2023 GCC Rio Grande Pueblo Plant Annual Groundwater Report

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INTRODUCTION

This Annual Groundwater Report provides a compilation and interpretation of groundwater monitoring data to the Colorado Division of Reclamation, Mining and Safety (CDRMS) for the GCC Rio Grande, Inc. (GCC) Pueblo Cement Plant and Quarry (the Facility) and documents groundwater monitoring activities, results and interpretations for 2023. This satisfies a requirement of the CDRMS Mining Permit M-2002-004, specifically under the approved Technical Revision 11 (TR-11). To best support these efforts, GCC maintains a quality assurance/quality control (QA/QC) program to:

- Conduct GCC compliance staff and contractor training on water quality sampling for all GCC monitoring locations, equipment and methodologies, with detailed written procedure for groundwater monitoring provided in the Facility Sampling and Analysis Plan approved under TR-11.
- Collect all water quality field data with an industry-standard multi-parameter device with electronic data deliverable (EDD) output for all field data.
- Enter and document all water quality field monitoring data by mobile (digital/paperless) field monitoring logs specific to groundwater compliance locations which are automatically distributed to a third party, Resource Hydrogeologic Services (RHS) for same-day review following sampling.
- Conduct industry-standard, 10% random QA/QC lab sample submittals for duplicate and field blank water quality samples.
- Utilize EDDs produced by the contract environmental analytical laboratory for all data analyses.
- Conduct EPA Level III (EPA Stage 2B) validation of all compliance groundwater analytical laboratory reporting with a minimum of 10% validated as EPA raw data review.
- Compile and manage all water quality and level data in a geo-referenced Microsoft Access database.

GROUNDWATER MONITORING

GROUNDWATER MONITORING LOCATIONS

In 2023 GCC monitored ten groundwater monitoring wells at the Facility, which are shown on the location map included as **Figure 1**. **Table 1** displays all of the monitoring well construction and survey data.

- MW-5 was installed in 2008 and completed in unconsolidated surficial/overburden sediments and immediately underlying weathered bedrock at a location downgradient of the entire Facility, including both the quarry and plant.
- MW-6 was installed in 2018 and completed in the Fort Hayes Limestone just down-dip, and downgradient of mine panel 2 and upgradient of the plant.
- MW-7 was installed in 2018 and completed in the Fort Hayes Limestone just down-dip, and downgradient of mine panel 2 and upgradient of the plant. This well is completed across a fault in the Fort Hayes Limestone that was documented when exposed during the mining of panel 2. MW-7 is located approximately 25 feet northwest of MW-6 and is screened over the same interval.

- MW-8 was in installed in 2020 and is completed in the Codell Sandstone, just down-dip, and downgradient of mine panel 2 and upgradient of the plant. MW-8 is located approximately 25 feet northeast of MW-7.
- MW-9 was installed in 2021 and is completed in the Codell Sandstone, up-dip, and upgradient of mine panel 4.
- MW-10 was installed in 2021 and is completed in the Blue Hills Shale, up-dip, and is upgradient of mine panel 4. MW-10 is located approximately 25 feet northeast of MW-9.
- MW-11 was installed in 2021 and is completed in the Fort Hayes Limestone just down-dip, and downgradient of mine panels 3 and 4.
- MW-12 was installed in 2021 and is completed in the Codell Sandstone, just down-dip, and downgradient of mine panels 3 and 4. MW-12 is located approximately 25 feet northeast of MW-11.
- MW-13 was installed in 2021 and is completed in the Fort Hayes Limestone, down-dip, and downgradient of the entire Facility, including both the quarry and plant.
- MW-14 was installed in 2021 and is completed in the Codell Sandstone, down-dip, and downgradient of the entire Facility, including both the quarry and plant. MW-14 is located approximately 25 feet northeast of MW-13.

GROUNDWATER MONITORING DATA COLLECTION

Groundwater monitoring was conducted quarterly in 2023 at MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, and MW-14. MW-5, which has been observed as dry since installation in 2008, was monitored in 2023Q2 and 2023Q4 and as with all previous years, was found to be dry in each event. Per the current SAP (TR-11), MW-5 is only monitored semi-annually which is typically in May/June and November/December.

For all of the wet monitoring wells MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, and MW-14 depth to water measurements, and field water quality parameters temperature, pH, oxygen reduction potential (ORP), dissolved oxygen (DO), and specific conductance were documented for each monitoring event. These monitoring events also included water sample collection for submittal and analysis by an accredited environmental analytical laboratory.

Industry-standard protocol for groundwater sample collection was utilized, which is the foundation for the Sampling and Analysis Plan (SAP) approved by CDRMS in 2022 as TR-11 and adopted by GCC as the site-specific, stand-alone document guiding groundwater monitoring at the Facility.

In 2023 groundwater was purged and sampled by means of dedicated variable speed 12-volt stainless steel pump systems designed for 2-inch monitoring wells (SS Sample Champ XL). The one exception to this was for sampling at MW-14, which is purged and sampled by a dedicated stainless steel bladder pump (QED T1300). All wells are sampled by low-flow methodology per the TR-11 SAP. Each monitoring well was pumped at the lowest practical rate possible, on the order of 0.03 to 0.1 gallons per

minute (gpm), to purge the calculated pump discharge tubing volume. Following the purging of the respective tubing volumes, stability was considered achieved and a water sample was collected for laboratory analysis when three consecutive measurements did not vary more that 3% for conductivity and temperature, +/- 10 millivolts for ORP, and +/- 0.1 standard units for pH. **Table 2** includes field parameters for each sample event and **Attachment 1** is a compilation of all compliance monitoring well "Groundwater Sampling Record" field forms completed by the monitoring team for 2023.

The CDRMS-required groundwater compliance constituents for the Facility are given in **Table 2**. These constituents are required by TR-11 and represent the CDPHE Water Quality Control Commission Regulation 41, the basic standards for groundwater (herein after, reference standards). GCC is specifically subject to Table 3 of that document, Agricultural Standards, CDPHE 2016.

GROUNDWATER MONITORING DATA ANALYSIS

GROUNDWATER QUALITY

Beginning in 2021Q2, groundwater samples were analyzed for major cation and anion constituents per TR-08 to supplement the existing analytical suite and support interpretations of major ion chemistry in groundwater. This has continued through 2023 under TR-11. Analytical results from water quality samples collected from all wet compliance monitoring wells are presented in **Table 2** and compared to CDPHE Colorado Water Quality Control Commission agricultural use reference standards (CDPHE, 2016). Complete analytical laboratory reports for 2023 are provided as **Attachment 2**.

A graphical analysis of water quality results from the Fort Hayes Limestone (MW-6, MW-7, MW-11, and MW-13), Codell Sandstone (MW-8, MW-9, MW-12, and MW-14), and Blue Hills Shale (MW-10) groundwater samples are presented in **Figures 2 through 7** and discussed below.

Major Ion Chemistry

Groundwater chemistry in the Fort Hayes Limestone is affected by local and regional structural controls on flow paths and residence times. For example, groundwater quality along the mine panel two fault, known at the Facility as the Damian fault (MW-6 and MW-7) is characterized by neutral pH and generally sodium-magnesium-sulfate type, whereas Fort Hayes groundwater in areas not associated with the Damian fault (MW-11 and MW-13) gains alkalinity as groundwater migrates downgradient and is characterized by neutral (MW-11) to alkaline (MW-13) pH and sodium-potassium-bicarbonate type. These differences in major ion chemistry along the different flow paths are presented graphically as Stiff Diagrams in **Figure 2**, where concentrations of major cations and anions (beginning in 2023Q1) are presented in milli-equivalents (milligrams of solute mass divided by ionic weight and multiplied by ionic charge) per liter so the ionic balance between positive and negative ions can be seen in each analysis.

In comparison, the underlying Codell Sandstone has a stronger sodium-potassium signature when compared with the Fort Hayes Limestone groundwater. However, similar trends in the relative flow paths (i.e., groundwater in the vicinity of the Damian fault versus groundwater not in the vicinity of the fault) are observed. Upgradient groundwater (MW-9) and groundwater associated with the Damian fault (MW-8) is characterized by neutral pH and sodium-potassium-sulfate type, as shown in **Figure 3**. Codell groundwater not in the vicinity of the Damian fault (MW-12) and further downgradient (MW-14) are near alkaline and have a groundwater type of sodium-potassium-chloride.

MW-10 was completed upgradient of mine panel four in the Blue Hills Shale unit. Major ion chemistry in this location is similar to the groundwater composition in the Fort Hayes Limestone at MW-6 and MW-7, near the Damian fault. Upgradient groundwater in the Blue Hills Shale is neutral to near alkaline in pH and is sodium-potassium-sulfate groundwater type (**Figure 4**).

Based on the observed groundwater composition and trends as groundwater migrates from upgradient to downgradient areas, it is apparent that local preferential pathways affect the groundwater flow and residence times, which results in localized variability in chemistry within each water-bearing unit.

Trace Element Chemistry Trends

Analytical results from groundwater quality samples collected in the Fort Hayes Limestone, Codell Sandstone, and Blue Hills Shale were evaluated against the applicable reference standards (CDPHE, Regulation 41, Table 3, Groundwater Quality Reference Standards [Agricultural Use]) in **Table 2**, and selected constituent trends through time are presented in **Figures 5 through 7**. In general, constituent concentrations were below the applicable reference standards in all three units, with a few exceptions. **Figures 5, 6, and 7** present time series plots of selected constituents pH, manganese, fluoride, and selenium in the Fort Hayes Limestone, Codell Sandstone, and Blue Hills Shale, respectively.

In the Fort Hayes Limestone, concentrations of manganese at MW-6 have been variable through time with consistent exceedances of the reference standard of 0.2 mg/L for samples collected at MW-6 between 2018 and 2021, and since 2022Q4 (**Figure 5**). The observed variable trends in manganese likely result from natural variation in the groundwater. No exceedances of manganese were observed on the opposite side of the Damian fault at MW-7 (**Figure 5**). Exceedances of manganese at upgradient location MW-9 and downgradient location MW-8, completed in the Codell Sandstone, were also observed, as shown in **Figure 6**. Only one discrete exceedance of the reference standard for manganese was observed in MW-10, during the 2022Q1 sampling event (**Figure 7)**. However, subsequent concentrations at this well have been over an order of magnitude less than the first sample collected in 2022Q1 (**Figure 7**). The observed variability in trends within

each lithologic unit and through time may be due to variability in recharge water quality and transport of constituents as groundwater migrates through the system. Although concentrations of manganese exceed the reference standard in some locations, the Colorado Water Quality Control Commission issued a decision that the reference standard is only applicable where pH values are less than 6.0. Because all water quality samples have a measured pH value of greater than 6.0, less emphasis is placed on the exceedance of manganese of the reference standard.

At MW-6, concentrations of cobalt and nickel appear to trend with concentrations of manganese, with exceedances of cobalt observed in 2022Q4, 2023Q1, and 2023Q2, as shown in **Table 2**. Exceedances of the reference standard for nickel occurred in 2022Q3 and 2022Q4, but have decreased to below the reference standard in 2023. Cobalt and nickel behave similarly in groundwater and can adsorbed by iron and manganese oxides (Hem, 2005). These observed changes in groundwater chemistry appear to be related to fluctuations in groundwater elevation and the wetting and drying of aquifer materials. MW-6 typically demonstrates unconfined conditions, whereby the measured water level is below the top of the well screen. The installation of six wells in 2021 has improved the understanding of groundwater flow and chemistry in each of the relevant hydrogeologic units present at the site. However, the source and distribution of constituents exceeding the standard, such as cobalt and nickel at MW-6, is not well defined and remains as a gap in the dataset. Continued monitoring of cobalt and nickel concentrations at MW-6, as well as new monitoring well locations discussed in the following data gap section will provide additional insight into the source and distribution of these constituents in groundwater.

Concentrations of fluoride have exceeded the reference standard in the downgradient Fort Hayes Limestone well, MW-13, and Codell Sandstone wells MW-12 and MW-14, as shown in **Figures 5 and 6**, respectively. Although concentrations of fluoride at MW-12 exceed the reference standard in 2022Q1 and 2022Q2, concentrations have since declined and no longer exceed the standard (**Figure 6**). Fluoride is a naturally-occurring constituent, usually present in ionic form in groundwater, and the solubility of fluoride-bearing minerals can be increased in waters that are generally low in calcium (Nordstrom and Smedley, 2022; Hem, 2005). In the downgradient wells where the highest concentration of fluoride occurs (MW-13 and MW-14), there is a corresponding low concentration of calcium in solution and increase in bicarbonate and carbonate alkalinity (**Table 2**). It is likely that groundwater in these locations is saturated with respect to calcite (CaCO3) and dissolved concentrations of calcite remain low as calcite precipitates, increasing the solubility of the fluoride ion in solution (Nordstrom and Smedley, 2022) Continued monitoring of fluoride concentrations at MW-13 and MW-14 will provide additional insight into the source and distribution of these constituents in groundwater. Additional monitoring recommendations are outlined in the following data gaps section. No exceedances of fluoride were observed in the upgradient Blue Hills Shale location (**Figure 7**).

The presence and abundance of elevated selenium concentrations in groundwater of the Fort Hayes Limestone is likely attributed to naturally-occurring seleniferous minerals deposited in a marine environment (Bern and Stogner, 2017). Exceedances of the selenium reference standard were observed in three of the Fort Hayes Limestone wells: MW-6, MW-7, and MW-11 (**Figure 5**). Concentrations of selenium at MW-6 have decreased since 2022Q2 to below the reference standard of 0.05 mg/L. Concentrations of selenium in MW-7 and MW-11 continue to be variable through time and likely reflect seasonal changes in water levels and recharge rates. No exceedances were observed for selenium in the Codell Sandstone (**Figure 6**) and Blue Hills Shale (**Figure 7**).

Although both MW-6 and MW-7 are completed in Fort Hayes Limestone in relatively close proximity to one another, differences observed in groundwater chemistry identify the primary mechanism for groundwater flow through faults and fracture zones, instead of continuous horizontal flow paths.

QUALITY ASSURANCE/QUALITY CONTROL

In 2023 GCC collected and submitted one blind duplicate sample in all quarterly sampling events, which is given sample ID MW-2B. These duplicates were reported to have constituent concentrations within acceptable ranges of the named sample, which was MW-7 2023Q1, MW-11 in 2023Q2, MW-8 in 2023Q3, and MW-12 in 2023Q4.

Future compliance groundwater sampling will continue to include standard submittal of 10% QA/QC blind duplicate or field blank samples per quarter (one sample for up to ten sites).

Beginning in 2020 and now continued through 2023, per the approved SAP, the compliance groundwater data were validated at EPA Level III (EPA Stage 2B) with a minimum of 10% validated as EPA raw data review. All laboratory standard delivery groups (SDGs) are Level IV. The groundwater data validation for 2023 found that the laboratory has complied with the requested methods and the data is considered fully useable for project purposes with the consideration of the following qualifications regarding holding times and sample temperature preservation.

The data quality review report, prepared by Diane Short & Associates, Inc., is included here as **Attachment 3**. Section II of this attached report discusses the holding time issues in detail and specifically states on page 2 and 3:

"First Quarter: Two samples for TDS in L79100 and one in L79125 had to be diluted after the initial analysis to meet method criteria. The reanalysis was out of the 7-day holding time in each case. The results for these samples are qualified as JH#, where # is the number of days outside of holding time. These results could possibly be biased due to chemical changes between analyses. Any bias should be minor in this case.

Second Quarter: Two samples for TDS in L80783 and one in L80818 had to be diluted after the initial analysis to meet method criteria. The reanalysis was out of the 7-day holding time in each case. The results for these samples are qualified as JH#, where # is the number of days outside of holding time. These results could possibly be biased due to chemical changes between analyses. Any bias should be minor in this case.

Third Quarter: One sample for TDS in L82382 had to be diluted after the initial analysis to meet method criteria. The reanalysis was out of the 7-day holding time. The result for this sample is qualified as JH#, where # is the number of days outside of holding time. These results could possibly be biased due to chemical changes between analyses. Any bias should be minor in this case.

Fourth Quarter: Two samples for TDS in L84579 and one for TDS in L84605 had to be diluted after the initial analysis to meet method criteria. The reanalysis was out of the 7-day holding time. The results for these samples are qualified as JH#, where # is the number of days outside of holding time. These results could possibly be biased due to chemical changes between analyses. Any bias should be minor in this case.

Also, for Quarter 4, all samples for Fluoride in L84605 were initially run within holding time but had high CCV recoveries (according to the laboratory notes in the raw data). The laboratory reanalyzed these on 12/14/2023 just over 0.5 days out of the 28-day hold time for fluoride. Results are qualified as JH1 to indicate that they are minimally outside of holding time. Although qualified, these results are not likely to be significantly biased."

Additionally, the attached data quality review report identified non-standard sample temperature preservation in one SDG in Quarter 2. As discussed in that report in Section II on page 3:

"In the Second quarter sampling, samples in L80818 were received at 9.2 deg C, which is above the 40CFR upper limit of 6 deg C for non-metals analysis. For preserved metals there is no specification for temperature. There is no indication that the samples were subjected to elevated temperatures during transit or storage. The most likely impact is on unpreserved samples, such as those used for nitrate analysis.

The Functional Guidelines recommend qualifying samples received > 10 deg C, and professional judgement otherwise. In this case, no qualifiers are added."

GROUNDWATER LEVEL

Bedrock groundwater level monitoring data for the Facility in 2023 included four Fort Hayes Limestone monitoring wells, four Codell Sandstone monitoring wells, and one Blue Hills Shale monitoring well. Shallow groundwater at the Facility was not observed to be present in 2023; the single unconsolidated surficial/overburden well MW-5 has been documented dry since installation in 2008. All as-built monitoring wells were surveyed by Clark Land Surveying, Inc. in January 2022 for latitude, longitude and elevation at both the top of casing water level reference points (TOC) and the ground surface at the concrete well pads. This data is presented in **Table 1**. All monitoring well level data is plotted as potentiometric groundwater elevation, thus allowing determination of flow direction and horizontal gradient for both the Fort Hayes and Codell aquifers. Additionally, with greater spatial distribution of the twinned monitoring well pairs, the monitoring well level data can now be normalized for direct comparison to better quantify the vertical hydraulic gradient regime of these two aquifers across the Facility. **Figure 8** shows the groundwater elevation hydrograph for all wetted wells over the full period of record 2018-2023. To plot all Facility monitoring wells, the vertical scale is 400 feet so some resolution is lost in this general plot. To better demonstrate the vertical hydraulic gradients at each twinned monitoring well location, **Figures 9 through 12** are plotted with a vertical scale of 50 feet. Those figures demonstrate both the detailed potentiometric groundwater trends as well as the vertical hydraulic gradients of each twinned monitoring location.

MW-6/MW-7/MW-8 Location

Previous to 2022, only two Fort Hayes monitoring wells, MW-6 and MW-7, existed at the Facility. MW-6 is screened across the non-faulted Fort Hayes. MW-7 is screened across the faulted Fort Hayes. Each of these wells are screened across the same depth intervals and are separated by a horizontal distance of approximately 25 feet. As shown in **Figure 1**, these wells are immediately downgradient of mine panel two. Evaluation of MW-6 water level monitoring data continues to demonstrate that the non-faulted Fort Hayes Limestone hosts a groundwater pressure regime that is derived from limited fracture networks with relatively low hydraulic conductivity and storage. However, as displayed in **Figure 9**, over the course of monitoring in 2023, the static water level at MW-6 tracked almost identically with MW-7, with the difference between quarterly measurements expressed as a geometric mean of 0.16 feet. Since level monitoring began at these wells in 2018, at times both MW-6 and MW-7 have tracked very closely in potentiometric elevation indicating very little to no differential pressure gradient in the Fort Hayes across the fault, and the difference observed in 2023 was the least to date. Both MW-6 and MW-7 exhibited a groundwater pressure regime that was unconfined based on the Quarter 1 level measurements, and then confined for Quarters 2, 3, and 4. Both MW-6 and MW-7 are completed with the top of the well screen at 5030 feet elevation, which is just below the top of the Fort Hayes Limestone. Therefore, observed levels above 5030 feet elevation demonstrate what are effectively confined aquifer conditions and observed levels below 5030 feet elevation demonstrate unconfined aquifer conditions.

MW-8, the underlying Codell Sandstone monitoring well at this location, demonstrated a similar water level trend as MW-6 and MW-7, but with an apparent relative delayed response to seasonal fluctuation. MW-8 observed water levels were greater (less deep) than MW-6 and MW-7 observed water levels in Quarters 1, 3, and 4.

As was discussed in the two previous Annual Groundwater Reports (RHS 2021, RHS 2022), this could indicate that the Fort Hayes groundwater recharge source is not only from surficial precipitation recharge in the southwest upland and up-dip areas of the Facility, but also from the underlying Codell Sandstone. Furthermore, the Damian fault that has been identified running through quarry panel two and the MW-6/MW-7/MW-8 location can be reasonably expected to extend not only through the Fort Hayes Limestone, but also the underlying Codell Sandstone by rule of geologic superposition. In areas where this fault, as well as other faults documented by exposure in previously quarried areas, are permeable, conditions exist to allow transmission of groundwater. These geologic structures may allow the over-pressured Codell Sandstone groundwater, where present, the preferential pathways to flow upwards into the Fort Hayes Limestone. It is further suggested that the MW-6/MW-7/MW-8 location may be located at or near the point of hydraulic balance between the two aquifers, in which the seasonality and magnitude of groundwater recharge, primarily derived from the fault, dictate that balance.

MW-11/MW-12 Location

Monitoring wells MW-11 (Fort Hayes) and MW-12 (Codell) were initiated into the Facility compliance monitoring program per the TR-11 SAP in 2022; monitoring has now continued through 2023. As shown in **Figure 1**, this location is directly downgradient of mine panels three and four, which is generally cross-gradient from monitoring locations MW-6/MW-7/MW-8. The wells are located approximately 25 feet apart at ground surface, with MW-11 up-dip in relation to the deeper MW-12. **Figure 8** demonstrates cross-gradient conditions as groundwater potentiometric levels are similar in trend and magnitude between the locations. This location is also on the southeast side of the Damian fault crossing between MW-7 and MW-6. **Figure 10** shows the two-year historical record of level monitoring events at MW-11 and MW-12. With two years and now two observed recharge seasons of level monitoring conducted to date, the trend shows a normal (downward) pressure gradient with respect to the Fort Hayes and underlying Codell and at this time is more distinct in magnitude than the vertical pressure gradient that has been observed at the MW-6/MW-7/MW-8 location. The maximum observed differential potentiometric pressure between MW-11 and MW-12 was approximately 23 feet at its maximum in 2022Q2, but increased to approximately 26 feet at its maximum in 2023Q4.

