1
Selenium	ND		5.0	0.89	ug/L		11/21/23 14:00	11/22/23 11:00	1
Sodium	ND		1000	330	ug/L		11/21/23 14:00	11/22/23 11:00	1
Thallium	ND		1.0	0.20	ug/L		11/21/23 14:00	11/22/23 11:00	1

Lab Sample ID: LCS 240-595403/2-A
Matrix: Water
Analysis Batch: 595723

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 595403

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Antimony	100	106		ug/L		106	80 - 120
Arsenic	1000	1010		ug/L		101	80 - 120
Barium	1000	966		ug/L		97	80 - 120
Beryllium	500	506		ug/L		101	80 - 120
Cadmium	500	498		ug/L		100	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	506		ug/L		101	80 - 120
Lithium	500	489		ug/L		98	80 - 120
Magnesium	25000	25600		ug/L		102	80 - 120
Molybdenum	500	483		ug/L		97	80 - 120
Potassium	25000	25100		ug/L		100	80 - 120
Selenium	1000	970		ug/L		97	80 - 120
Sodium	25000	24900		ug/L		100	80 - 120
Thallium	1000	1000		ug/L		100	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-595412/1-A
Matrix: Water
Analysis Batch: 595618

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 595412

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.20	0.13	ug/L		11/21/23 14:00	11/22/23 13:16	1

Eurofins Cleveland

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-595412/2-A
 Matrix: Water
 Analysis Batch: 595618

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 595412

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.49		ug/L		110	80 - 120

Method: 2320B-1997 - Alkalinity, Total

Lab Sample ID: MB 240-595656/4
 Matrix: Water
 Analysis Batch: 595656

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			11/22/23 13:47	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			11/22/23 13:47	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			11/22/23 13:47	1

Lab Sample ID: LCS 240-595656/3
 Matrix: Water
 Analysis Batch: 595656

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	80.6	82.1		mg/L		102	86 - 123

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-596610/3
 Matrix: Water
 Analysis Batch: 596610

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			12/05/23 15:26	1

Lab Sample ID: LCS 240-596610/4
 Matrix: Water
 Analysis Batch: 596610

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.50	2.34		mg/L		94	90 - 110

Lab Sample ID: 240-195798-1 MS
 Matrix: Water
 Analysis Batch: 596610

Client Sample ID: OHIO RIVER
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.12		2.50	2.74		mg/L		105	80 - 120

Lab Sample ID: 240-195798-1 MSD
 Matrix: Water
 Analysis Batch: 596610

Client Sample ID: OHIO RIVER
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.12		2.50	2.71		mg/L		104	80 - 120	1	15

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-638356/1-A
Matrix: Water
Analysis Batch: 641880

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 638356

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.06469	U	0.132	0.133	1.00	0.237	pCi/L	11/27/23 10:49	12/22/23 14:25	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	102		30 - 110		11/27/23 10:49	12/22/23 14:25	1			

Lab Sample ID: LCS 160-638356/2-A
Matrix: Water
Analysis Batch: 641880

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 638356

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	13.65		1.56	1.00	0.278	pCi/L	120	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	96.4		30 - 110						

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-638358/1-A
Matrix: Water
Analysis Batch: 641298

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 638358

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.4002	U	0.311	0.314	1.00	0.480	pCi/L	11/27/23 10:59	12/19/23 16:26	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	102		30 - 110		11/27/23 10:59	12/19/23 16:26	1			
Y Carrier	85.6		30 - 110		11/27/23 10:59	12/19/23 16:26	1			

Lab Sample ID: LCS 160-638358/2-A
Matrix: Water
Analysis Batch: 641298

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 638358

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Radium-228	7.63	8.197		1.16	1.00	0.478	pCi/L	107	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	96.4		30 - 110						
Y Carrier	83.4		30 - 110						

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

Metals

Prep Batch: 595403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195798-1	OHIO RIVER	Total Recoverable	Water	3005A	
MB 240-595403/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-595403/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 595412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195798-1	OHIO RIVER	Total/NA	Water	7470A	
MB 240-595412/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-595412/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 595618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195798-1	OHIO RIVER	Total/NA	Water	7470A	595412
MB 240-595412/1-A	Method Blank	Total/NA	Water	7470A	595412
LCS 240-595412/2-A	Lab Control Sample	Total/NA	Water	7470A	595412

Analysis Batch: 595723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195798-1	OHIO RIVER	Total Recoverable	Water	6020B	595403
MB 240-595403/1-A	Method Blank	Total Recoverable	Water	6020B	595403
LCS 240-595403/2-A	Lab Control Sample	Total Recoverable	Water	6020B	595403

General Chemistry

Analysis Batch: 595656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195798-1	OHIO RIVER	Total/NA	Water	2320B-1997	
MB 240-595656/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 240-595656/3	Lab Control Sample	Total/NA	Water	2320B-1997	

Analysis Batch: 596610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195798-1	OHIO RIVER	Total/NA	Water	300.0-1993 R2.1	
MB 240-596610/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-596610/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-195798-1 MS	OHIO RIVER	Total/NA	Water	300.0-1993 R2.1	
240-195798-1 MSD	OHIO RIVER	Total/NA	Water	300.0-1993 R2.1	

Rad

Prep Batch: 638356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195798-1	OHIO RIVER	Total/NA	Water	PrecSep-21	
MB 160-638356/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-638356/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 638358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-195798-1	OHIO RIVER	Total/NA	Water	PrecSep_0	
MB 160-638358/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-638358/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Eurofins Cleveland

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
 Project/Site: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