MW-13/MW-14 Location

Monitoring wells MW-13, completed in the Fort Hayes Limestone, and MW-14, completed in the Codell Sandstone, were initiated into the Facility compliance monitoring program per the TR-11 SAP in 2022; monitoring has now continued through 2023. As shown in **Figure 1**, this location is downgradient of both the Facility quarry and plant. The wells are located approximately 25 feet apart at ground surface, with MW-13 up-dip in relation to the deeper MW-14. These monitoring wells are by far the deepest at the Facility (**Table 1**) as they are the most down-dip locations of all existing bedrock wells. **Figure 11** displays the two-year historical record of level monitoring events at MW-13 and MW-14. The level trends at this location were substantially different in 2023 than 2022, most noticeable at MW-13. While it may appear that the March 6 and August 8, 2023 levels are outliers and possibly water level tape reading or transcription errors, multiple readings were taken during each groundwater sampling event, with both the static and the final pumping level recorded on the field forms as shown in Attachment 1. These additional readings appear to support the validity of the static level measurements. Furthermore, the August 8 and November 14, 2023 level trend is similar to the Fort Hayes and Codell trends observed at the MW-6/MW-7/MW-8 location. With exception of the March 6, 2023 level measurement at MW-13, this demonstrates that with increasing depth down-dip to the northeast the differential pressure between the Fort Hayes Limestone and the Codell Sandstone increases. Such a condition at this location supports the hypothesis that upgradient Fort Hayes Limestone monitoring locations are likely receiving recharge from the Codell Sandstone through one or more cross-cutting faults. Continued level monitoring over time should allow better determination of the hydraulic gradient between the Fort Hayes and Codell at this location, and thus refinement of the groundwater conceptual model. As the twinned MW-13 and MW-14 are being considered as a possible groundwater point-of-compliance wells, RHS recommends additional monthly infill level monitoring at MW-13 and MW-14 in between quarterly compliance monitoring events in 2024 to attempt to obtain a more robust view of seasonality.

MW-9/MW-10 Location

Monitoring wells MW-9, completed in the Codell Sandstone, and MW-10, completed in the underlying Blue Hills Shale were initiated into the Facility compliance monitoring program per the TR-11 SAP in 2022. Monitoring has now continued through 2023. As shown in **Figure 1**, this location is upgradient of mine panel four. The wells are located approximately 25 feet apart at ground surface, with MW-9 up-dip in relation to the deeper MW-10. As documented in the GCC Rio Grande Pueblo Plant TR-08 Monitoring Wells Installation Report (RHS 2022), this location was planned as another Fort Hayes/Codell twinned pair of wells, however, the Fort Hayes Limestone was not found there once drilling commenced. It was then presumed that the Fort Hayes Limestone had been eroded in this arroyo location, leaving only the underlying Codell Sandstone and Blue Hills Shale as potential monitoring well completion intervals. An alternative upgradient Fort Hayes Limestone monitoring location was explored approximately 1/8-mile due north on a

ridge line, however, the Fort Hayes Limestone was not encountered during drilling there either. **Figure 12** displays the two-year historical record of monitoring events at MW-9 and MW-10. Both wells are in near-hydraulic balance, with differential pressure observed at a maximum of approximately 1.37 feet throughout 2023, which was observed March 7 during spring snowmelt runoff. Further long-term level monitoring should confirm if the Codell Sandstone and Blue Hills Shale are hydraulically communicating at this location. Both wells exhibit confined pressure conditions indicating possible recharge is upgradient in the outcrop areas on the flanks of Greenhorn Creek to the southwest. Confined groundwater pressure observed at this location suggest that the quarry's Codell floor rock is also saturated under confining pressure, and thus not likely to accept potential stormwater run-off infiltration from the overlying quarry.

Groundwater Flow Direction and Gradient

Groundwater potentiometric elevations are plotted to determine the respective flow directions and horizontal gradients. Groundwater contours have been kept relatively large at 50 feet, which is still adequate to demonstrate the groundwater flow direction and gradient.

Figure 13 presents a groundwater potentiometric elevation map for the Fort Hayes aquifer with level measurements collected at MW-6, MW-7, MW-11, and MW-13 in 2023Q4. The groundwater flow direction is on a bearing of 45° northeast in line with strata dip direction. The Fort Hayes groundwater gradient is calculated as approximately 3.4% or 2.0°. The strata dip of the Fort Hayes has been estimated at 4.7% or 2.7°.

Figure 14 presents a groundwater potentiometric elevation map for the Codell aquifer with level measurements collected at MW-8, MW-9, MW-12, and MW-14 in 2023Q4. The groundwater flow direction is on a bearing of 45° northeast in line with strata dip. The 50-foot contour spacing apparently increases slightly downgradient across the Facility, which suggests a decreasing or flattening of the gradient to the northeast as the strata extends further into the basin. For the area including the quarry and planned future mine panels, the Codell groundwater gradient is calculated as approximately 2.8% or 1.6°. For the area downgradient of the quarry, including the plant and to the permit boundary to the northeast, the Codell groundwater gradient is calculated as approximately 2.5% or 1.4°. The strata dip of the Codell Sandstone has been estimated at 4.7% or 2.7°.

GROUNDWATER CONCEPTUAL MODEL DATA GAPS

Expanded groundwater exploration in 2021 and subsequent initial monitoring of six new wells in 2022 and 2023 at the Facility has significantly improved the groundwater conceptual model and thus the understanding of the groundwater flow regime. Those monitoring well installations have allowed identification of groundwater data gaps to be addressed in the next phase of hydrogeologic

characterization drilling and monitoring well installation, which has been approved as TR-12 (GCC/RHS 2023) to install ten new monitoring wells, and is currently in the field services contracting stage with program execution planned for March 2024. High accuracy surveying of all Facility monitoring wells' elevation, latitude and longitude now allows plotting of groundwater potentiometric levels in order to more accurately predict groundwater flow direction and the groundwater gradient. The now greater spatial distribution of Fort Hayes and Codell monitoring wells across the Facility has improved confidence that the groundwater flow direction for both of these intervals is to the northeast at an approximate bearing of 45° generally with strata dip direction. Based on 2023 data the calculation of groundwater gradient remains approximately 3.4% (2.0°) in the Fort Hayes and 2.5% (1.4°) in the Codell.

UPGRADIENT GROUNDWATER MONITORING GAPS

TR-12 (GCC/RHS 2023) addresses the upgradient monitoring gaps by identifying two locations sited upgradient of existing and planned mining. Each shall be a twinned arrangement of Fort Hayes Limestone and Codell Sandstone monitoring wells to match the configuration of monitoring wells installed under TR-11 (GCC/RHS 2021). These areas are shown on **Figure 16**. MW-15 and MW-16 will be upgradient (southwest) of mine panels one or two in Section 24, on the north side of the Damian fault, with sufficient setback from the reclaimed highwall. MW-17 and MW-18 will be at the southwest boundary of mine panel three in Section 25, on the south side of the Damian fault. These Fort Hayes and Codell bedrock monitoring well locations are important to improve the current upgradient groundwater data gap as the numerous faults identified across the mine panels may create heterogeneous conditions which affect the site groundwater regime flow and quality.

DOWNGRADIENT GROUNDWATER MONITORING GAPS

TR-12 (GCC/RHS 2023) also addresses the downgradient monitoring gaps as mining progresses to the southeast now in mine panel four. A pair of twinned Fort Hayes and Codell monitoring wells shall be installed downgradient (northeast) of mine panels four, five, and six as MW-19 and MW-20, shown in **Figure 16**. This location may prove to be suitable as a future Facility groundwater point-of-compliance for the south/southeast portion of the mine permit area, but will otherwise also allow refinement and improvement of the accuracy of the potentiometry. It will also serve as a true baseline location downgradient of planned future mining, to be installed and monitored ahead of such mining.

Additionally, one pair of twinned Fort Hayes and Codell monitoring wells shall be installed downgradient of MW-6, MW-7, and MW-8, and thus downgradient of mine panel two, as shown in **Figure 16**. This location is roughly half of the distance between the aforementioned wells and the MW-13/MW-14 location, and is downgradient of the plant footprint. This location is critical to understanding the groundwater chemistry and potentiometric differences identified between the two

established monitoring locations (MW-6/MW-7/MW-8 and MW-13/MW-14) which is possibly related to the deepening of the dipping strata away from shallow recharge sources in the vicinity of the quarry, as well as potentially influenced by known faults mapped through the quarry which very likely continue on trend to the northeast. This location will assist with determining if the MW-13/MW-14 location is suitable as a potential Facility groundwater point-of-compliance location.

Finally, a pair of twinned Fort Hayes and Codell monitoring wells shall be installed in the area downgradient from mine panel one, in the area northwest of the plant footprint, as shown in **Figure 16**. This location will provide direct downgradient groundwater chemistry monitoring for the reclaimed mine panel one, which is currently not possible. This location will also allow level monitoring to refine the Fort Hayes and Codell potentiometry to improve accuracy of the Facility groundwater flow direction and gradient interpretation, as well as provide more insight into the hydraulic gradient between the Fort Hayes Limestone and underlying Codell Sandstone.

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TABLES

Table 1. GCC Monitoring Well Construction and Survey Data.

Monitoring Well ID	Year Installed	CDWR Receipt Number	CDWR Permit Number	UTM NAD 83 Zone 13N Easting (meters)	UTM NAD 83 Zone 13N Northing (meters)	Elevation - Top of PVC Casing - Water Level Measuring Point (ft)	Elevation - Ground Surface at Wellhead Cement Pad (ft)	Well Diameter (in)	Well Casing Material	Total Well Completion Depth (ftbgs)	Screened Interval (ftbgs)	Screened Filter Pack Interval (ftbgs)	Screened Interval Formation	Type of Dedicated Sampling Pump
MW-5	2008	3632233	278490	533304.305	4217575.554	4966.65	4964.39	2	SCH 40 PVC	25.00	9.0-24.0	8.0-25.0	Colluvium/Weathered Bedrock	None - Dry Well
MW-6	2018	3690376A	312701	533308.582	4217579.756	5064.14	5061.62	2	SCH 40 PVC	56.40	30.9-56.4	28.0-56.7	Fort Hayes Limestone	12V ESP - SS Sample Champ XL
MW-7	2018	3690376B	312702	534710.190	4219189.212	5063.75	5061.09	2	SCH 40 PVC	56.10	30.6-56.1	27.5-57.0	Fort Hayes Limestone	12V ESP - SS Sample Champ XL
MW-8	2020	3696266	316170	534714.843	4219193.313	5062.90	5060.74	2	SCH 40 PVC	63.10	58.1-62.9	57.0-64.3	Codell Sandstone	12V ESP - SS Sample Champ XL
MW-9	2021	10013525	323005	535148.659	4221153.094	5256.09	5253.97	2	SCH 40 PVC	40.30	30.0-40.0	20.9-42.0	Codell Sandstone	12V ESP - SS Sample Champ XL
MW-10	2021	10013526	323006	535153.271	4221157.369	5255.82	5253.60	2	SCH 40 PVC	80.30	50.0-80.0	47.0-81.5	Blue Hills Shale	12V ESP - SS Sample Champ XL
MW-11	2021	10013527	323007	534405.485	4219710.530	5084.30	5082.09	2	SCH 40 PVC	70.00	39.6-69.6	36.6-70.6	Fort Hayes Limestone	12V ESP - SS Sample Champ XL
MW-12	2021	10013528	323008	534407.927	4219719.209	5083.94	5081.64	2	SCH 40 PVC	86.50	76.2-86.2	73.1-86.6	Codell Sandstone	12V ESP - SS Sample Champ XL
MW-13	2021	10013529	323009	534401.520	4219714.939	4990.11	4987.93	2	SCH 40 PVC	175.33	135.0-175.0	135.0-175.0	Fort Hayes Limestone	12V ESP - SS Sample Champ XL
MW-14	2021	10013530	323010	535242.397	4221415.851	4989.92	4987.81	2	SCH 40 PVC	205.33	190.0-205.0	187.0-206.0	Codell Sandstone	Bladder Pump - QED T1300

Coordinates Based Off State Plane Grid/NAD83 Colorado South. Vertical Datum Based of NAVD88.

Table 2 (Page 1 of 2). GCC Quarterly Compliance Groundwater Monitoring Data 2018-2023.

Location ID	Sample Date	Depth to Water (ft BTOC)	Field pH (SU)	Field Specific Conductance (µS/cm)	Field Temperature (Degrees C)	Total Dissolved Solids (mg/L)	Total Alkalinity (mg/L)	Bicarbonate as CaCO3 (mg/L)	Carbonate as CaCO3 (mg/L)	Hydroxide as CaCO3 (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Fluoride (mg/L)	Nitrate (mg/L)	Nitrate/Nitrite (mg/L)	Nitrite (mg/L)	Aluminum (mg/L)	Arsenic (mg/L)	Beryllium (mg/L)	Boron (mg/L)	Cadmium (mg/L)
MW-5	12/9/2019	DRY																			
MW-5	9/17/2020	DRY																			
MW-5	11/23/2020	DRY																			
MW-5	5/12/2021	DRY																			
MW-5	11/18/2021	DRY																			
MW-5	3/24/2022	DRY																			
MW-5	5/10/2022	DRY																			
MW-5	11/8/2022	DRY																			
MW-5	5/30/2023	DRY																			
MW-5	11/14/2023	DRY																			
MW-6	1/3/2018	48.24	6.95	4720	14	----	----	----	----	----	----	----	----	----	<0.020	----	0.64	<0.03	<0.005	0.63	<0.005
MW-6	4/27/2018	41.31	7.20	6200	16.3	5,030	----	----	----	----	----	----	<1.0	<0.10	<0.020	<0.040	<0.2	<0.03	<0.005	0.65	<0.005
MW-6	9/26/2018	DRY																			
MW-6	12/12/2018	42.91	7.39	6500	14.9	----	----	----	----	----	----	----	<1.0	----	<0.020	<0.040	<0.2	<0.03	<0.005	0.62	<0.005
MW-6	3/7/2019	56.03	Inadequate volume for representative field parameters or lab sample submittal																	DRY	
MW-6	6/12/2019	43.92	7.14	5975	17.8	5,620	----	----	----	----	----	----	0.60	12	12.1	0.030	0.5	<0.001	<0.05	0.50	0.0003
MW-6	9/19/2019	28.15	----	----	----	5,860	----	----	----	----	----	----	0.60	11	11.1	0.080	<0.3	0.0004	<0.05	0.30	0.00026
MW-6	12/9/2019	30.44	----	----	----	5,460	----	----	----	----	----	----	0.80	8.1	8.12	0.020	<0.3	<0.001	<0.05	0.30	<0.0003
MW-6	3/9/2020	32.30	7.22	5591	16.5	5,780	----	----	----	----	----	----	0.70	2.02	2.58	0.560	<0.3	0.0005	<0.05	0.30	0.00016
MW-6	9/16/2020	29.78	7.20	5405	16.7	5,480	----	----	----	----	----	----	0.50	0.05	0.05	<0.01	0.19	0.0009	<0.01	0.31	0.00011
MW-6	11/23/2020	30.92	7.25	5425	14.3	5,300	----	----	----	----	----	----	0.57	1.62	1.63	0.012	<0.25	<0.001	<0.05	0.33	<0.00025
MW-6	2/22/2021	36.61	7.55	5684	15.8	5,780	----	----	----	----	----	----	0.62	0.07	0.067	<0.01	<0.25	<0.001	<0.05	0.33	<0.00025
MW-6	5/19/2021	46.32	7.43	5945	14.9	----	524	524	<2	<2	109	3200	0.57	0.03	0.032	<0.01	<0.05	0.00237	<0.01	0.38	0.000058
MW-6	8/31/2021	26.18	7.32	6170	16.1	----	459	459	<2	<2	74	3390	0.58	4.2	4.24	0.038	<0.05	<0.001	<0.01	0.24	<0.00025
MW-6	11/18/2021	29.70	7.18	7477	14.2	----	450	450	<2	<2	76	3750	0.62	0.846	0.85	<0.01	<0.05	<0.001	<0.01	0.25	<0.00025
MW-6	3/22/2022	36.00	7.23	5322	14.0	5,200	321	321	<2	<2	49	3610	0.62	8.01	8.02	0.011	<0.25	<0.001	<0.05	0.21	<0.00025
MW-6	5/17/2022	36.94	7.03	5726	16.7	5,190	461	461	<2	<2	89	3140	0.57	3.24	3.25	0.015	<0.25	<0.0002	<0.05	0.32	<0.00005
MW-6	8/15/2022	36.78	7.02	5404	20.5	5,410	421	421	<2	<2	69	3700	0.50	1.02	1.09	0.070	<0.25	0.00040	<0.05	0.19	0.000131
MW-6	11/7/2022	33.62	6.92	5311	15.7	5,200	445	445	<2	<2	77	3180	0.79	<0.02	<0.02	<0.01	<0.25	<0.001	<0.05	0.28	<0.00025
MW-6	3/6/2023	37.00	6.92	4358	15.9	5,390	491	491	<2	<2	76	3200	0.52	<0.02	<0.02	<0.01	<0.05	0.00109	<0.01	0.25	<0.00025
MW-6	5/30/2023	24.61	6.96	5847	18.2	5,380	493	493	<2	<2	75	3150	0.52	0.32	0.361	0.040	<0.05	<0.001	<0.01	0.24	<0.00025
MW-6	8/8/2023	26.90	7.00	5361	21.1	5,440	456	456	<2	<2	74	3260	0.43	0.29	0.287	<0.01	0.057	0.00076	0.012	0.27	<0.0001
MW-6	11/14/2023	32.12	6.99	5278	15.9	5,200	448	448	<2	<2	68	3120	0.55	0.16	0.156	<0.01	<0.25	<0.001	<0.05	0.24	<0.00025
MW-7	1/3/2018	42.91	6.86	4765	15	5,510	----	----	----	----	----	----	0.42	----	<0.020	<1.00	1.35	0.00949	<0.005	0.46	<0.005
MW-7	4/27/2018	39.09	6.85	5820	15	5,270	----	----	----	----	----	----	<0.50	<0.050	<0.100	<0.020	<0.2	<0.03	<0.005	0.44	<0.005
MW-7	9/26/2018	DRY																			
MW-7	12/12/2018	37.84	6.90	6093	14	----	----	----	----	----	----	----	<1.0	----	<0.020	<0.040	<0.2	<0.03	<0.005	0.45	<0.005
MW-7	3/7/2019	40.79	6.95	6020	13.7	5,640	----	----	----	----	----	----	----	----	0.014		<0.2	<0.03	<0.005	0.43	<0.005
MW-7	6/12/2019	31.25	6.95	5997	18	5,700	----	----	----	----	----	----	0.50	1.73	1.74	0.010	<0.3	<0.001	<0.05	0.40	<0.0003
MW-7	9/18/2019	27.89	----	----	----	6,740	----	----	----	----	----	----	0.50	10	10.1	0.020	0.40	0.0003	<0.05	0.30	0.00015
MW-7	12/9/2019	29.51	----	----	----	5,320	----	----	----	----	----	----	0.50	14	14.3	0.080	<0.3	<0.001	<0.05	0.20	<0.0003
MW-7	3/9/2020	32.46	7.01	6459	15.8	6,540	----	----	----	----	----	----	0.40	15	14.9	0.060	<0.3	<0.0002	<0.05	0.20	0.00011
MW-7	9/16/2020	29.65	7.17	4772	15.2	4,950	----	----	----	----	----	----	0.40	11	11.0	0.030	0.16	<0.0002	<0.01	0.14	0.00007
MW-7	11/23/2020	30.40	7.16	4999	14.3	5,070	----	----	----	----	----	----	0.47	11	11.2	0.039	<0.25	<0.001	<0.05	0.15	<0.00025
MW-7	2/22/2021	32.87	7.55	6077	14.4	6,500	----	----	----	----	----	----	0.49	9.9	9.98	0.068	<0.25	<0.001	<0.05	0.20	<0.00025
MW-7	5/19/2021	30.83	7.51	5464	15.2	----	309	309	<2	<2	51	3430	0.40	7.51	7.54	0.027	<0.05	<0.0002	<0.01	0.14	0.000057
MW-7	8/31/2021	25.79	7.15	6061	15.4	----	467	467	<2	<2	96	3360	0.52	0.91	0.91	<0.01	<0.05	<0.001	<0.01	0.31	<0.00025
MW-7	11/18/2021	29.45	6.94	6589	13.9	----	299	299	<2	<2	53	3700	0.53	3.84	3.84	<0.01	<0.05	<0.001	<0.01	0.19	<0.00025
MW-7	3/22/2022	36.70	6.95	5654	15.1	5,760	491	491	<2	<2	94	3650	0.57	1.22	1.24	0.02	<0.25	<0.001	<0.05	0.39	<0.00025
MW-7	5/10/2022	37.61	6.86	5593	15.2	5,660	477	477	<2	<2	104	3240	0.58	0.19	0.19	<0.01	<0.25	<0.001	<0.05	0.37	<0.00025
MW-7	8/15/2022	29.34	6.99	5905	20.0	6,170	484	484	<2	<2	97	3810	0.50	0.15	0.15	<0.01	<0.25	0.0004	<0.05	0.29	0.000067
MW-7	11/7/2022	33.53	7.08	4727	15.2	4,690	250	250	<2	<2	41	3000	0.37	4.65	4.65	<0.01	<0.25	<0.001	<0.05	0.16	<0.00025
MW-7	3/6/2023	37.43	6.95	4958	15.6	6,210	545	545	<2	<2	91	3630	0.55	0.26	0.276	0.013	<0.25	<0.002	<0.05	0.32	<0.0005
MW-7	5/30/2023	24.50	7.03	5099	18.1	5,560	358	358	<2	<2	47	3470	0.41	8.66	8.66	<0.01	<0.05	<0.001	<0.01	0.17	<0.00025
MW-7	8/8/2023	26.41	6.99	5757	17.6	5,690	484	484	<2	<2	90	3500	0.41	0.11	0.113	<0.01	0.057	<0.0004	0.012	0.33	<0.0001
MW-7	11/14/2023	31.76	6.97	5750	16.2	5,630	552	552	<2	<2	117	3140	0.58	<0.02	<0.02	<0.01	<0.05	<0.001	<0.01	0.36	<0.00025
MW-8	3/9/2020	43.78	Inadequate volume for representative field parameters or lab sample submittal at time of water level measurement and then COVID-19 restrictions enacted before well could be revisited following purge																		
MW-8	9/16/2020	29.74	Inadequate volume for representative field parameters or lab sample submittal after purge - sample collected 9/28/20 because well took 2 weeks to recover																		
MW-8	9/28/2020	57.43	7.26	9179	14.7	7,900	----	----	----	----	----	----	0.90	<0.02	<0.02	<0.01	<0.25	0.0138	<0.05	1.2	<0.00025
MW-8	11/9/2020	37.26	Inadequate volume for representative field parameters or lab sample submittal after purge - sample collected 11/23/20 because well took 2 weeks to recover																		
MW-8	11/23/2020	39.73	7.11	5327	13.9	4,060	----	----	----	----	----	----	1.14	<0.050	<0.02	<0.01	<0.25	0.00219	<0.05	0.82	<0.00025
MW-8	2/22/2021	34.21	7.65	5476	14.8	4,180	----	----	----	----	----	----	1.10	<0.02	<0.02	<0.01	<0.05	0.00350	<0.01	0.848	<0.00025
MW-8	5/19/2021	34.56	7.60	5571	16.1	----	1200	1200	<2	<2	316	1520	0.89	0.99	1.01	0.016	<0.05	0.00155	<0.01	0.89	0.000065
MW-8	8/31/2021	25.75	7.32	6077	17.8	----	1080	1080	<2	<2	272	1820	1.00	<0.02	0.022	0.014	<0.05	0.00124	<0.01	0.78	<0.00025
MW-8	11/18/2021	24.46	7.14	3852	14.7	----	1140	1140	<2	<2	283	1920	0.90	0.07	0.096	0.028	<0.05	<0.001	<0.01	0.80	<0.00025
MW-8	3/28/2022	36.35	7.13	4545	15.1	3,040	1020	1020	<2	<2	204	1090	0.92	0.03	0.041	0.012	<0.1	0.00279	<0.02	0.60	<0.0001
MW-8	5/17/2022	37.93	7.12	5556	18.0	3,630	1130	1130	<2	<2	315	1260	1.01	<0.02	<0.02	<0.01	<0.1	0.00427	<0.02	0.88	<0.00005
MW-8	8/15/2022	30.25	7.18	5325	18.8	3,790	1090	1090	<2	<2	291	1510	1.09	<0.02	<0.02	<0.01	<0.1	0.00767	<0.02	0.81	<0.00005
MW-8	11/7/2022	32.00	7.15	5236	16.1	3,840	1130	1130	<2	<2	297	1450	0.90	<0.02	<0.02	<0.01	<0.1	0.00542	<0.02	0.85	<0.0001
MW-8	3/6/2023	33.76	7.19	4375	15.3	3,600	1250	1250	<2	<2	280	1470	1.03	<0.02	<0.02	<0.01	<0.1	0.00511	<0.02	0.89	<0.0001
MW-8	5/30/2023	27.25	7.14	5892	17.1	4,000	1400	1400	<2	<2	288	1430	0.89	0.99	0.989	<0.01	<0.05	0.00146	<0.01	0.93	<0.00025
MW-8	8/8/2023	23.88	7.22	5184	20.5	3,900	1250	1250	<2	<2	275	1380	0.95	<0.02	<0.02	<0.01	<0.05	0.00099	0.012	0.90	<0.0001
MW-8	11/14/2023	29.93	7.20	5237	16.4	3,550	1260	1260	<2	<2	275	1320	1.06	<0.02	<0.02	<0.01	<0.05	0.00095	<0.01	0.88	<0.0001
MW-9	3/28/2022	26.16	6.55	4834	15.0	4,420	223	223	<2	<2	44	3200	0.49	0.51	1.38	0.867	0.14	<0.001	<0.01	0.90	<0.00025
MW-9	5/17/2022	26.32	6.59	5486	16.9	4,390	232	232	<2	<2	44	2980	0.44	0.89	1.33	0.44	<0.25	<0.0002	<0.05	1.19	<0.00005
MW-9	8/15/2022	26.42	6.86	4998	18.9	4,640	323	323	<2	<2	45	3160	0.43	0.04	0.038	<0.01	<0.25	0.00058	<0.05	1.15	0.000065
MW-9	11/7/2022	26.37	6.81	4959	16.2	4,590	347	347	<2	<2	46	2970	0.27	<0.02	<0.02	<0.01	<0.25	0.0007	<0.05	1.26	<0.00025
MW-9	3/7/2023	26.52	6.90	4387	13.6	4,600	389	389	<2	<2	44	2850	0.44	<0.02	<0.02	<0.01	<0.05	0.00061	<0.01	1.32	<0.00005
MW-9	5/31/2023	26.68	6.85	5789	18.6	4,740	407	407	<2	<2	49	3050	0.35	<0.02	<0.02	<0.01	0.052	<0.001	<0.01	1.39	<0.00025
MW-9	8/9/2023	26.83	6.97	5170	17.4	4,640	393	393	<2	<2	49	2870	0.39	0.05	0.053	<0.01	0.151	<0.001	<0.01	1.32	<0.00025
MW-9	11/15/2023	26.72	6.91	5216	17.4	4,530	414	414	<2	<2	47	2770	0.42	0.10	0.095	<0.01	<0.05	<0.001	<0.01	1.43	<0.00025
MW-10	3/28/2022	26.35	7.43	5724	15.1	4,220	587	587	<2	<2	289	2380	0.99	<0.02	<0.02	<0.01	<0.25	0.00289	<0.05	0.99	<0.00025
MW-10	5/17/2022	26.73	7.50	6205	18.0	4,170	627	627	<2	<2	358	1990	1.08	<0.02	<0.02	<0.01	<0.25	0.00321	<0.05	1.59	<0.00005
MW-10	8/15/2022	26.04	7.56	5813	18.8	4,210	644	644	<2	<2	350	2240	1.16	<0.02	<0.02	<0.01	<0.25	0.00404	<0.05	1.32	<0.00005
MW-10	11/7/2022	25.45	7.57	5698	15.3	4,030	656	656	<2	<2	376	1900	1.02	<0.02	<0.02	<0.01	<0.25	0.00264	<0.05	1.40	<0.00025
MW-10	3/7/2023	24.88	7.65	4662	13.8	3,890	696	696	<2	<2	375	1730	1.15	<0.02	<0.02	<0.01	<0.05	0.00182	<0.01	1.33	0.000052
MW-10	5/31/2023	25.50	7.68	6002	17.7	3,740	729	713	15	<2	399	1640	1.18	<0.02	<0.02	<0.01	<0.05	0.00138	<0.01	1.35	<0.0001
MW-10	8/9/2023	26.17	7.86	5030	16.8	3,600	696	696	<2	<2	410	1500	1.27	<0.02	<0.02	<0.01	<0.05	0.00110	<0.01	1.25	<0.00005
MW-10	11/15/2023	25.68	7.82	4403	16.1	3,360	727	701	27	<2	351	1240	1.26	<0.02	<0.02	<0.01	<0.05	0.00110	<0.01	1.31	<0.00025
MW-11	3/23/2022	58.41	7.39	2265	15.5	1,500	782	782	<2	<2	133	353	0.82	<0.02	<0.02	0.017	<0.05	<0.002	<0.01	0.41	<0.0005
MW-11	5/17/2022	59.41	7.39	2681	17.2	1,580	842	821	20	<2	136	330	0.91	<0.02	0.03	0.033	<0.05	0.00078	<0.01	0.49	<0.00005
MW-11	8/15/2022	54.00	7.37	2619	18.8	1,640	839	839	<2	<2	135	401	0.93	<0.2	<0.2	<0.01	<0.05	0.00051	<0.01	0.45	<0.00005
MW-11	11/7/2022	57.23	7.35	2573	15.2	1,590	839	839	<2	<2	125	359	0.76	<0.02	<0.02	<0.01	<0.05	0.00029	<0.01	0.43	<0.00005
MW-11	3/6/2023	59.37	7.39	2039	15.8	1,570	885	885	<2	<2	125	263	0.89	<0.02	<0.02	<0.01	<0.05	<0.0002	<0.01	0.46	<0.00005
MW-11	5/31/2023	52.18	7.39	2861	16.6	1,700	898	898	<2	<2	138	424	0.87	<0.02	<0.02	<0.01	<0.05	0.00025	<0.01	0.48	<0.00005
MW-11	8/8/2023	45.09	7.34	2633	17.5	1,740	794	794	<2	<2	117	525	0.79	<0.2	<0.2	<0.01	<0.05	0.00180	0.012	0.47	<0.0001
MW-11	11/15/2023	34.24	7.30	2474	16.8	1,630	787	787	<2	<2	100	471	0.85	<0.02	<0.02	<0.01	0.526	0.00041	<0.01	0.44	<0.00005
MW-12	3/28/2022	63.48	8.19	2896	15.4	1,360	409	380	29	<2	374	129	2.52	<0.02	<0.02	0.012	<0.05	0.00464	<0.01	0.60	<0.00005
MW-12	5/17/2022	81.76	8.04	3720	17.3	1,810	472	448	24	<2	793	88.3	2.21	0.32	1.28	0.957	<0.05	0.00233	<0.01	0.80	<0.00005
MW-12	8/15/2022	79.28	7.69	4219	18.0	2,370	523	523	<2	<2	954	204	1.85	8.89	9.4	0.511	<0.1	0.00157	<0.02	0.79	<0.00005
MW-12	11/7/2022	72.80	7.67	4399	15.2	2,450	553	553	<2	<2	1000	195	1.65	4.18	5.7	1.55	<0.1	0.00081	<0.02	0.84	<0.0001
MW-12	3/6/2023	65.47	7.74	3504	17.7	2,520	634	631	3.1	<2	1020	186	1.77	0.09	0.587	0.495	<0.1	0.00302	<0.02	0.87	<0.0001
MW-12	5/31/2023	65.23	7.79	4903	17.1	2,530	638	629	8.5	<2	1070	159	1.81	<0.02	<0.02	<0.01	<0.05	0.00203	<0.01	0.89	<0.0001
MW-12	8/8/2023	63.24	7.82	4492	19.0	2,580	615	615	<2	<2	1000	220	1.77	<0.02	<0.02	<0.01	<0.05	0.00241	0.012	0.93	<0.0001
MW-12	11/15/2023	60.60	7.76	4570	17.1	2,730	622	602	20	<2	1030	315	1.79	<0.02	<0.02	<0.01	<0.05	0.00246	<0.01	0.93	<0.0001
MW-13	3/23/2022	117.48	8.23	3872	16.9	2,430	1060	1030	29	<2	573	234	5.41	<0.02	<0.02	<0.01	<0.1	0.00178	<0.02	0.94	<0.0001
MW-13	5/10/2022	118.78	8.38	3190	17.5	2,150	995	933	62	<2	566	88.5	6.06	0.11	0.11	<0.01	<0.1	0.00075	<0.02	0.95	<0.0001
MW-13	8/15/2022	119.21	7.89	4115	19.1	2,610	1180	1180	<2	<2	606	172	6.46	<0.02	<0.02	0.029	<0.1	0.00285	<0.02	1.00	<0.00005
MW-13	11/8/2022	119.31	7.96	4251	16.0	2,540	1280	1230	53	<2	643	122	6.51	0.04	0.064	0.024	<0.1	0.00102	<0.02	1.03	<0.00025
MW-13	3/6/2023	83.74	7.91	3668	15.7	2,730	1450	1340	111	<2	674	104	6.49	<0.02	<0.02	<0.01	<0.1	<0.001	<0.02	1.09	<0.00025
MW-13	5/30/2023	119.19	8.00	4842	17.7	2,640	1450	1380	75	<2	654	64	5.79	<0.02	<0.02	<0.01	<0.05	0.00044	<0.01	1.04	0.00012
MW-13	8/8/2023	84.08	8.16	4054	18.0	2,590	1350	1260	89	<2	673	69	6.57	0.03	0.03	<0.01	<0.05	<0.0004	0.012	1.06	<0.0001
MW-13	11/14/2023	111.52	8.04	4145	18.0	2,640	1360	1290	73	<2	677	132	6.82	<0.02	<0.02	<0.01	<0.05	0.0004	<0.01	1.07	<0.0001
MW-14	3/28/2022	92.54	8.07	3669	17.5	2,300	866	800	66	<2	473	353	2.35	<0.02	<0.02	<0.01	<0.1	0.00533	<0.02	1.46	<0.0001
MW-14	5/17/2022	108.77	7.68	6741	17.2	3,610	1320	1300	27	<2	1410	143	3.10	0.02	0.02	<0.01	<0.1	0.00382	<0.02	1.26	0.000066
MW-14	8/15/2022	95.53	7.66	5626	18.2	4,240	1300	1300	<2	<2	1480	321	3.10	<0.02	<0.02	<0.01	<0.25	0.0059	<0.05	1.17	<0.00005
MW-14	11/8/2022	92.34	7.59	6395	15.5	4,410	1320	1320	<2	<2	1660	393	2.87	<0.02	<0.02	<0.01	<0.25	0.00448	<0.05	1.24	<0.0005
MW-14	3/6/2023	90.12	7.60	5744	14.7	4,690	1470	1410	62	<2	1590	460	3.10	<0.02	<0.02	<0.01	<0.25	0.00531	<0.05	1.32	<0.00025
MW-14	5/30/2023	86.50	7.61	8043	17.8	4,710	1490	1490	<2	<2	1730	414	2.61	<0.02	<0.02	<0.01	0.053	0.00408	<0.01	1.21	<0.00025
MW-14	8/8/2023	82.40	7.71	6875	18.9	4,750	1420	1420	<2	<2	1710	436	2.90	0.026	0.026	<0.01	<0.05	0.00436	0.012	1.30	<0.0001
MW-14	11/14/2023	99.18	7.64	6832	17.4	4,590	1500	1470	35	<2	1630	232	4.01	<0.02	<0.02	<0.01	<0.05	0.00236	<0.01	1.23	<0.00025
Field QA/QC Samples																					
MW-6 (duplicate)	9/19/2019	----	----	----	----	6,020	----	----	----	----	----	----	0.70	11	10.8	0.08	<0.3	0.0004	<0.05	0.30	0.00031
MW-7 (duplicate)	6/12/2019	----	----	----	----	5,600	----	----	----	----	----	----	0.90	1.28	1.28	<0.01	<0.3	<0.001	<0.05	0.40	<0.04
MW-7 (duplicate)	11/9/2019	----	----	----	----	5,510	----	----	----	----	----	----	0.50	15	14.7	0.08	<0.3	<0.001	<0.05	0.20	<0.0003
MW-7 (duplicate)	3/9/2020	----	----	----	----	6,530	----	----	----	----	----	----	0.40	15	14.5	0.05	<0.3	<0.0002	<0.05	0.10	0.0001
MW-7 (duplicate)	9/16/2020	----	----	----	----	5,040	----	----	----	----	----	----	0.40	11	10.9	0.03	0.11	<0.0002	<0.01	0.13	0.00007
MW-7 (duplicate)	2/22/2021	----	----	----	----	6,460	----	----	----	----	----	----	0.49	10	10.3	0.068	<0.05	<0.001	<0.01	0.17	<0.00025
MW-7 (duplicate)	5/19/2021	----	----	----	----	----	291	291	<2	<2	51	3280	0.43	7.45	7.48	0.028	<0.05	<0.0002	<0.01	0.14	0.000068
MW-7 (duplicate)	8/31/2021	----	----	----	----	----	464	464	<2	<2	109	3480	0.53	0.91	0.91	<0.01	<0.05	<0.001	<0.01	0.31	<0.00025
MW-7 (duplicate)	3/22/2022	----	----	----	----	5,730	492	492	<2	<2	94	3720	0.56	1.18	1.20	0.018	<0.25	<0.001	<0.05	0.35	<0.00025
MW-7 (duplicate)	5/10/2022	----	----	----	----	5,660	490	490	<2	<2	104	3290	0.58	0.20	0.20	<0.01	<0.25	<0.001	<0.05	0.39	<0.00025
MW-7 (duplicate)	3/6/2023	----	----	----	----	5,870	504	504	<2	<2	89	3480	0.51	0.20	0.20	<0.01	<0.05	<0.0004	<0.01	0.29	<0.0001
MW-8 (duplicate)	11/23/2020	----	----	----	----	4,040	----	----	----	----	----	----	1.15	<0.050	<0.02	<0.01	<0.25	0.00234	<0.05	0.83	<0.00025
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Table 2 (Page 2 of 2). GCC Quarterly Compliance Groundwater Monitoring Data 2018-2023.