Client Sample ID: OHIO RIVER

Lab Sample ID: 240-195798-1

Date Collected: 11/16/23 10:05

Matrix: Water

Date Received: 11/18/23 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			595403	S4FJ	EET CLE	11/21/23 14:00
Total Recoverable	Analysis	6020B		1	595723	RKT	EET CLE	11/22/23 11:21
Total/NA	Prep	7470A			595412	S4FJ	EET CLE	11/21/23 14:00
Total/NA	Analysis	7470A		1	595618	GK	EET CLE	11/22/23 13:33
Total/NA	Analysis	2320B-1997		1	595656	QUY8	EET CLE	11/22/23 14:25
Total/NA	Analysis	300.0-1993 R2.1		1	596610	JWW	EET CLE	12/05/23 21:13
Total/NA	Prep	PrecSep-21			638356	KAC	EET SL	11/27/23 10:49
Total/NA	Analysis	9315		1	641881	SCB	EET SL	12/22/23 14:27
Total/NA	Prep	PrecSep_0			638358	KAC	EET SL	11/27/23 10:59
Total/NA	Analysis	9320		1	641298	FLC	EET SL	12/19/23 16:30
Total/NA	Analysis	Ra226_Ra228		1	641922	EMH	EET SL	12/22/23 17:49

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
 Project/Site: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

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
California	State	2927	02-27-24
Georgia	State	4062	02-27-24
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-28-24
Kentucky (WW)	State	KY98016	12-31-23
Michigan	State	9135	02-27-24
Minnesota	NELAP	039-999-348	12-31-23
Minnesota (Petrofund)	State	3506	08-01-23 *
New Jersey	NELAP	OH001	07-01-24
New York	NELAP	10975	04-02-24
Ohio	State	8303	02-27-24
Ohio VAP	State	ORELAP 4062	02-27-24
Oregon	NELAP	4062	02-27-24
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
Virginia	NELAP	460175	09-14-24
West Virginia DEP	State	210	12-31-23

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	04-06-25
Arizona	State	AZ0813	12-08-24
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-24
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-24
Illinois	NELAP	200023	11-30-24
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-24
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-24
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-24
Massachusetts	State	M-MO054	06-30-24
MI - RadChem Recognition	State	9005	06-30-24
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-24
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells Appendix IV

Job ID: 240-195798-1

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	07-31-24
North Dakota	State	R-207	06-30-24
Oklahoma	NELAP	9997	08-31-24
Oregon	NELAP	4157	09-01-24
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-24
Texas	NELAP	T104704193	07-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO000542021-14	07-31-24
Virginia	NELAP	10310	06-15-25
Washington	State	C592	08-30-24
West Virginia DEP	State	381	01-31-24

Barberton Facility

Client Light Stone

Site Name _____

Cooler unpacked by: _____

Cooler Received on 11-18-23

Opened on 11-18-23

Nancy Payne

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 # 22 (CF 11.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

- 2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity Leads 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 NA
- Were tamper/custody seals intact and uncompromised? Yes No NA

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

- 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# HC316719
- 14. Were VOAs on the COC? Yes No
- 15. Were air bubbles >6 mm in any VOA vials? Yes No NA **Larger than this.**
- 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: _____

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u>		<u>Preservation</u>	<u>Preservation</u>
			<u>pH</u>	<u>Temp</u>	<u>Added</u>	<u>Lot Number</u>
OHIO RIVER	240-195798-C-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
OHIO RIVER	240-195798-D-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____
OHIO RIVER	240-195798-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____	_____

Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Carrier Tracking No(s):	COC No.:
Client Contact:		Phone:	Cisneros, Roxanne	State of Origin:	240-176984-1
Shipping/Receiving		E-Mail:	roxanne.cisneros@et.eurofins.com	Page:	Page 1 of 1
Company:		Accreditations Required (See note):		Job #:	240-195798-1
TestAmerica Laboratories, Inc.		Due Date Requested:		Analysis Requested	
Address:		13715 Rider Trail North,		M - Hexane	
City:		Earth City		N - None	
State, Zip:		MO, 63045		O - AsNaO2	
Phone:		314-298-8566(Tel) 314-298-8757(Fax)		P - Na2O4S	
Email:				Q - Na2SO3	
Project #:		24019633		R - Na2S2O3	
Site:		Federal GWM Wells		S - H2SO4	
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=organic, B=biologic, A=Air)
OHIO RIVER (240-195798-1)		11/16/23	10:05 Eastern		Water
Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		9320_Ra228/PreSep_0 Radium-228 (GPPC)	9315_Ra226/PreSep_21 Radium-226 (GPPC)
Total Number of Containers		Special Instructions/Note:		. Recount of TAR after 21 day ingrowth if > action limit. save platchet	
2					
<p>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.</p>					
Possible Hazard Identification					
Unconfirmed					
Deliverable Requested: I, II, III, IV, Other (specify)					
Primary Deliverable Rank: 2					
Empty Kit Relinquished by:					
Date/Time: 11-21-23 8:20					
Relinquished by: <i>[Signature]</i>					
Date/Time:					
Relinquished by:					
Date/Time:					
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No					
Custody Seal No.:					
Cooler Temperature(s) °C and Other Remarks:					
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Special Instructions/QC Requirements:					
Time:					
Method of Shipment:					
Received by: <i>[Signature]</i>					
Date/Time: 11-21-23 8:20					
Company: <i>[Signature]</i>					
Date/Time:					
Received by: <i>[Signature]</i>					
Date/Time: NOV 22 2023 0840					
Company:					



Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-195798-1

Login Number: 195798

List Number: 2

Creator: Pinette, Meadow L

List Source: Eurofins St. Louis

List Creation: 11/22/23 01:50 PM

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





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