Location ID	Sample Date	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Calcium (mg/L)	Iron (mg/L)	Lead (mg/L)	Lithium (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Mercury (mg/L)	Nickel (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Sodium (mg/L)	Vanadium (mg/L)	Zinc (mg/L)	Barium (mg/L)
MW-5	12/9/2019																	
MW-5	9/17/2020																	
MW-5	11/23/2020																	
MW-5	5/12/2021																	
MW-5	11/18/2021																	
MW-5	3/24/2022																	
MW-5	5/10/2022																	
MW-5	11/8/2022																	
MW-5	5/30/2023																	
MW-5	11/14/2023																	
MW-6	1/3/2018	<0.005	0.0042	0.006	----	0.47	<0.01	0.66	----	**0.59**	<0.0002	0.029	----	<0.03	----	<0.005	0.025	----
MW-6	4/27/2018	<0.005	0.019	<0.01	----	0.06	<0.01	0.69	----	**1.14**	<0.0002	0.069	----	<0.03	----	<0.005	<0.01	0.032
MW-6	9/26/2018																	
MW-6	12/12/2018	<0.005	0.0060	<0.01	----	<0.1	0.004	0.48	----	**0.66**	<0.0002	0.017	----	0.0062	----	0.0012	0.009	----
MW-6	3/7/2019																DRY	
MW-6	6/12/2019	<0.05	<0.05	<0.05	----	0.80	0.002	0.52	----	**0.97**	<0.0002	0.150	----	**0.0966**	----	<0.03	<0.05	----
MW-6	9/19/2019	<0.05	0.05	<0.05	----	0.30	0.0004	0.49	----	**0.58**	<0.0002	0.130	----	**0.1400**	----	<0.03	<0.05	----
MW-6	12/9/2019	<0.05	<0.05	<0.05	----	<0.2	<0.0005	0.49	----	**0.49**	<0.0002	0.110	----	**0.0880**	----	<0.03	<0.05	----
MW-6	3/9/2020	<0.05	<0.05	0.06	----	<0.2	<0.0001	0.48	----	**0.40**	<0.0002	0.110	----	**0.0401**	----	<0.03	<0.05	----
MW-6	9/16/2020	0.01	0.03	<0.01	----	0.19	0.0006	0.49	----	**0.39**	<0.0002	0.088	----	0.0064	----	<0.01	0.020	----
MW-6	11/23/2020	<0.05	<0.05	<0.05	----	<0.3	<0.0005	0.45	----	**0.33**	<0.0002	0.114	----	0.0155	----	<0.05	0.110	----
MW-6	2/22/2021	<0.05	<0.05	<0.05	----	<0.3	<0.0005	0.476	----	**0.32**	<0.0002	0.0810	----	0.00487	----	<0.05	<0.1	----
MW-6	5/19/2021	<0.02	<0.02	<0.01	315	0.13	<0.0001	0.47	344	**0.36**	<0.0002	0.058	9.9	0.0023	810	<0.01	<0.02	----
MW-6	8/31/2021	<0.02	<0.02	<0.01	410	<0.06	<0.0005	0.49	498	**0.28**	<0.0002	0.085	11.2	0.0148	575	<0.01	<0.02	----
MW-6	11/18/2021	<0.1	<0.02	<0.01	383	<0.06	<0.0005	0.47	473	**0.24**	<0.0002	0.076	10.3	0.0153	589	<0.01	<0.02	----
MW-6	3/22/2022	<0.1	<0.1	<0.05	488	<0.3	<0.0005	0.43	460	0.08	<0.0002	<0.04	**11.5**	**0.0465**	362	<0.05	<0.1	----
MW-6	5/17/2022	<0.1	0.012	<0.05	440	<0.3	<0.0001	0.46	422	0.20	<0.0002	0.121	10.9	**0.0538**	522	<0.05	<0.1	----
MW-6	8/15/2022	<0.1	0.020	<0.05	421	0.70	<0.0001	0.43	410	**0.29**	<0.0002	**0.409**	10.8	0.0112	456	<0.05	<0.1	----
MW-6	11/7/2022	<0.1	**0.061**	<0.05	414	0.32	<0.0005	0.43	**411**	**0.61**	<0.0002	**0.320**	10.3	<0.0005	**473**	<0.05	<0.1	----
MW-6	3/6/2023	<0.1	**0.063**	<0.01	413	1.55	<0.0005	0.42	416	**0.84**	<0.0002	0.102	10.7	<0.0005	558	<0.01	<0.02	----
MW-6	5/30/2023	<0.02	**0.054**	<0.01	398	1.12	<0.0005	0.46	421	**0.66**	<0.0002	0.090	10.5	0.0032	566	<0.01	0.028	----
MW-6	8/8/2023	<0.02	0.043	0.011	402	1.34	<0.0002	0.49	422	**0.51**	<0.0002	0.078	**11.5**	0.0053	532	<0.01	0.039	----
MW-6	11/14/2023	<0.1	0.035	<0.05	414	0.86	<0.0005	0.43	408	**0.42**	<0.0002	0.083	**11.3**	0.0045	521	<0.05	<0.1	----
MW-7	1/3/2018	<0.005	0.0014	0.00555	----	1.39	<0.01	0.78	----	0.20	<0.0002	0.016	----	**<0.03**	----	0.0023	0.027	----
MW-7	4/27/2018	<0.005	<0.005	<0.01	----	0.25	<0.01	0.67	----	0.17	<0.0002	0.006	----	**<0.03**	----	<0.005	<0.01	0.0142
MW-7	9/26/2018																	
MW-7	12/12/2018	<0.005	<0.005	<0.01	----	0.24	<0.01	0.57	----	0.10	<0.0002	0.004	----	**<0.03**	----	<0.005	0.010	----
MW-7	3/7/2019	<0.005	0.0020	<0.01	----	0.30	<0.01	0.56	----	0.15	<0.0002	0.008	----	**<0.03**	----	<0.005	0.010	----
MW-7	6/12/2019	<0.05	<0.05	<0.05	----	<0.2	<0.0005	0.62	----	0.14	<0.0002	<0.04	----	0.0087	----	<0.03	<0.05	----
MW-7	9/18/2019	<0.05	<0.05	<0.05	----	0.80	0.001	0.48	----	0.10	<0.0002	<0.04	----	**0.0762**	----	<0.03	<0.05	----
MW-7	12/9/2019	<0.05	<0.05	<0.05	----	<0.2	<0.0005	0.44	----	<0.05	<0.0002	<0.04	----	**0.0903**	----	<0.03	<0.05	----
MW-7	3/9/2020	<0.05	<0.05	<0.05	----	<0.2	<0.0001	0.60	----	<0.05	<0.0002	<0.04	----	**0.0701**	----	<0.03	<0.05	----
MW-7	9/16/2020	0.01	<0.01	<0.01	----	0.15	0.0002	0.43	----	0.01	<0.0002	0.013	----	**0.0655**	----	<0.01	<0.02	----
MW-7	11/23/2020	<0.05	<0.05	<0.05	----	<0.3	<0.0005	0.38	----	<0.05	<0.0002	<0.04	----	**0.0452**	----	<0.05	<0.1	----
MW-7	2/22/2021	<0.05	<0.05	<0.05	----	<0.3	<0.0005	0.634	----	<0.05	<0.002	<0.04	----	**0.0348**	----	<0.05	<0.1	----
MW-7	5/19/2021	<0.02	<0.02	<0.01	460	<0.06	<0.0001	0.47	530	<0.01	<0.0002	0.023	13.7	**0.0401**	393	<0.01	<0.02	----
MW-7	8/31/2021	<0.02	<0.02	<0.01	391	<0.06	<0.0005	0.52	397	0.07	<0.0002	0.016	10.8	0.0115	666	<0.01	<0.02	----
MW-7	11/18/2021	<0.1	<0.02	<0.01	429	<0.06	<0.0005	0.38	386	0.06	<0.0002	0.016	10.6	**0.0284**	402	<0.01	<0.02	----
MW-7	3/22/2022	<0.1	<0.1	<0.05	396	<0.3	<0.0005	0.55	428	0.06	<0.0002	<0.04	10.8	0.0114	671	<0.05	<0.1	----
MW-7	5/10/2022	<0.1	0.0023	<0.05	376	<0.3	<0.0005	0.55	392	0.09	<0.0002	<0.04	10.1	0.0055	662	<0.05	<0.1	----
MW-7	8/15/2022	<0.1	0.0028	<0.05	346	**0.44**	<0.0001	0.54	371	0.07	<0.0002	<0.04	10.5	0.0008	703	<0.05	<0.1	----
MW-7	11/7/2022	<0.1	0.0018	<0.05	454	<0.3	<0.0005	0.34	365	<0.05	<0.0002	<0.04	11.3	**0.0371**	306	<0.05	<0.1	----
MW-7	3/6/2023	<0.1	0.0040	<0.05	384	<0.3	<0.001	0.56	449	0.06	<0.0002	<0.04	11.2	<0.001	706	<0.05	<0.1	----
MW-7	5/30/2023	<0.02	0.0021	<0.01	466	0.09	<0.0005	0.45	519	<0.01	<0.0002	0.023	13.1	**0.0981**	360	<0.01	<0.02	----
MW-7	8/8/2023	<0.04	0.0025	0.011	385	0.17	<0.0002	0.61	436	0.08	<0.0002	0.017	12.0	0.0080	638	<0.01	<0.02	----
MW-7	11/14/2023	<0.02	0.0014	<0.01	333	0.64	<0.0005	0.62	353	0.09	<0.0002	0.008	10.2	<0.0005	707	<0.01	<0.02	----
MW-8	3/9/2020																	
MW-8	9/16/2020																	
MW-8	9/28/2020	<0.05	<0.05	<0.05	----	2.62	<0.0005	0.51		**0.30**	<0.0002	<0.04		0.0008		<0.05	<0.1	----
MW-8	11/9/2020																	
MW-8	11/23/2020	<0.05	<0.05	<0.05	----	<0.3	<0.0005	0.33	----	**0.25**	<0.0002	<0.04	----	<0.0005	----	<0.05	<0.1	----
MW-8	2/22/2021	<0.01	<0.01	<0.01	----	<0.06	<0.0005	0.36	----	**0.31**	<0.0002	<0.008	----	<0.0005	----	<0.01	<0.02	----
MW-8	5/19/2021	<0.04	<0.02	<0.01	93	<0.06	0.00016	0.37	31	**0.28**	<0.0002	<0.008	6.2	0.0002	1250	<0.01	<0.02	----
MW-8	8/31/2021	<0.02	<0.02	<0.01	111	<0.06	<0.0005	0.38	39	**0.32**	<0.0002	<0.008	5.9	<0.0005	1300	<0.01	<0.02	----
MW-8	11/18/2021	<0.1	<0.02	<0.01	107	<0.06	<0.0005	0.38	47	**0.27**	<0.0002	<0.008	6.4	<0.0005	1150	<0.02	<0.02	----
MW-8	3/28/2022	<0.04	<0.04	<0.02	60	<0.12	0.00036	0.26	20	0.20	<0.0002	<0.016	4.3	<0.0002	805	<0.02	<0.04	----
MW-8	5/17/2022	<0.04	<0.04	<0.02	77	<0.12	<0.0001	0.39	29	**0.30**	<0.0002	<0.016	5.3	<0.0001	1180	<0.02	<0.04	----
MW-8	8/15/2022	<0.04	<0.04	<0.02	68	0.83	<0.0001	0.37	27	**0.24**	<0.0002	<0.016	5.4	<0.0002	1110	<0.02	<0.04	----
MW-8	11/7/2022	<0.04	0.00051	<0.02	68	0.89	<0.0002	0.37	27	**0.24**	<0.0002	<0.016	5.4	<0.0005	1160	<0.02	<0.04	----
MW-8	3/6/2023	<0.04	0.00055	<0.02	70	0.86	<0.0002	0.36	28	**0.23**	<0.0002	<0.016	5.6	<0.0002	1240	<0.02	<0.04	----
MW-8	5/30/2023	<0.02	0.00031	<0.01	60	1.02	<0.0005	0.42	25	0.19	<0.0002	<0.008	5.5	0.0009	1280	<0.01	<0.02	----
MW-8	8/8/2023	<0.04	0.00024	<0.01	64	0.89	<0.0002	0.44	26	**0.22**	<0.0002	<0.008	6.2	<0.0002	1140	<0.01	<0.02	----
MW-8	11/14/2023	<0.02	0.00023	<0.01	64	0.85	<0.0002	0.44	26	**0.23**	<0.0002	<0.008	6.4	<0.0002	1150	<0.01	<0.02	----
MW-9	3/28/2022	<0.02	<0.02	<0.01	367	<0.06	<0.0005	0.29	178	**0.61**	<0.0002	0.022	8.1	<0.0005	540	<0.01	<0.02	----
MW-9	5/17/2022	<0.1	0.0093	<0.05	478	<0.3	<0.0001	0.36	216	**0.76**	<0.0002	<0.04	9.3	0.0003	694	<0.05	<0.1	----
MW-9	8/15/2022	<0.1	0.0040	<0.05	417	<0.3	<0.0001	0.36	156	**0.55**	<0.0002	<0.04	9.5	<0.0001	716	<0.05	<0.1	----
MW-9	11/7/2022	<0.1	0.0063	0.05	418	0.51	<0.0005	0.38	158	**0.55**	<0.0002	<0.04	9.0	<0.0001	741	<0.05	<0.1	----
MW-9	3/7/2023	<0.1	0.0036	<0.01	409	0.94	<0.0001	0.38	156	**0.46**	<0.0002	<0.008	9.0	<0.0001	779	<0.01	<0.02	----
MW-9	5/31/2023	<0.02	0.0025	<0.01	415	1.39	<0.0005	0.41	161	**0.45**	<0.0002	<0.008	8.9	<0.0005	820	<0.01	<0.02	----
MW-9	8/9/2023	<0.02	0.0022	<0.01	395	1.69	<0.0005	0.44	158	**0.50**	<0.0002	<0.008	8.6	<0.0005	747	<0.01	0.74	----
MW-9	11/15/2023	<0.02	0.0018	<0.01	408	1.77	<0.0005	0.37	159	**0.42**	<0.0002	<0.008	9.2	<0.0005	799	<0.01	<0.02	----
MW-10	3/28/2022	<0.1	<0.1	<0.05	430	<0.3	0.00055	0.31	198	**0.69**	<0.0002	<0.04	8.9	<0.0005	615	<0.05	<0.1	----
MW-10	5/17/2022	<0.1	0.00102	<0.05	83	0.51	<0.0001	0.34	24	0.07	<0.0002	<0.04	6.9	0.0004	1400	<0.05	<0.1	----
MW-10	8/15/2022	<0.1	0.000287	<0.05	54	0.62	0.00021	0.31	16.2	<0.05	<0.0002	<0.04	6.9	<0.0002	1240	<0.05	<0.1	----
MW-10	11/7/2022	<0.1	<0.00025	0.06	46	0.53	<0.0005	0.32	14.7	<0.05	<0.0002	<0.04	6.3	<0.0005	1240	<0.05	<0.1	----
MW-10	3/7/2023	<0.04	0.00017	<0.01	40	0.47	0.00028	0.30	12.4	0.03	<0.0002	<0.008	5.9	0.0001	1090	<0.01	<0.02	----
MW-10	5/31/2023	<0.02	<0.0001	<0.01	38	0.41	<0.0002	0.30	11.8	0.02	<0.0002	<0.008	5.6	<0.0002	1230	<0.01	<0.02	----
MW-10	8/9/2023	<0.02	0.000075	<0.01	33	0.33	0.0001	0.32	10.2	0.02	<0.0002	<0.008	5.5	<0.0005	1110	<0.01	<0.02	----
MW-10	11/15/2023	<0.02	<0.00025	<0.01	29	0.27	<0.0005	0.26	8.63	<0.01	<0.0002	<0.008	5.4	<0.0005	1170	<0.01	<0.02	----
MW-11	3/23/2022	<0.02	<0.02	<0.01	45	<0.06	<0.001	0.15	24	<0.01	<0.0002	<0.008	3.6	<0.002	461	<0.01	<0.02	----
MW-11	5/17/2022	<0.02	<0.02	<0.01	52	<0.06	<0.0001	0.18	29	0.02	<0.0002	<0.008	3.4	**0.1320**	513	<0.01	<0.02	----
MW-11	8/15/2022	<0.02	<0.02	<0.01	47	<0.06	<0.0001	0.16	26	<0.01	<0.0002	<0.008	3.5	**0.1250**	477	<0.01	<0.02	----
MW-11	11/7/2022	<0.02	0.0023	<0.01	68	<0.06	<0.0001	0.15	34	0.02	<0.0002	0.011	3.7	**0.1620**	412	<0.01	<0.02	----
MW-11	3/6/2023	<0.02	0.00043	<0.01	53	<0.06	<0.0001	0.14	28	<0.01	<0.0002	<0.008	3.4	**0.1140**	435	<0.01	<0.02	----
MW-11	5/31/2023	<0.02	0.0001	<0.01	46	<0.06	<0.0001	0.17	29	0.02	<0.0002	<0.008	3.7	**0.0386**	563	<0.01	<0.02	----
MW-11	8/8/2023	<0.02	0.0002	0.01	68	0.06	<0.0002	0.19	36	0.11	<0.0002	<0.008	4.1	0.0007	494	<0.01	<0.02	----
MW-11	11/15/2023	<0.02	0.00054	<0.01	91	0.19	<0.0001	0.16	44	0.07	<0.0002	<0.008	4.4	**0.0421**	422	<0.01	<0.02	----
MW-12	3/28/2022	<0.02	<0.02	<0.01	11	<0.06	<0.0001	0.11	3.12	0.01	<0.0002	<0.008	2.2	<0.0002	488	<0.01	<0.02	----
MW-12	5/17/2022	<0.02	<0.02	<0.01	14	<0.06	<0.0001	0.17	4.55	0.03	<0.0002	<0.008	2.9	0.0007	707	<0.01	<0.02	----
MW-12	8/15/2022	<0.04	<0.04	<0.02	26	<0.12	<0.0002	0.19	6.19	<0.02	<0.0002	<0.016	3.7	<0.0002	805	<0.02	<0.04	----
MW-12	11/7/2022	<0.04	0.0017	<0.02	26	<0.12	<0.0002	0.20	7.38	0.07	<0.0002	0.099	4.1	0.0008	861	<0.02	<0.04	----
MW-12	3/6/2023	<0.04	0.00095	<0.02	24	<0.12	0.00021	0.21	8.32	0.04	<0.0002	0.048	4.0	0.0004	967	<0.02	<0.04	----
MW-12	5/31/2023	<0.02	0.00037	<0.01	21	0.30	0.00028	0.21	8.70	0.10	<0.0002	<0.008	3.9	<0.0002	958	<0.01	<0.02	----
MW-12	8/8/2023	<0.02	0.00062	0.013	24	0.19	0.00021	0.27	9.05	0.11	<0.0002	<0.008	4.8	<0.0005	879	<0.01	<0.02	----
MW-12	11/15/2023	<0.02	0.00082	<0.01	27	0.12	<0.0002	0.26	10.3	0.09	<0.0002	<0.008	5.2	<0.001	909	<0.01	<0.02	----
MW-13	3/23/2022	<0.04	<0.04	<0.02	5.46	<0.12	<0.0002	0.18	1.45	<0.02	<0.0002	<0.016	2.9	<0.0002	885	<0.02	<0.04	----
MW-13	5/10/2022	<0.04	<0.04	<0.02	4.13	<0.12	<0.0002	0.18	1.00	<0.02	<0.0002	<0.016	2.4	0.0184	782	<0.02	<0.04	----
MW-13	8/15/2022	<0.04	<0.04	<0.02	7.84	<0.12	<0.0001	0.21	1.74	<0.02	<0.0002	<0.016	3.1	<0.0002	910	<0.02	<0.04	----
MW-13	11/8/2022	<0.04	<0.00025	<0.02	6.65	<0.12	<0.0002	0.23	1.67	<0.02	<0.0002	<0.016	3.1	<0.0002	977	<0.02	<0.04	----
MW-13	3/6/2023	<0.04	<0.00025	<0.02	7.60	<0.12	<0.0005	0.24	2.21	<0.02	<0.0002	<0.016	3.1	<0.0002	1060	<0.02	<0.04	----
MW-13	5/30/2023	<0.02	0.00022	<0.01	6.22	<0.06	0.00043	0.28	1.82	<0.01	<0.0002	<0.008	2.9	<0.001	1050	<0.01	<0.02	----
MW-13	8/8/2023	<0.02	<0.0001	<0.01	5.65	<0.06	<0.0002	0.28	1.82	0.01	<0.0002	<0.008	3.8	<0.0005	945	<0.01	<0.02	----
MW-13	11/14/2023	<0.02	<0.0001	<0.01	6.70	<0.06	<0.0002	0.27	1.74	<0.01	<0.0002	<0.008	3.6	<0.0002	891	<0.01	<0.02	----
MW-14	3/28/2022	<0.04	<0.04	<0.02	85	<0.12	<0.0002	0.32	23	<0.02	<0.0002	<0.016	7.1	0.0098	1260	<0.02	<0.1	----
MW-14	5/17/2022	<0.04	<0.04	<0.02	16	<0.12	<0.0001	0.40	4.75	<0.02	<0.0002	<0.016	4.6	0.0012	1390	<0.02	<0.04	----
MW-14	8/15/2022	<0.1	0.00075	<0.05	17	<0.3	<0.0002	0.36	4.86	<0.05	<0.0002	<0.04	5.3	<0.0002	1450	<0.05	<0.1	----
MW-14	11/8/2022	<0.1	0.00086	<0.05	18	0.36	<0.001	0.36	4.99	<0.05	<0.0002	<0.04	5.7	<0.001	1610	<0.05	<0.1	----
MW-14	3/6/2023	<0.1	0.00066	<0.05	19	0.81	<0.0005	0.38	6.44	<0.05	<0.0002	<0.04	5.3	<0.0005	1740	<0.05	<0.1	----
MW-14	5/30/2023	<0.02	0.00062	<0.01	17	0.68	0.00084	0.50	5.47	0.04	<0.0002	<0.008	5.0	<0.002	1770	<0.01	0.063	----
MW-14	8/8/2023	<0.1	0.00036	0.01	19	1.10	<0.0005	0.52	5.89	0.06	<0.0002	<0.008	6.2	<0.0005	1750	<0.01	<0.02	----
MW-14	11/14/2023	<0.02	<0.00025	<0.01	16	0.53	<0.0005	0.56	5.39	0.03	<0.0002	<0.008	5.7	<0.0005	1590	<0.01	<0.02	----
Field QA/QC Samples																		
MW-6 (duplicate)	9/19/2019	<0.05	0.05	<0.05	----	0.30	0.0005	0.48	----	**0.57**	<0.0002	0.150	----	**0.1410**	----	<0.03	<0.05	----
MW-7 (duplicate)	6/12/2019	<0.05	<0.05	<0.05	----	0.20	<0.0005	0.61	----	0.14	<0.0002	<0.04	----	0.0084	----	<0.03	<0.05	----
MW-7 (duplicate)	11/9/2019	<0.05	<0.05	<0.05	----	<0.2	<0.0005	0.44	----	<0.05	<0.0002	<0.04	----	**0.0903**	----	<0.03	<0.05	----
MW-7 (duplicate)	3/9/2020	<0.05	<0.05	<0.05	----	<0.2	<0.0001	0.60	----	<0.05	<0.0002	<0.04	----	**0.0704**	----	<0.03	<0.05	----
MW-7 (duplicate)	9/16/2020	0.01	<0.01	<0.01	----	0.12	0.0002	0.43	----	0.01	<0.0002	0.010	----	**0.0654**	----	<0.01	<0.02	----
MW-7 (duplicate)	2/22/2021	<0.01	<0.01	<0.01	----	<0.06	<0.0005	0.619	----	0.020	<0.0002	0.0197	----	**0.0329**	----	<0.01	<0.02	----
MW-7 (duplicate)	5/19/2021	<0.02	<0.02	<0.01	457	<0.06	<0.0001	0.47	528	<0.01	<0.0002	0.012	13.9	**0.0398**	390	<0.01	<0.02	----
MW-7 (duplicate)	8/31/2021	<0.02	<0.02	<0.01	390	<0.06	<0.0005	0.52	396	0.07	<0.0002	0.017	10.9	0.0109	661	<0.01	<0.02	----
MW-7 (duplicate)	3/22/2022	<0.1	<0.1	<0.05	383	<0.3	<0.0005	0.52	431	<0.05	<0.0002	<0.04	10.5	0.0119	642	<0.05	<0.1	----
MW-7 (duplicate)	5/10/2022	<0.1	0.0022	<0.05	373	<0.3	<0.0005	0.56	389	0.10	<0.0002	<0.04	10.3	0.0061	675	<0.05	<0.1	----
MW-7 (duplicate)	3/6/2023	<0.1	0.0039	<0.01	388	0.09	<0.0002	0.54	443	0.07	<0.0002	0.026	11.7	0.0056	677	<0.01	<0.02	----
MW-8 (duplicate)	11/23/2020	<0.05	<0.05	<0.05	----	<0.3	<0.0005	0.34	----	**0.25**	<0.0002	<0.04	----	<0.0005	----	<0.05	<0.1	----
MW-8 (duplicate)	11/18/2021	<0.04	<0.02	<0.01	104	<0.06	<0.0002	0.38	43	**0.27**	<0.0002	<0.008	6.3	<0.0002	1150	<0.02	<0.02	----
MW-8 (duplicate)	8/15/2022	<0.04	<0.04	<0.02	68	0.83	<0.0001	0.36	27	**0.24**	<0.0002	<0.016	5.4	<0.0002	1100	<0.02	<0.04	----
MW-8 (duplicate)	11/7/2022	<0.04	0.00052	<0.02	70	0.86	<0.0002	0.37	28	**0.25**	<0.0002	<0.016	5.7	<0.0005	1160	<0.02	<0.04	----
MW-8 (duplicate)	8/8/2023	<0.02	0.0003	0.01	66	0.87	<0.0002	0.45	27	**0.24**	<0.0002	<0.008	6.3	<0.0002	1160	<0.01	<0.02	----
MW-11 (duplicate)	5/31/2023	<0.02	0.0001	<0.01	46	<0.06	<0.0001	0.17	29	<0.01	<0.0002	<0.008	3.3	0.0019	549	<0.01	<0.02	----
MW-12 (duplicate)	11/15/2023	<0.02	0.0008	<0.01	27	0.10	<0.0005	0.21	10.1	0.09	<0.0002	<0.008	4.5	<0.0005	973	<0.01	<0.02	----
CDPHE Regulation 41 Table 3 Groundwater Quality Reference Standards (Agricultural Use)[1]		*0.10*	*0.05*	*0.2*	*---*	*5.0*	*0.10*	*2.5*	*---*	*0.20*	*0.01*	*0.20*	*---*	*0.02*	*---*	*0.10*	*2.0*	*---*

Notes:

-Concentrations in bold indicate exceedance of CDPHE Groundwater Quality Reference Standard for Agricultural Use as applicable to the facility.
-Underlined values exceeded the method hold time for analysis.
-The applicable facility standards established for boron (5.0 mg/L) and total dissolved solids (<10,000) are different than the CDPHE agricultural use standards; 0.75mg/L and 1.5 x background, respectively.
-MW-5 has been dry since installation and initial monitoring on 7/14/2008.
-2020Q2 monitoring not conducted due to COVID-19 restrictions.

FIGURES

Figure 1. GCC site map with 2023 compliance groundwater monitoring locations.

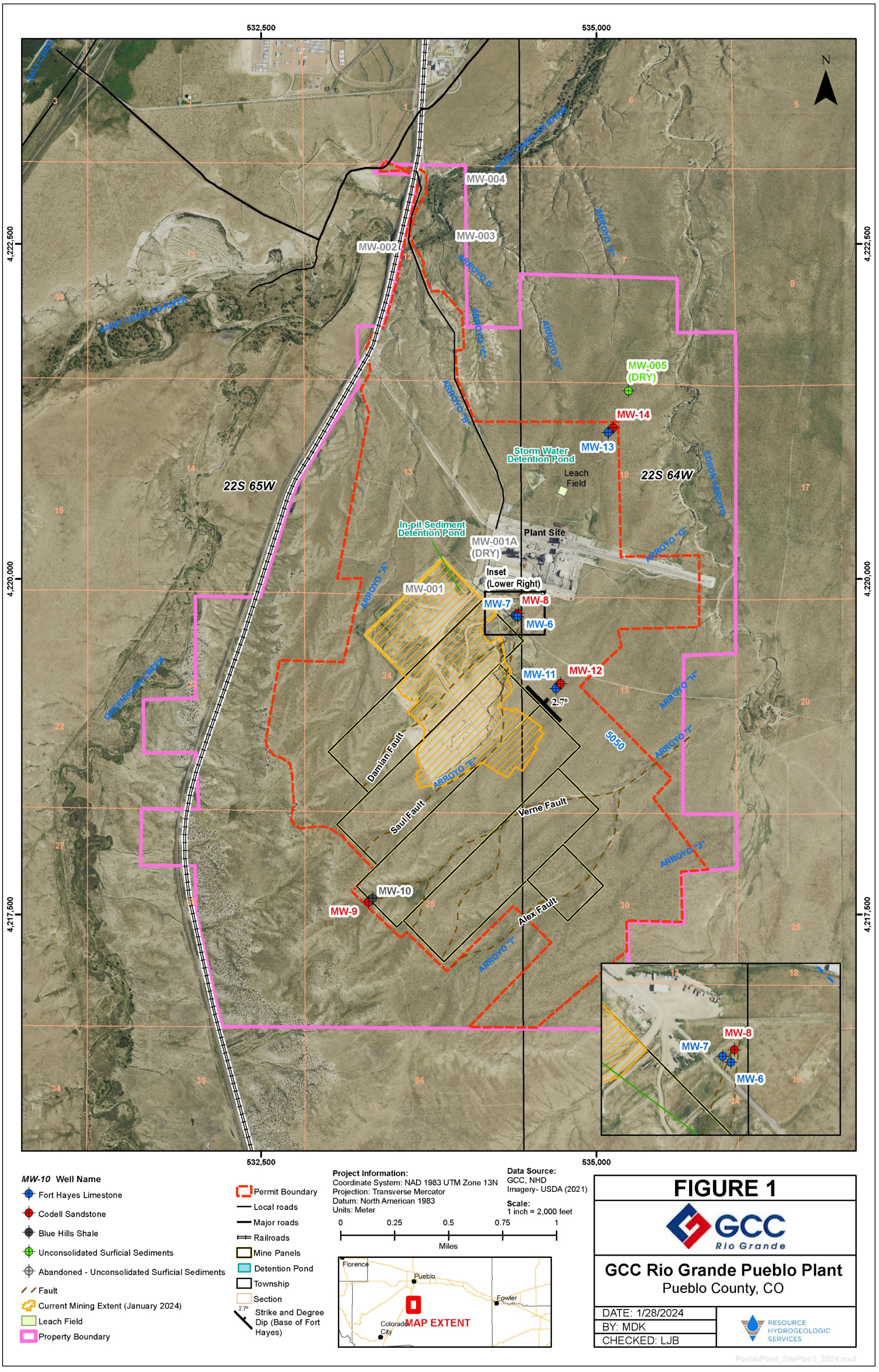


Figure 2. GCC Rio Grande Pueblo Plant 2023 Fort Hayes Stiff Diagrams.

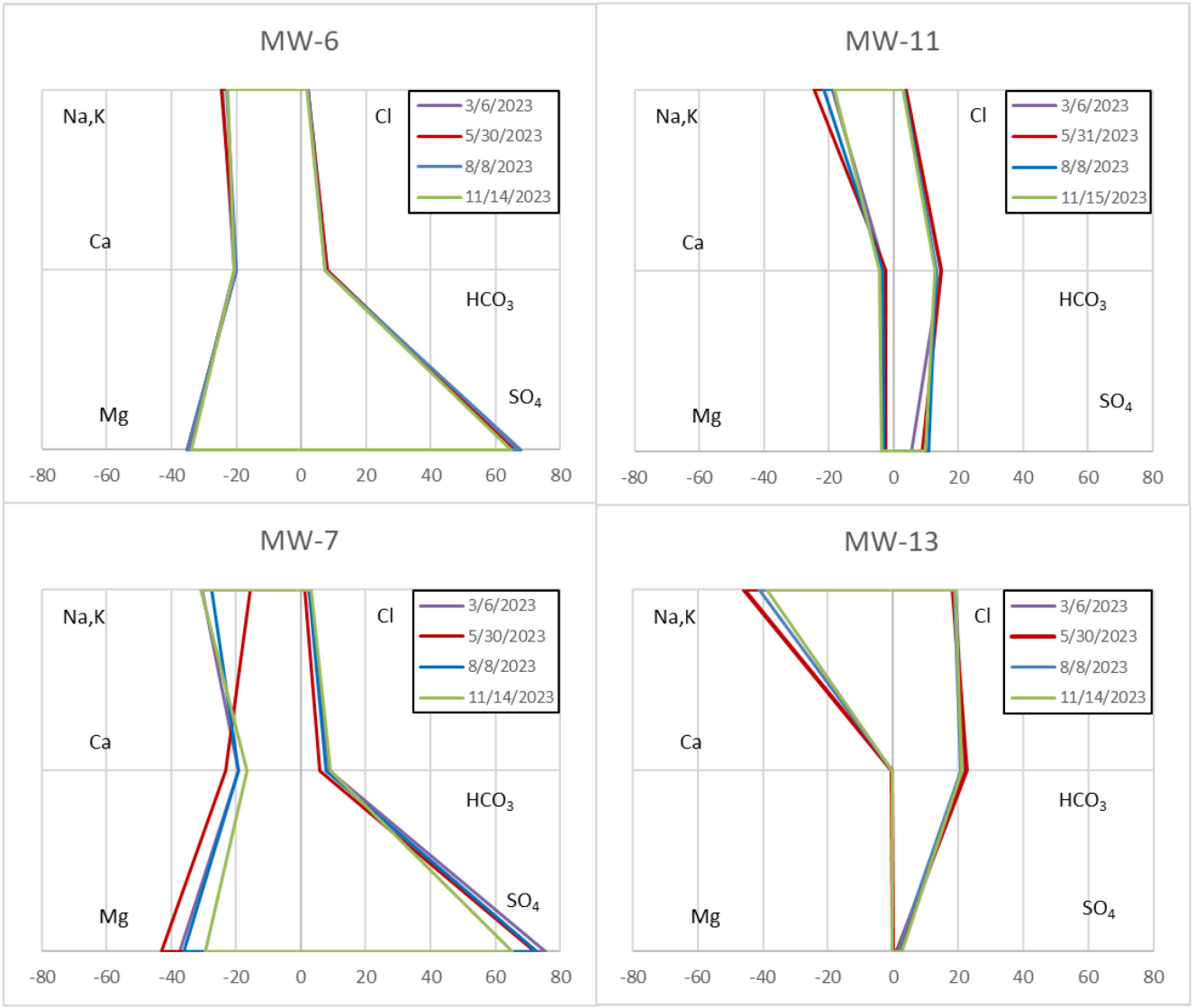


Figure 3. GCC Rio Grande Pueblo Plant 2023 Codell Stiff Diagrams.

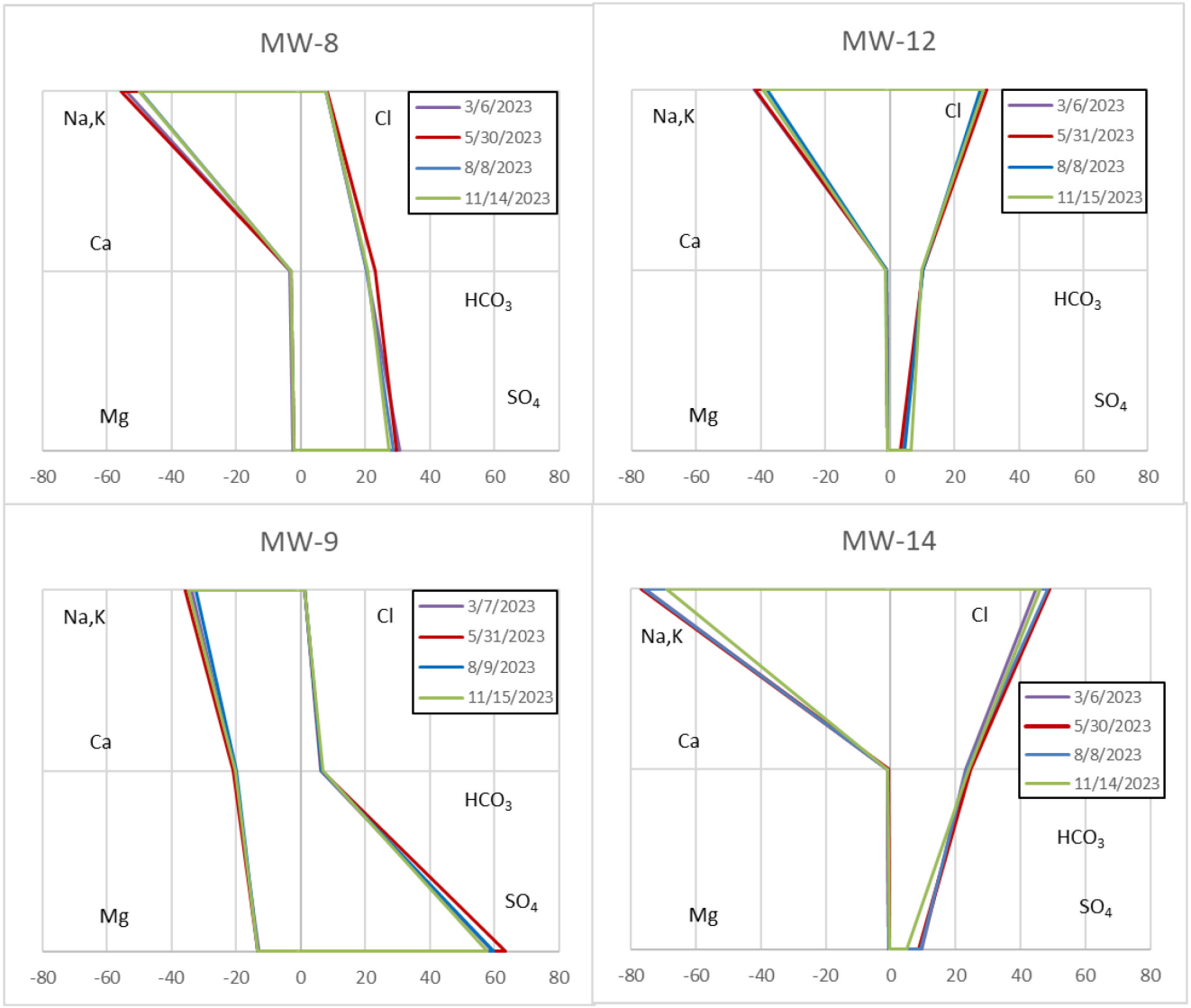


Figure 4. GCC Rio Grande Pueblo Plant 2023 Blue Hills Stiff Diagram.

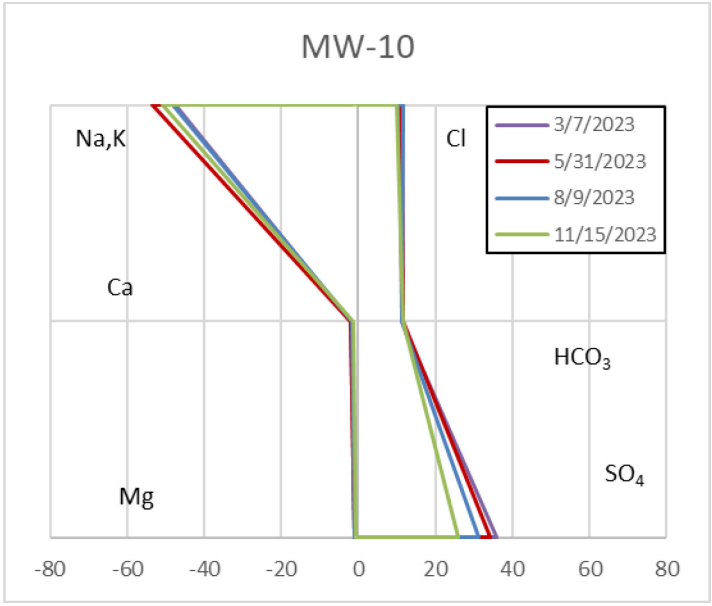
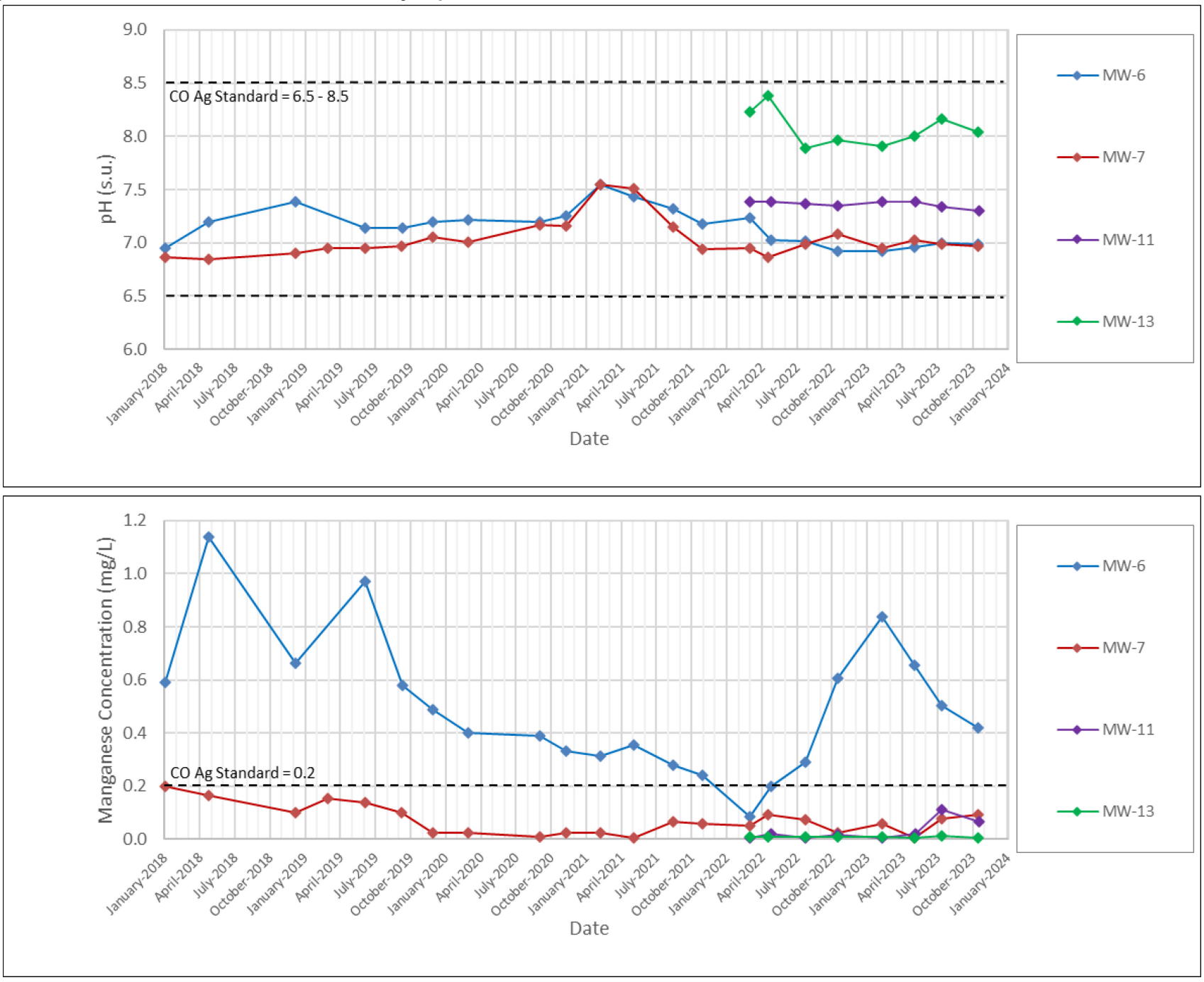
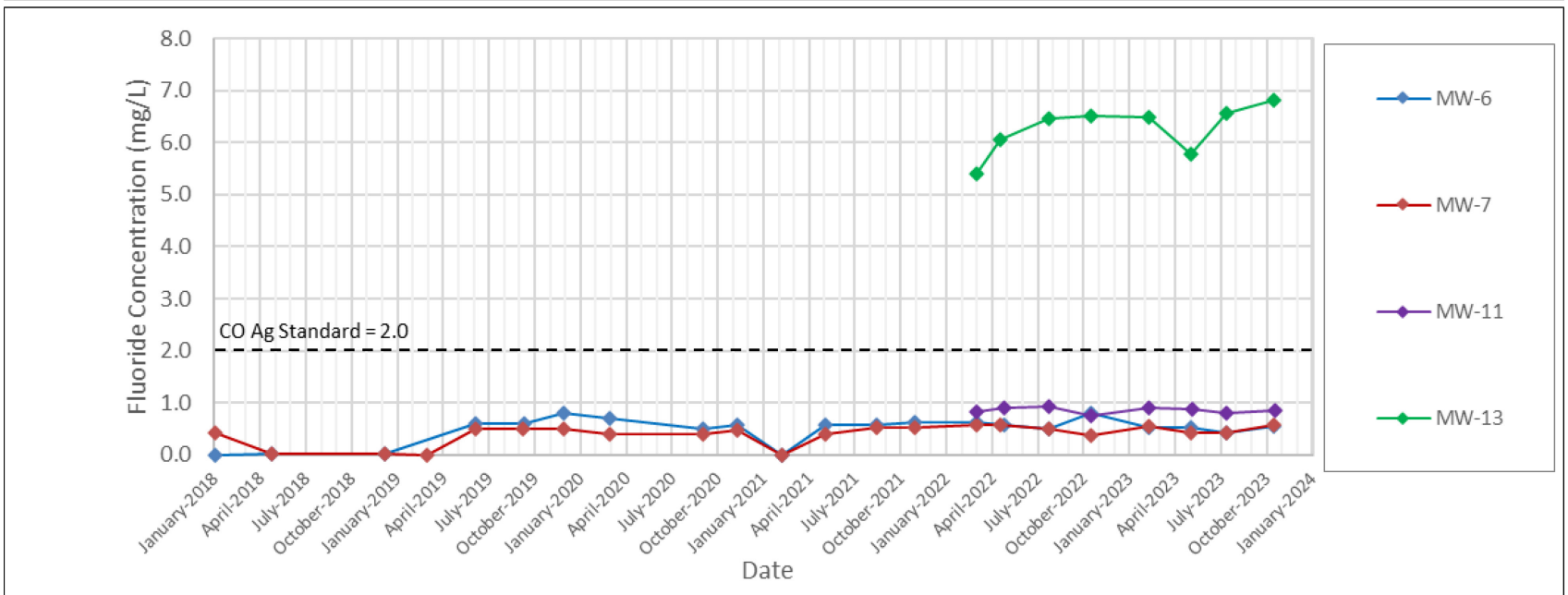


Figure 5. GCC Rio Grande Pueblo Plant Fort Hayes pH, Mn, F, Se Time Series Plots – Full Period of Record 2018-2023.





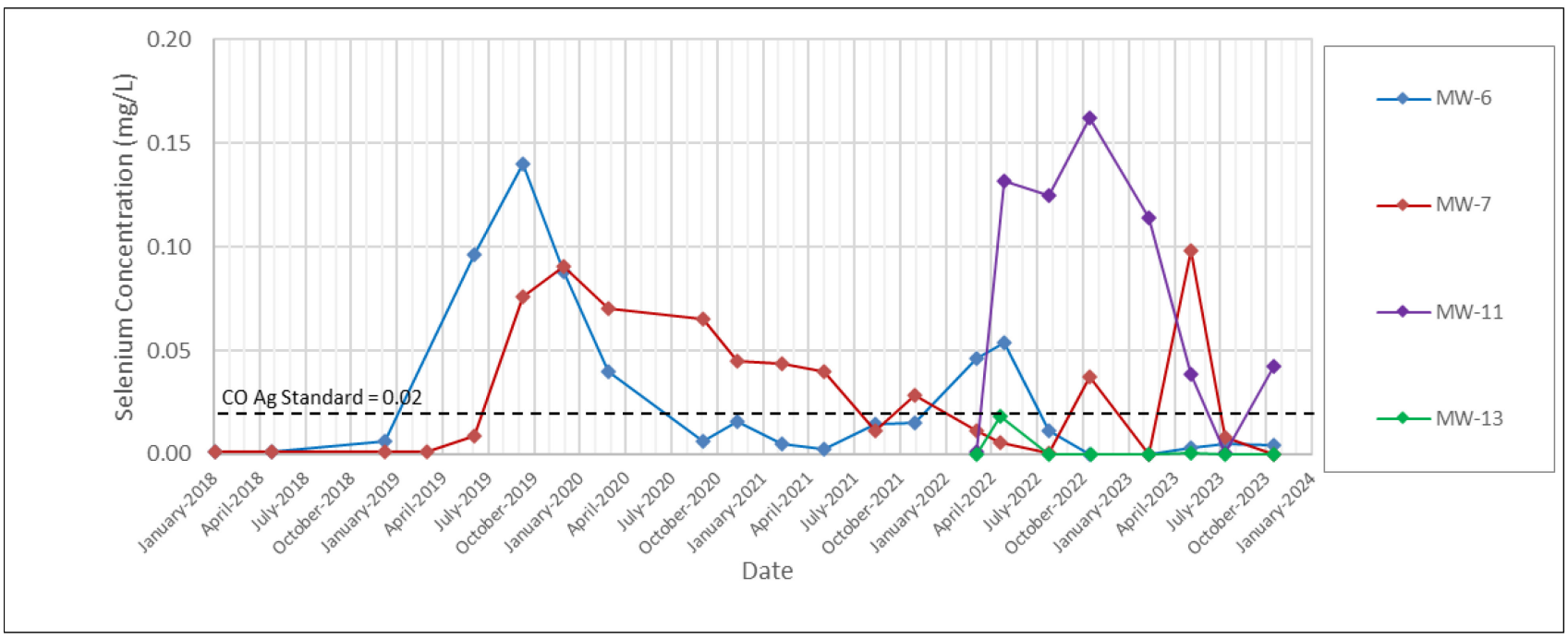
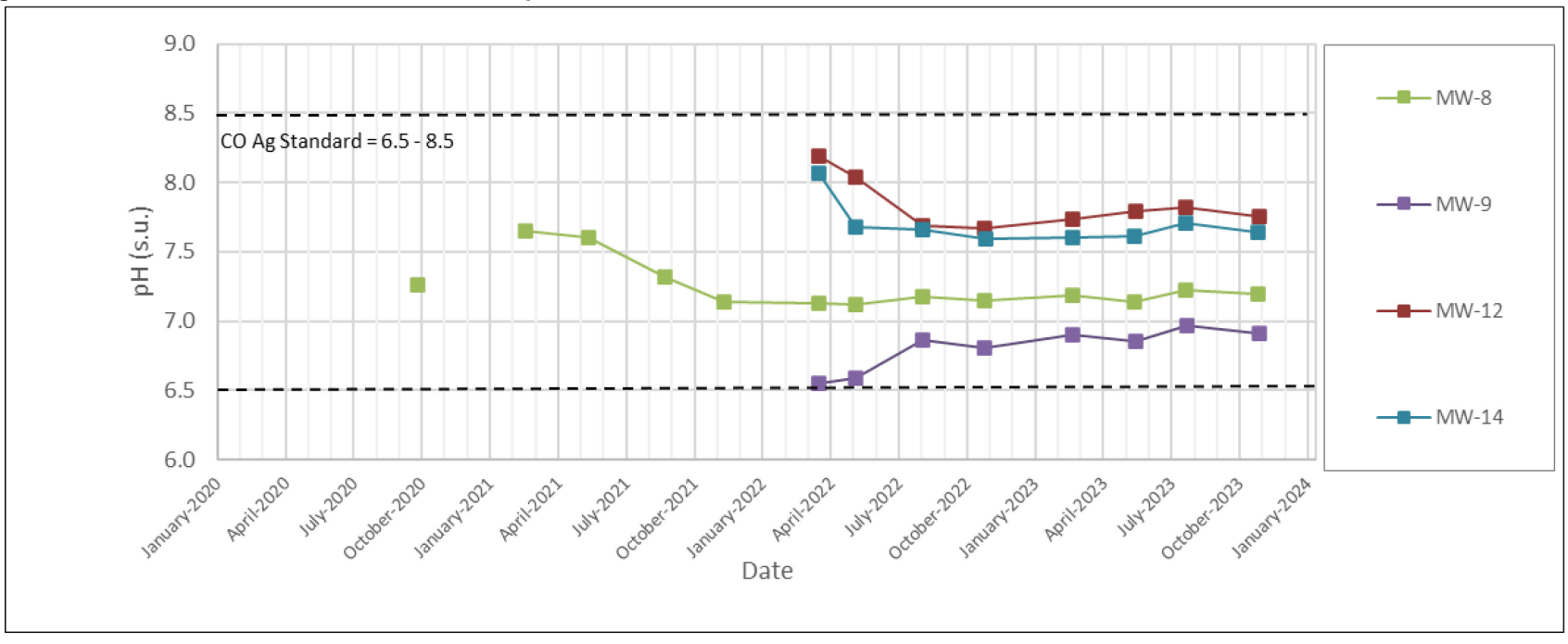
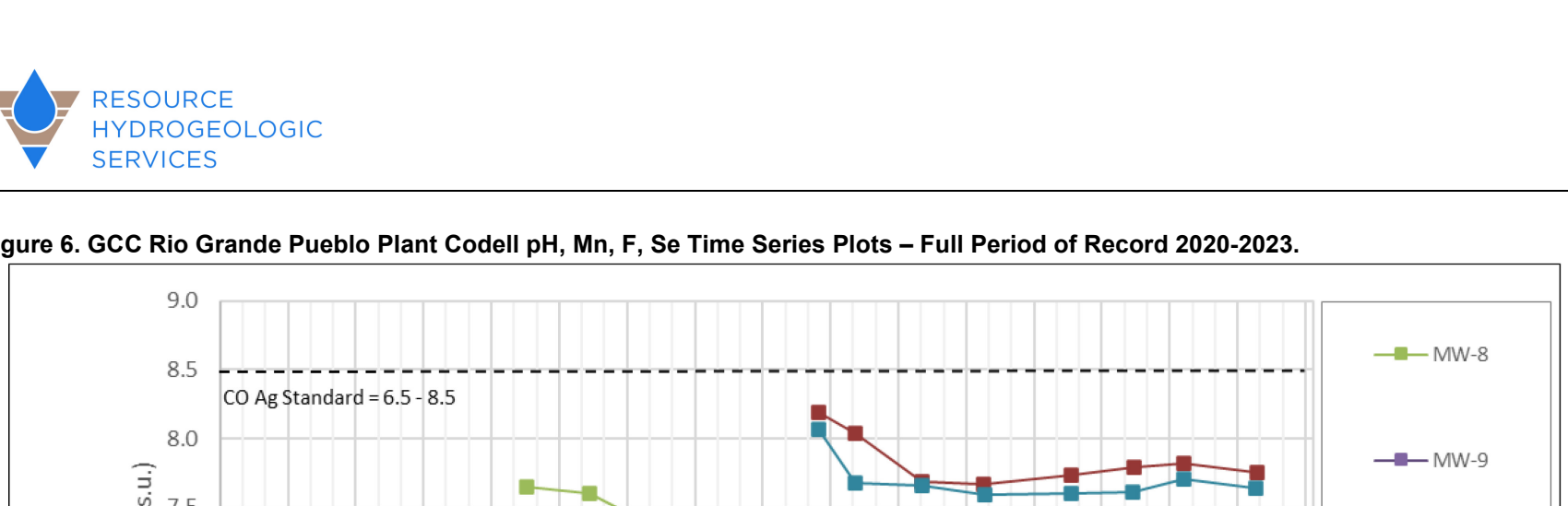


Figure 6. GCC Rio Grande Pueblo Plant Codell pH, Mn, F, Se Time Series Plots – Full Period of Record 2020-2023.





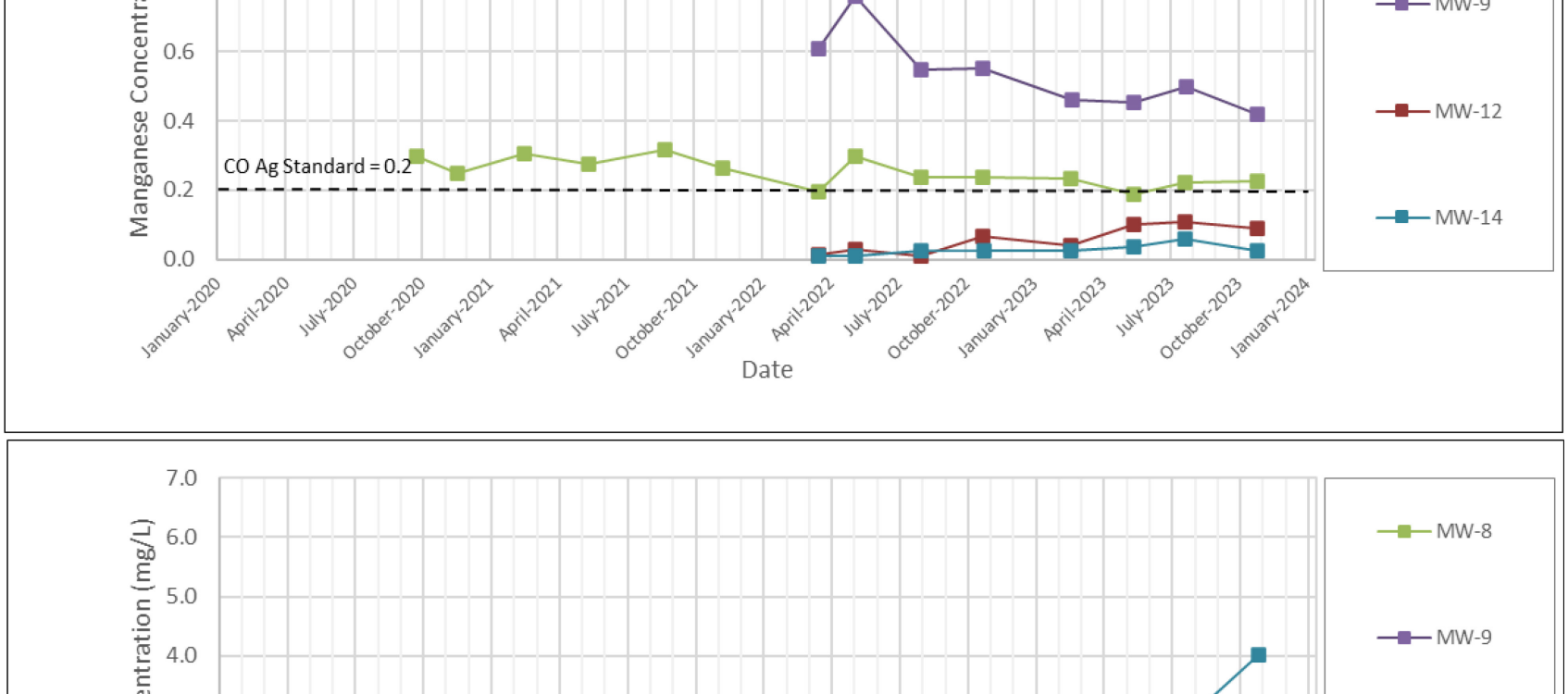
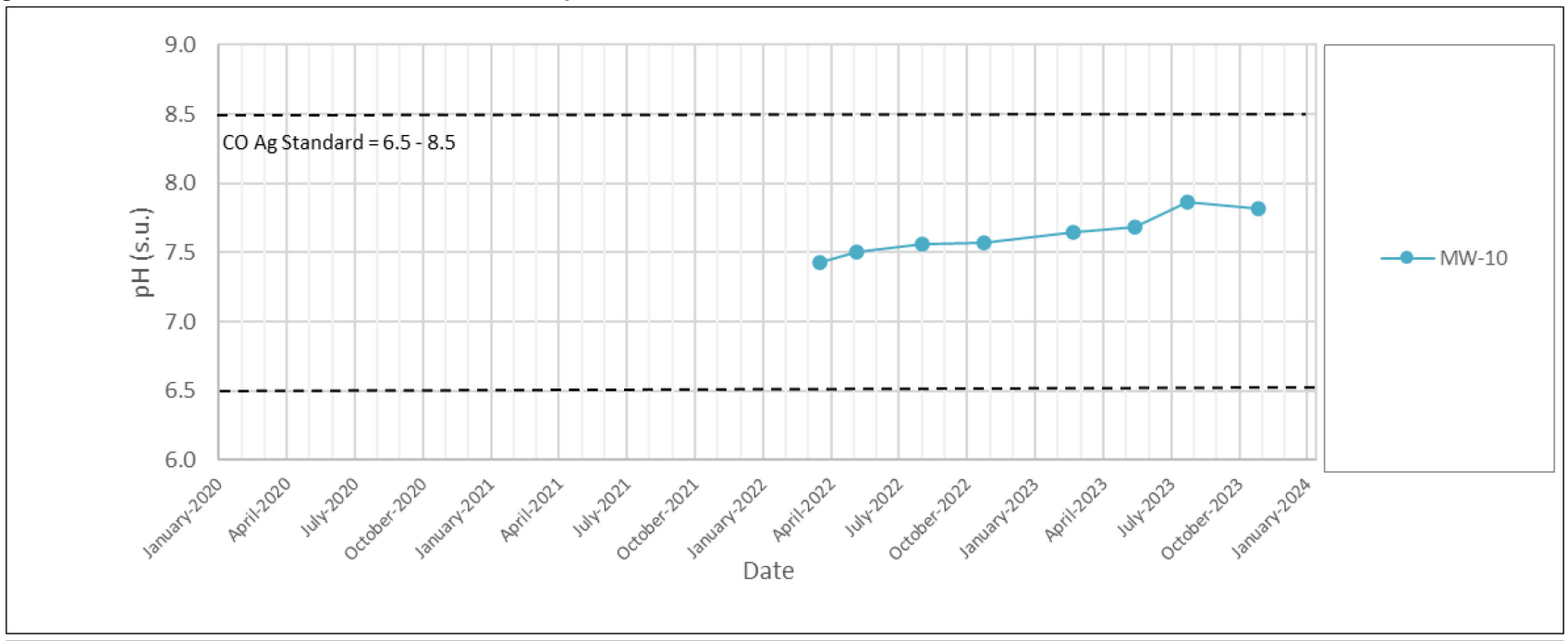
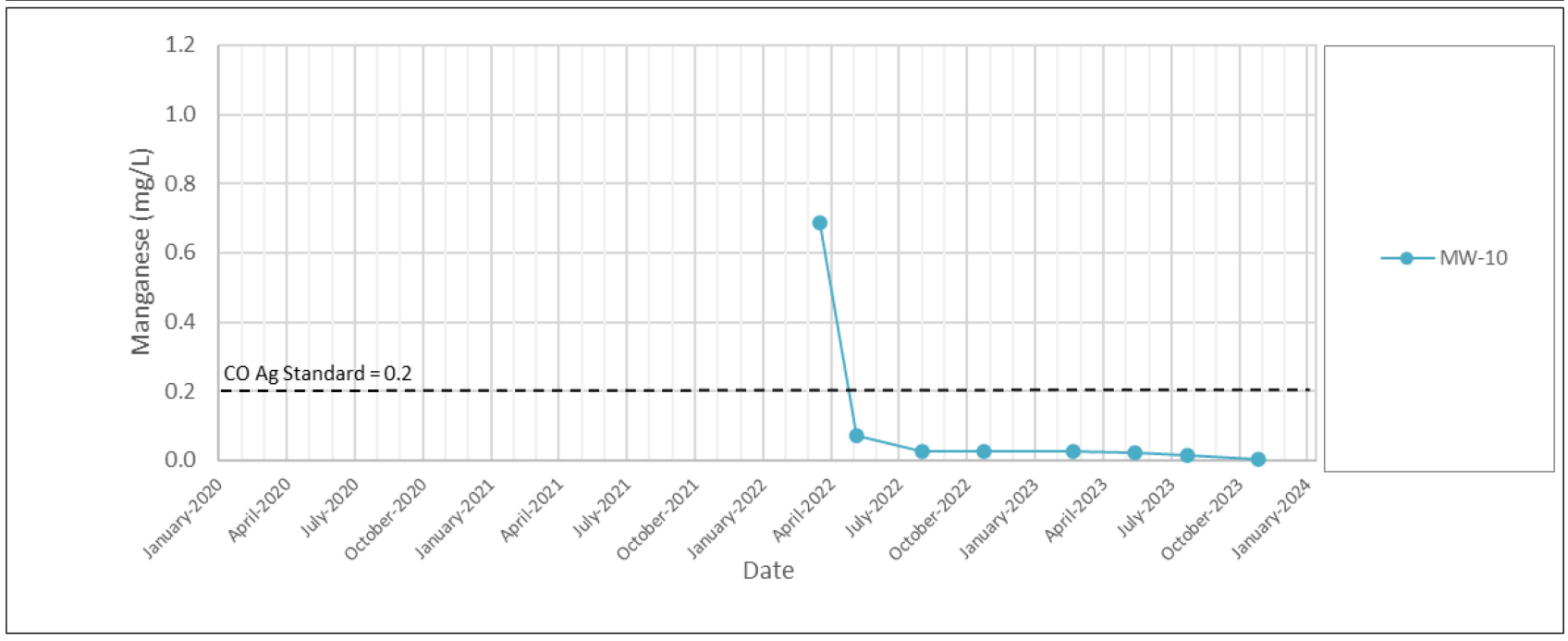
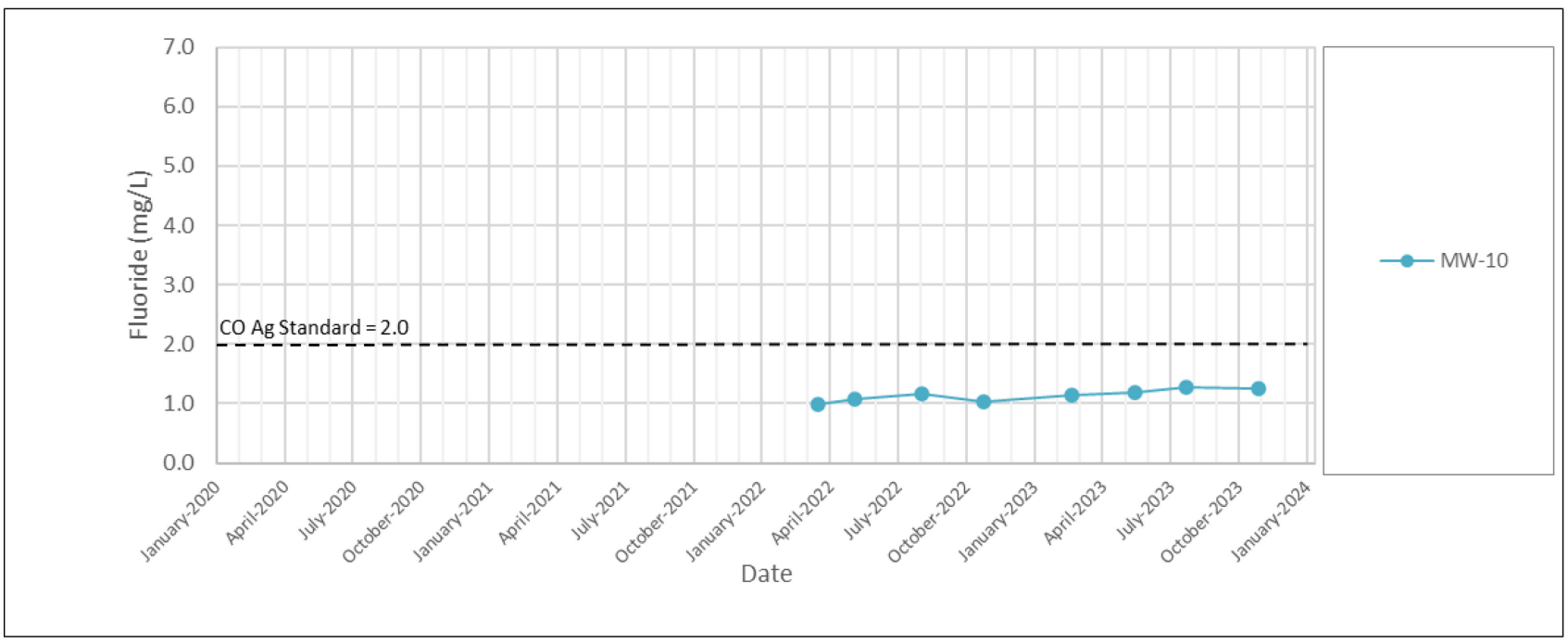


Figure 7. GCC Rio Grande Pueblo Plant Blue Hills pH, Mn, F, Se Time Series Plots – Full Period of Record 2022-2023.







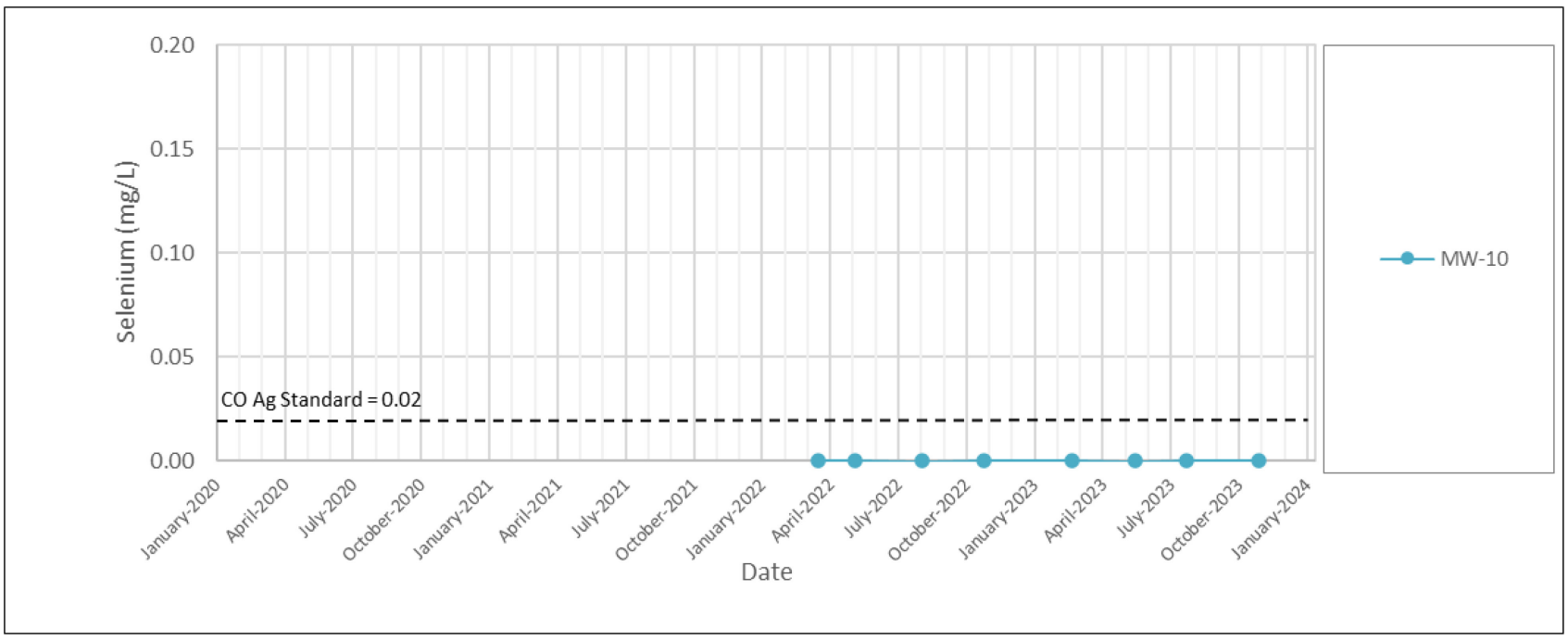


Figure 8. GCC Rio Grande Pueblo Plant Bedrock Groundwater Hydrograph – Full Period of Record 2018-2023.

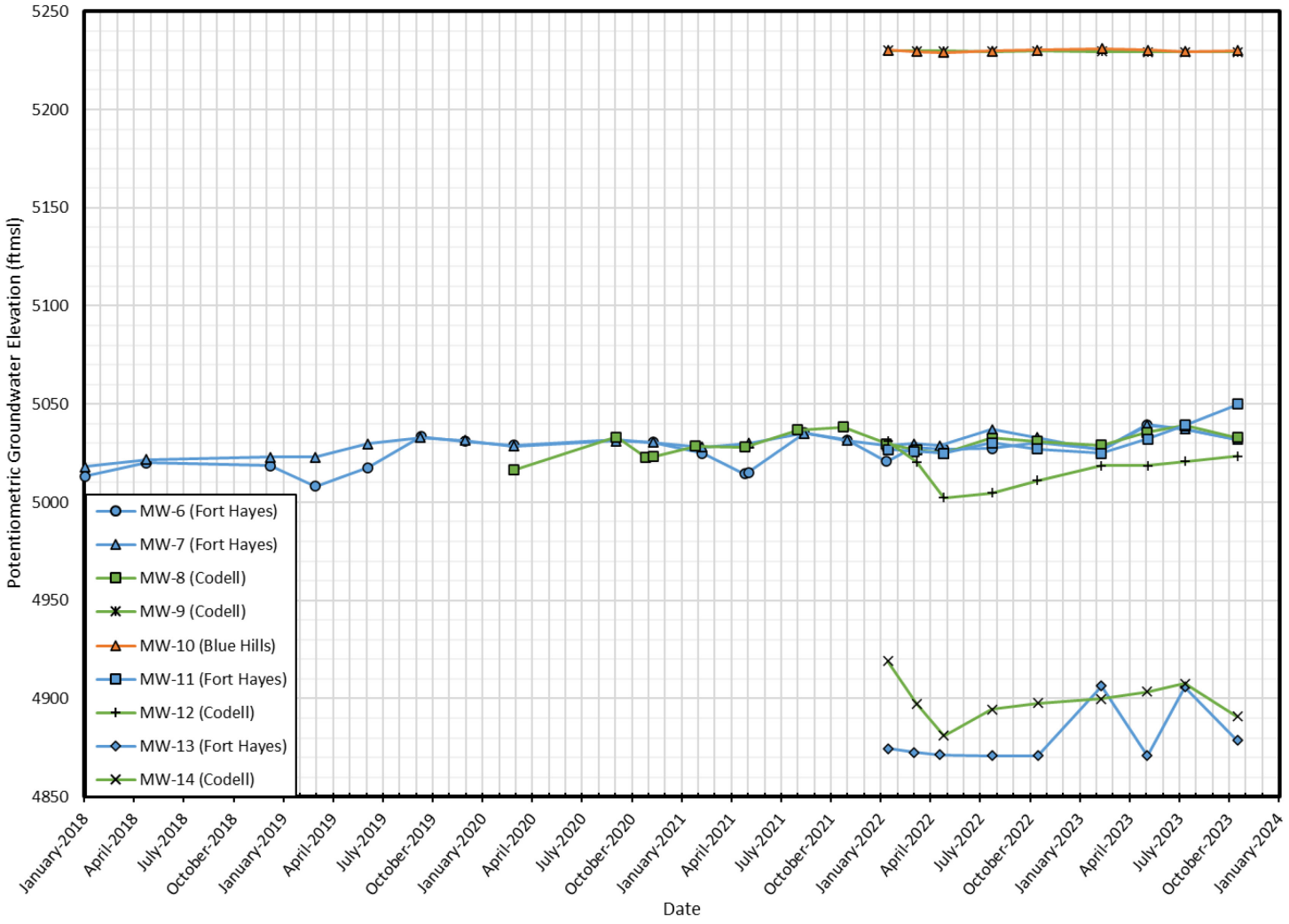


Figure 9. GCC Rio Grande Pueblo Plant MW-6, MW-7 & MW-8 Groundwater Hydrograph – Full Period of Record 2018-2023.

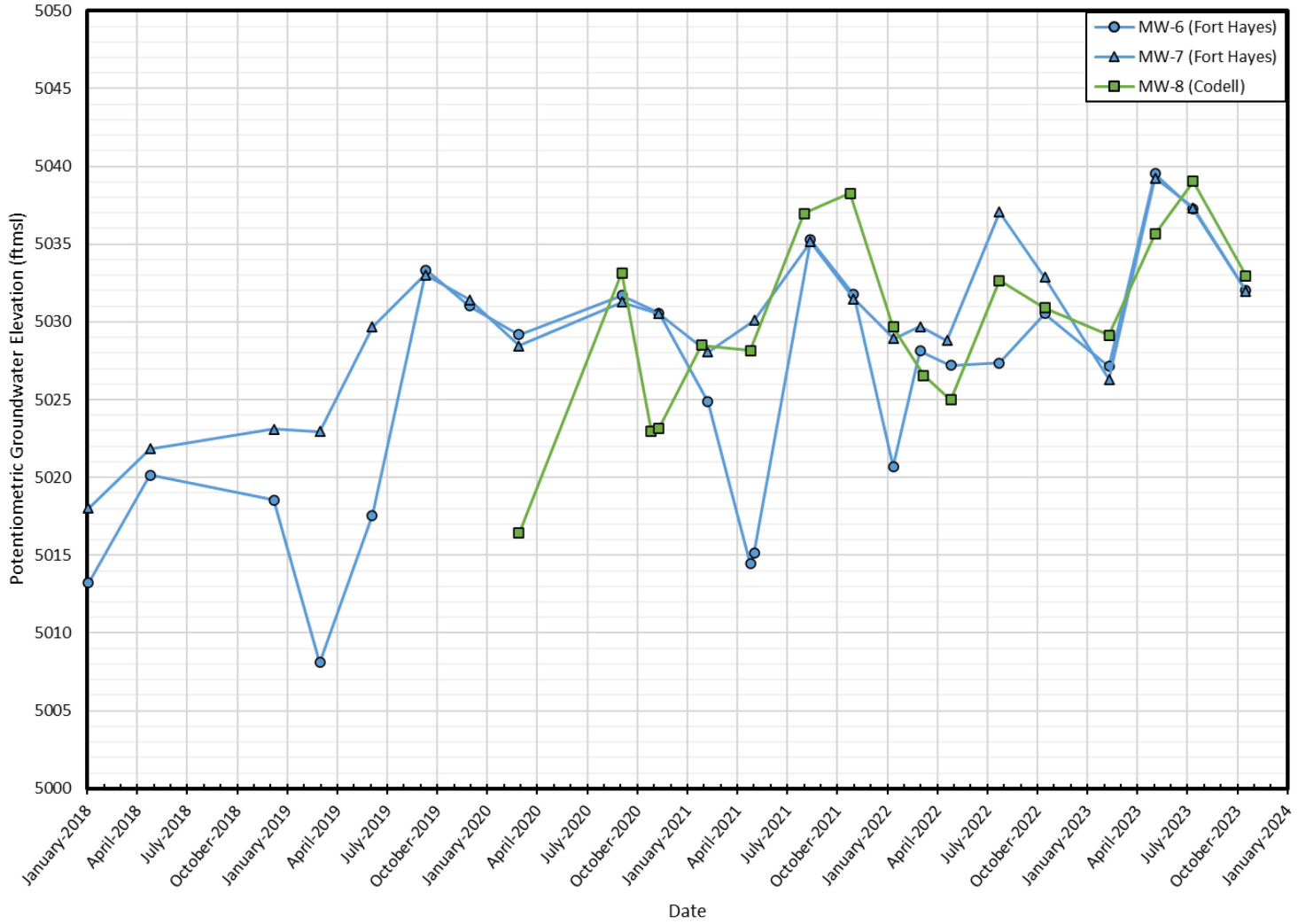


Figure 10. GCC Rio Grande Pueblo Plant MW-9 & MW-10 Groundwater Hydrograph – Full Period of Record 2022-2023.

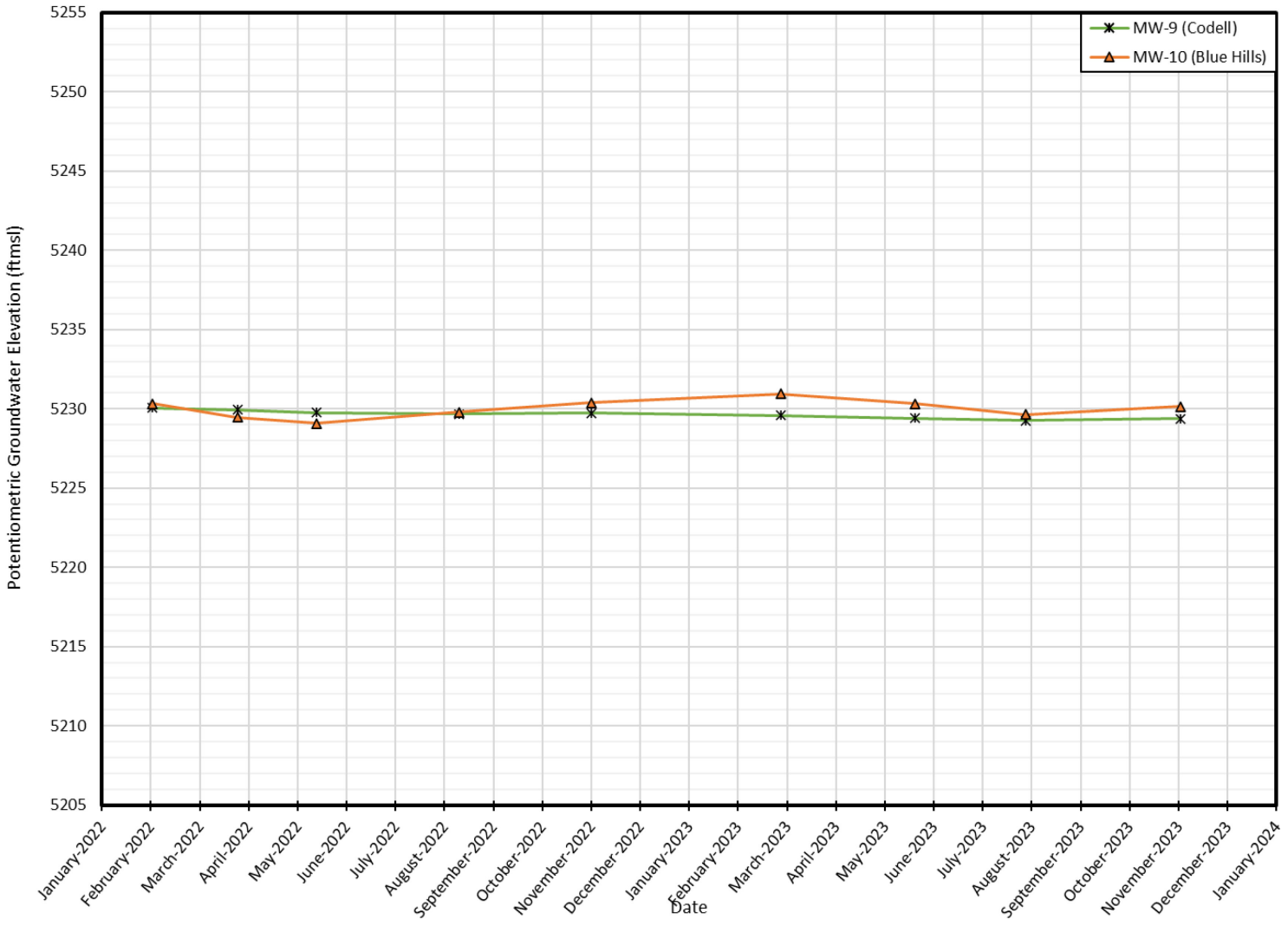


Figure 11. GCC Rio Grande Pueblo Plant MW-11 & MW-12 Groundwater Hydrograph – Full Period of Record 2022-2023.

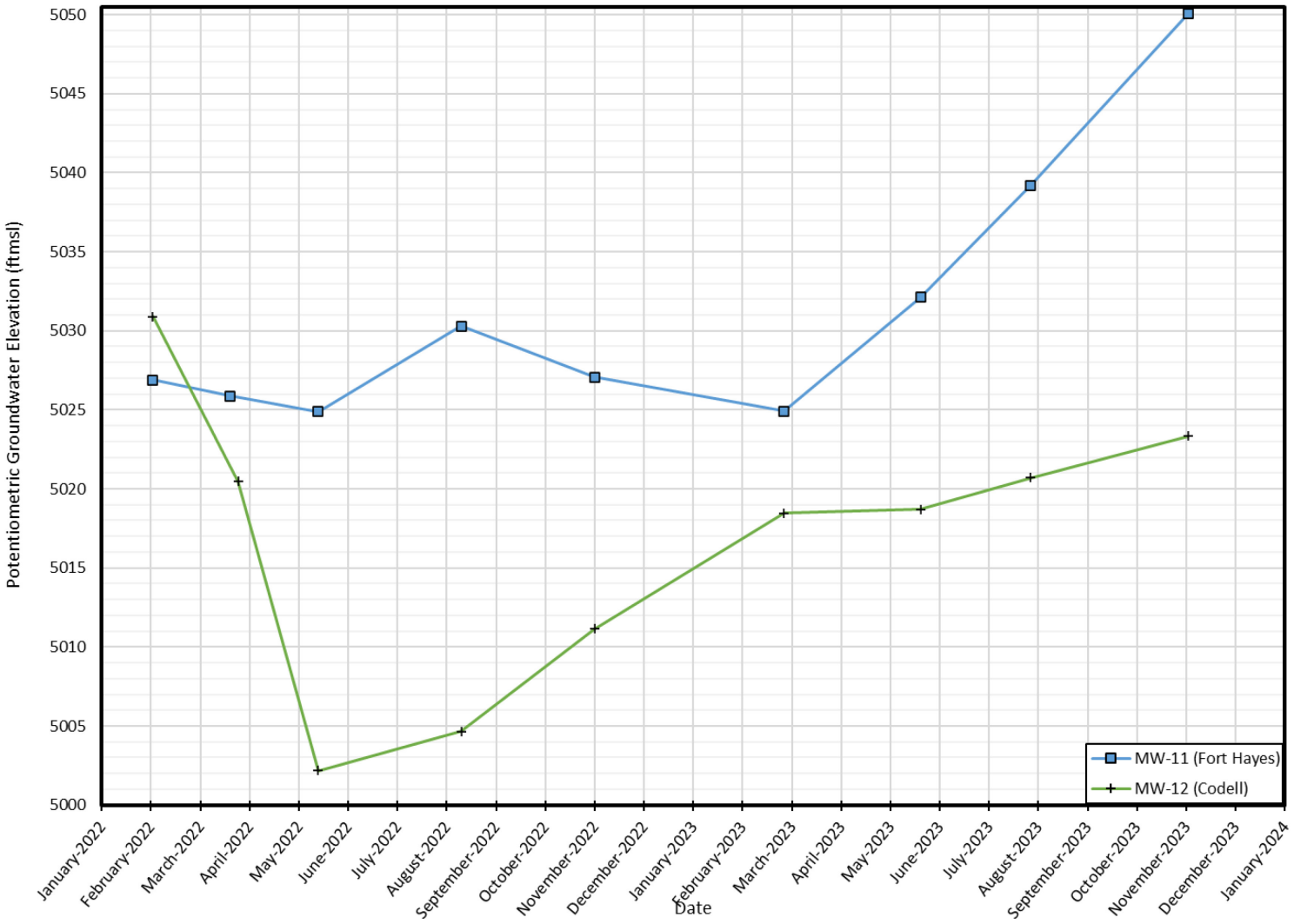


Figure 12. GCC Rio Grande Pueblo Plant MW-13 & MW-14 Groundwater Hydrograph – Full Period of Record 2022-2023.

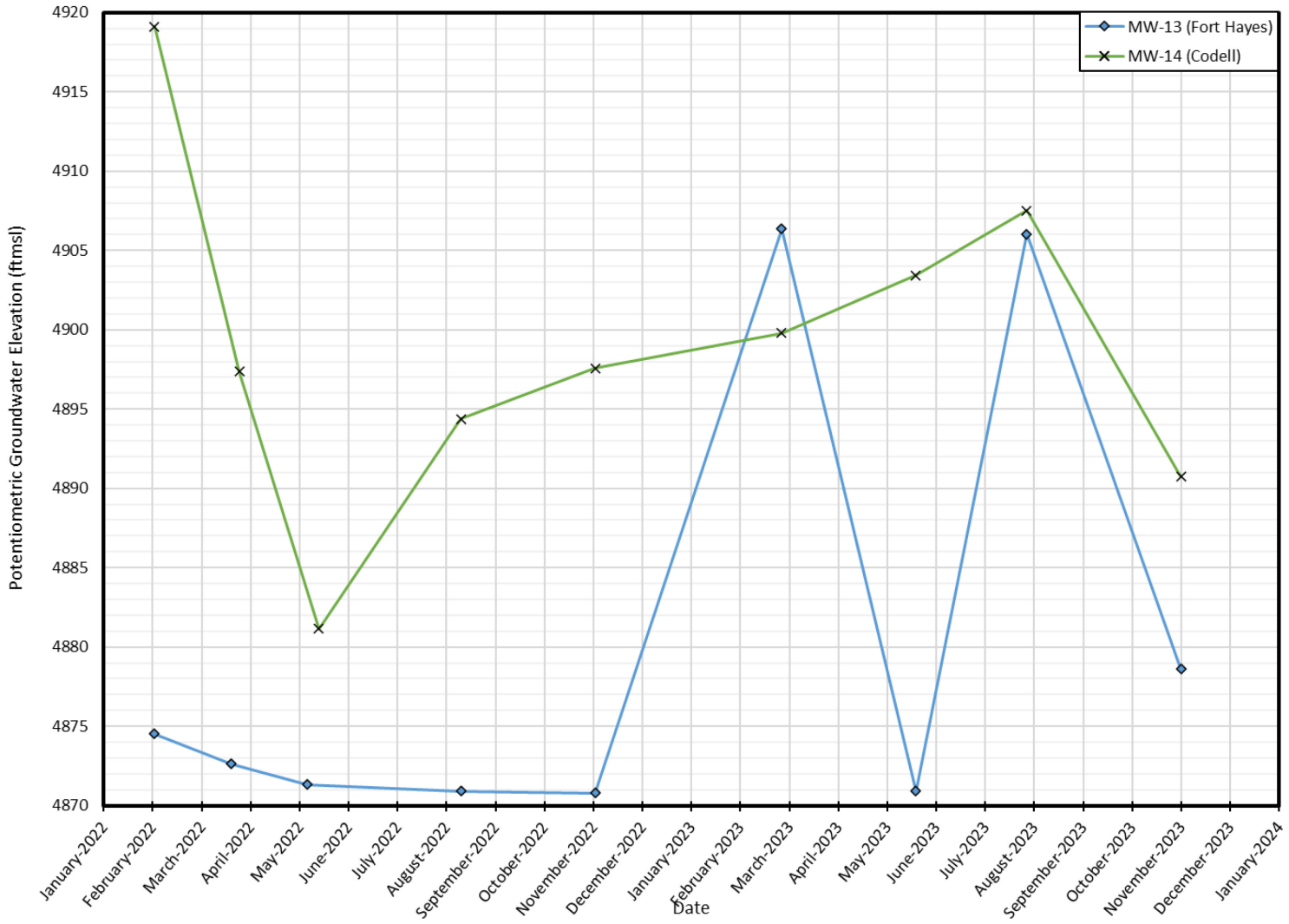


Figure 13. GCC Rio Grande Pueblo Plant Fort Hays 2023 Groundwater Potentiometric Elevation Map.

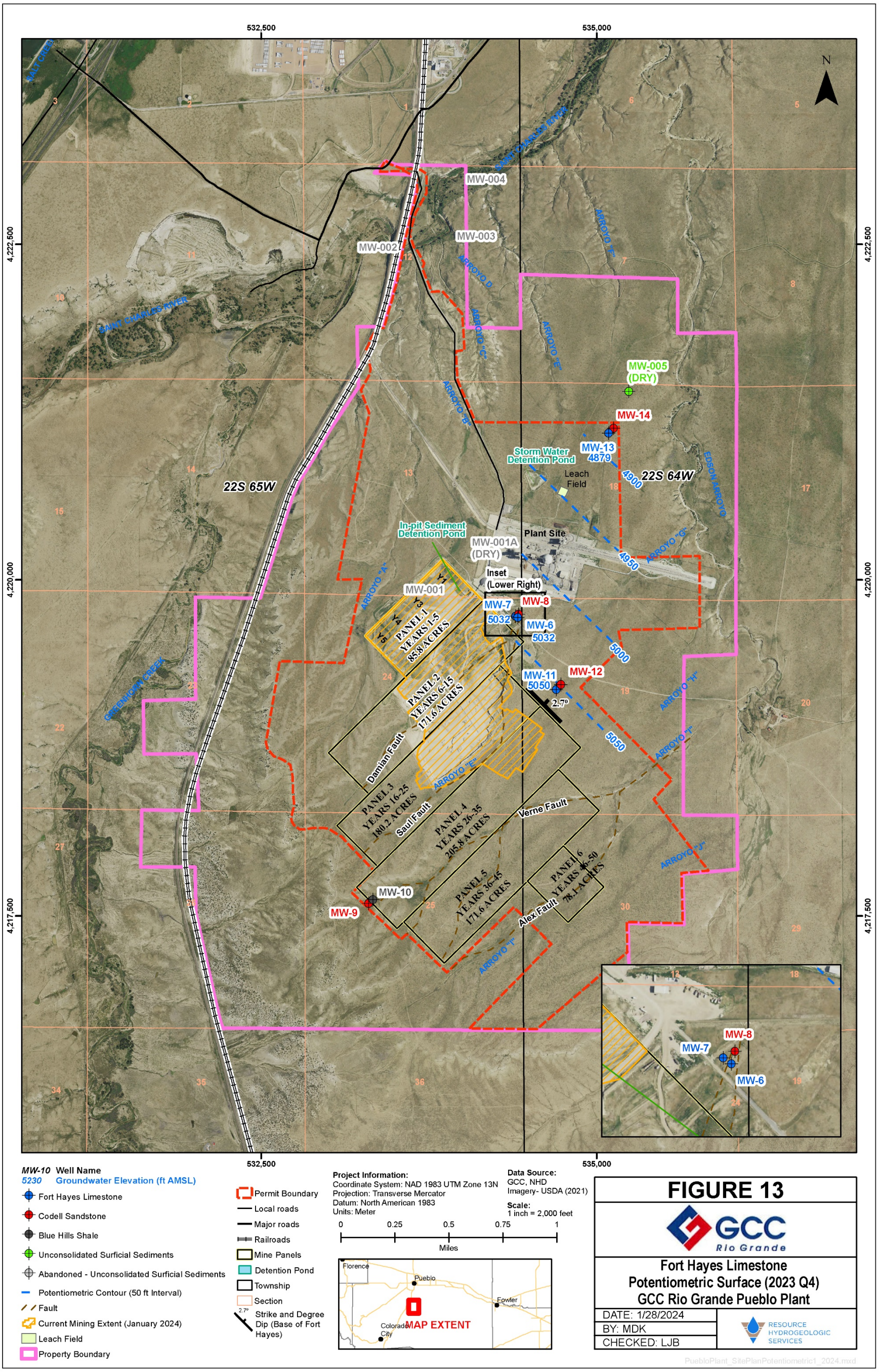


Figure 14. GCC Rio Grande Pueblo Plant Codell 2023 Groundwater Potentiometric Elevation Map.

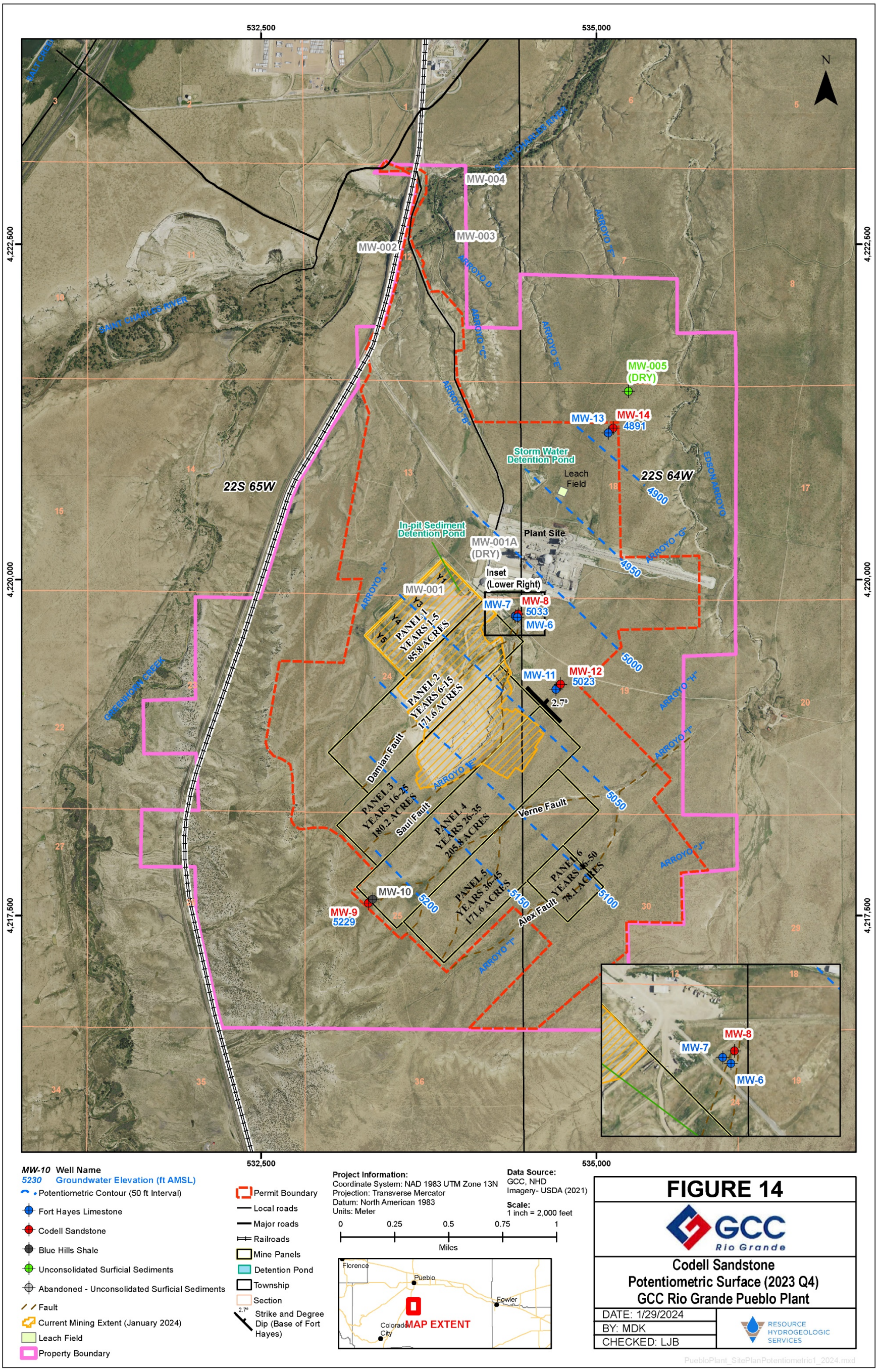


Figure 15. GCC Pueblo stratigraphic section (from Contour Consulting Engineering LLC Geologic Report and Submittal, January 25, 2013) (2013-01-28_HYDROLOGY – M2002004).

Ref: USGS Miscellaneous Geologic Investigations Map I-597

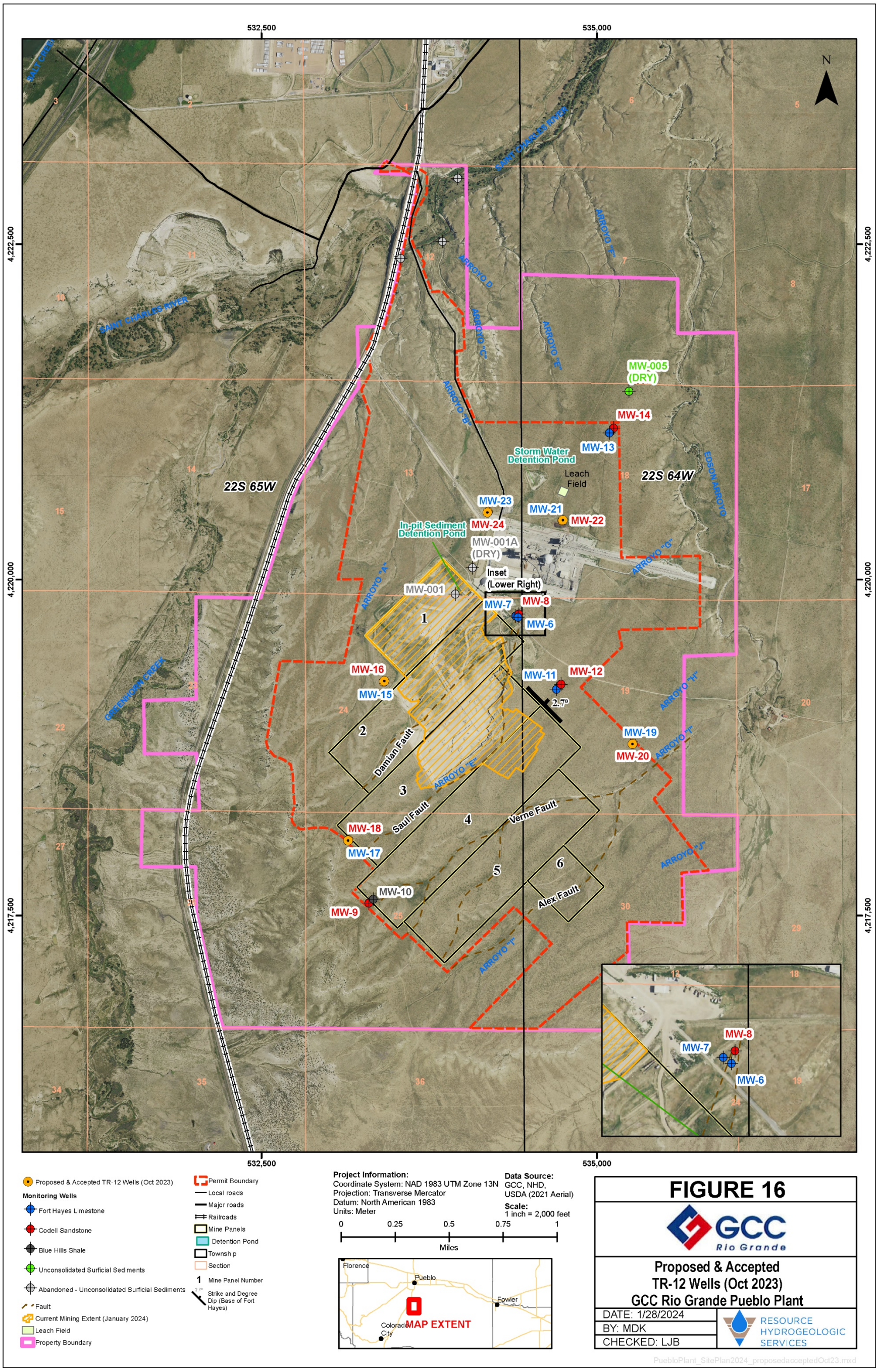
GEOLOGIC STRATIGRAPHY PUEBLO CEMENT PLANT

Formation	Member	USGS Map Symbol	Stratigraphic Description	Thickness (Feet)	Remarks
COLLUVIUM (Quaternary)		Qc	Yellowish-gray silt and clay containing pebbles, angular blocks of limestone, and sandstone derived from underlying bedrock and surficial deposits. Areas of lower elevations above streams are same age as and grade into Piney Creek Alluvium. Large broad upland areas range in age from Illinoian to Holocene. Along drainageways includes some alluvium.	10-20	plant site and mine site overburden material
NIOBRARA FORMATION (Late Cretaceous)	SMOKEY HILL SHALE	Ksuc	upper chalk unit: olive-black blocky ledge-forming chalk that weathers dark yellowish orange.	8	missing at Red Rock Site (removed by erosion)
		Ksus	upper chalky shale unit: olive-gray gypsiferous bentonitic calcareous shale and yellowish-gray platy chalk beds in upper part; pale-yellowish brown soft calcareous shale and platy chalky limestone beds in lower part.	263	
		Ksmc	middle chalk unit: yellowish-gray platy ledge-forming chalk containing selenite nodules.	28	
		Ksms	middle shale unit: light-olive-gray platy bentonitic gypsiferous calcareous shale containing limestone concretions 30 to 40 feet below the top; sandy shale 150 to 190 feet above base; shaly limestone at base.	283	
		Ksll	lower limestone unit: dark-gray platy hard ledge-forming limestone in about 16 beds separated by light-olive-gray platy shale containing limonite-stained gypsum lenses. Contains alternating thick shale and thin limestone beds in lower 15 feet.	38	
		Ksls	lower shale unit: yellowish-brown platy to earthy calcareous shale containing thin beds of platy limestone and limonite-stained gypsum lenses.	56	underlies Colluvium at plant site
		Kssl	shale and limestone unit: about 18 beds of gray dense ledge-forming limestone separated by soft calcareous shale.	21	underlies Colluvium in portion of mine area
	FORT HAYES LIMESTONE	Kf	about 40 beds of gray desnse ledge-forming limestone separated by thin beds of calcareous shale. Contains pseudomorphs of limonite after pyrite.	40	source of limestone for mining operation
CARLILE SHALE (Late Cretaceous)	JUANA LOPEZ MEMBER	Kc	yellowish-gray calcareous shale containing lenses of dark-brownish-gray fetid fine-grained calcarenite that has spots of light-gray glauconitic calcarenite.	2	
	CODELL SANDSTONE		yellowish-gray massive to platy cliff-forming sandstone; shaly and containing spherical concretions in lower part.	30	
	BLUE HILL SHALE		dary-gray hard to soft blocky shale; upper half sandy, and containing two prominent layers of large septarian concretions.	101	
	FAIRPORT CHALKY SHALE		gray to yellowish brown soft bentonitic platy calcareous shale	99	
GREENHORN LIMESTONE (Late Cretaceous)	BRIDGE CREEK LIMESTONE	Kgh	about 26 gray hard shaly-weathering limestone beds separated by soft calcareous shale and bentonite layers.	52	
	HARTLAND SHALE		dark-gray calcareous platy shale and thin layers of calcarenite composed of tests of Foraminifera and prisms of Inoceramus shells.	59	
	LINCOLN LIMESTONE		gray thin-bedded petroliferous limestone and calcareous shale	25-50	
GRANEROS SHALE (Late Cretaceous)		Kg	Dark-gray to black fissile gypsiferous shale; contains zone of calcereous concentrations about 40 feet below top. Alternating beds of shale and sandstone at base.	90-200	
DAKOTA SANDSTONE (Early Cretaceous)	UPPER SANDSTONE	Kd	Tan to bright gray, fine-to medium-grained massive sandstone. May be conglomeratic and moderately cemented, but may be soft and contain thin shale beds.	74-140	proposed aquifer for production well
	DRY CREEK CANYON		Dark-gray to black sandy shale, this unit may not be present.		
	LOWER SANDSTONE		Medium-grained sandstone.		

Sources:

1. Scott, Glenn R., 1969, Geologic Map of the Southwest and Southeast Pueblo Quadrangles, Colorado U.S. Geological Survey Miscellaneous Investigations Series Map I-597. Scale 1:24,000.
2. Weist, 1965, U.S. Geological Survey Water Supply Paper 1799.

Figure 16. GCC Rio Grande Pueblo Plant proposed and accepted TR-12 2024 monitoring well installation locations.



ATTACHMENT 1 - GCC Groundwater Monitoring Field Records

Wells - GCC Pueblo Compliance Water Sampling

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230308-1314032001-18296954686
Form Name:
Wells - GCC Pueblo Compliance Water Sampling
Submitter Name:
Amy Veek (amy.veek) | amy.veek
Submission Date:
Mar 8, 2023 1:40:03 PM MST

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-6
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.52
Static Depth to Water (ft)	37.00
Well Total Depth (ft below top of casing)	56.4
Depth to Water below ground Surface (ft)	34.48
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Mar 3, 2023 2:30:00 PM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	50
Date	Mar 6, 2023
Time	1:45:00 PM MST

Sampling

Sample Temperature (°C)	15.90
Specific Conductivity (µS/cm)	4357.91
pH (S.U.)	6.92
Oxygen Reduction Potential (mV)	-25.06
Dissolved Oxygen (mg/L)	0.20
Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time

Depth to Water (ft TOC)	38.60
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.02
Total Purged (gal)	0.30
Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.12792205852155 altitude: 1534.8866 longitude: -104.60583038264254 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Amy Veek – GCC Pueblo Environmental Engineer
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-6 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-6
Date	Mar 6, 2023
Time	1:45:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230308-1314032001-18296954685
Form Name:
Wells - GCC Pueblo Compliance Water Sampling
Submitter Name:
Amy Veek (amy.veek) | amy.veek
Submission Date:
Mar 8, 2023 1:33:58 PM MST

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-7
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.66
Static Depth to Water (ft)	37.43
Well Total Depth (ft below top of casing)	56.1
Depth to Water below ground Surface (ft)	34.77
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Mar 3, 2023 2:30:00 PM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	50
Date	Mar 6, 2023
Time	1:29:00 PM MST

Sampling

Sample Temperature (°C)	15.60
Specific Conductivity (µS/cm)	4958.39
pH (S.U.)	6.95
Oxygen Reduction Potential (mV)	-45.30
Dissolved Oxygen (mg/L)	0.33
Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time

Depth to Water (ft TOC)	38.33
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.01
Total Purged (gal)	0.30
Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.12792205852155 altitude: 1534.8866 longitude: -104.60583038264254 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Amy Veek – GCC Pueblo Environmental Engineer
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 2

Details

Method of Sample Collection	MW-7 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-7
Date	Mar 6, 2023
Time	1:29:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

LAB SAMPLE 2 OF 2

Details

Method of Sample Collection	MW-7 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-7
Date	Mar 6, 2023
Time	1:29:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Duplicate

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230308-1314032001-18296954684
Form Name:
Wells - GCC Pueblo Compliance Water Sampling
Submitter Name:
Amy Veek (amy.veek) | amy.veek
Submission Date:
Mar 8, 2023 1:28:24 PM MST

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-8
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.16
Static Depth to Water (ft)	33.76
Well Total Depth (ft below top of casing)	65.65
Depth to Water below ground Surface (ft)	31.60
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Mar 3, 2023 2:30:00 PM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	49
Date	Mar 6, 2023
Time	1:14:00 PM MST

Sampling

Sample Temperature (°C)	15.30
Specific Conductivity (µS/cm)	4375.18
pH (S.U.)	7.19
Oxygen Reduction Potential (mV)	-103.55
Dissolved Oxygen (mg/L)	0.71
Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time

Depth to Water (ft TOC)	42.23
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.03
Total Purged (gal)	0.50
Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.127922058051865 altitude: 1534.8866 longitude: -104.60583038242905 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Amy Veek – GCC Pueblo Environmental Engineer
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-8 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-8
Date	Mar 6, 2023
Time	1:14:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230308-1314032001-18296961394

Form Name:
Wells - GCC Pueblo Compliance Water Sampling

Submitter Name:
Amy Veek (amy.veek) | amy.veek

Submission Date:
Mar 8, 2023 1:54:01 PM MST

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-9
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.08
Static Depth to Water (ft)	26.52
Well Total Depth (ft below top of casing)	42.23
Depth to Water below ground Surface (ft)	24.44
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Mar 3, 2023 2:30:00 PM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Cloudy
Air Temperature (°F)	32
Date	Mar 7, 2023
Time	2:19:00 PM MST

Sampling

Sample Temperature (°C)	13.62
Specific Conductivity (µS/cm)	4387.27
pH (S.U.)	6.90
Oxygen Reduction Potential (mV)	-45.25
Dissolved Oxygen (mg/L)	0.20
Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time

Depth to Water (ft TOC)	28.62
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.01
Total Purged (gal)	0.20
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Amy Veek – GCC Pueblo Environmental Engineer
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-9 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-9
Date	Mar 7, 2023
Time	2:19:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230308-1314032001-18296961503

Form Name:
Wells - GCC Pueblo Compliance Water Sampling

Submitter Name:
Amy Veek (amy.veek) | amy.veek

Submission Date:
Mar 8, 2023 1:58:15 PM MST

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-10
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.24
Static Depth to Water (ft)	24.88
Well Total Depth (ft below top of casing)	82.55
Depth to Water below ground Surface (ft)	22.64
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Mar 3, 2023 2:30:00 PM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Cloudy
Air Temperature (°F)	32
Date	Mar 7, 2023
Time	2:30:00 PM MST

Sampling

Sample Temperature (°C)	13.81
Specific Conductivity (µS/cm)	4662.16
pH (S.U.)	7.65
Oxygen Reduction Potential (mV)	-106.68
Dissolved Oxygen (mg/L)	0.00
Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time

Depth to Water (ft TOC)	30.49
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.02
Total Purged (gal)	0.50
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Amy Veek – GCC Pueblo Environmental Engineer
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-10 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-10
Date	Mar 7, 2023
Time	2:30:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230308-1314032001-18296954985
Form Name:
Wells - GCC Pueblo Compliance Water Sampling
Submitter Name:
Amy Veek (amy.veek) | amy.veek
Submission Date:
Mar 8, 2023 1:44:21 PM MST

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-11
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.18
Static Depth to Water (ft)	59.37
Well Total Depth (ft below top of casing)	72.68
Depth to Water below ground Surface (ft)	57.19
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Mar 6, 2023 2:30:00 PM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	50
Date	Mar 6, 2023
Time	2:07:00 PM MST

Sampling

Sample Temperature (°C)	15.76
Specific Conductivity (µS/cm)	2038.60
pH (S.U.)	7.39
Oxygen Reduction Potential (mV)	-236.88
Dissolved Oxygen (mg/L)	0.16
Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time

Depth to Water (ft TOC)	61.13
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.01
Total Purged (gal)	0.40
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Amy Veek – GCC Pueblo Environmental Engineer
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-11 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-11
Date	Mar 6, 2023
Time	2:07:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230308-1314032001-18296961099

Form Name:
Wells - GCC Pueblo Compliance Water Sampling

Submitter Name:
Amy Veek (amy.veek) | amy.veek

Submission Date:
Mar 8, 2023 1:48:40 PM MST

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-12
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.29
Static Depth to Water (ft)	65.47
Well Total Depth (ft below top of casing)	88.8
Depth to Water below ground Surface (ft)	63.18
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Mar 3, 2023 2:30:00 PM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	51
Date	Mar 6, 2023
Time	2:24:00 PM MST

Sampling

Sample Temperature (°C)	17.69
Specific Conductivity (µS/cm)	3504.32
pH (S.U.)	7.74
Oxygen Reduction Potential (mV)	-168.55
Dissolved Oxygen (mg/L)	0.46
Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time

Depth to Water (ft TOC)	72.93
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.03
Total Purged (gal)	0.50
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Amy Veek – GCC Pueblo Environmental Engineer
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-12 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-12
Date	Mar 6, 2023
Time	2:24:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230308-1314032001-18296961548

Form Name:
Wells - GCC Pueblo Compliance Water Sampling

Submitter Name:
Amy Veek (amy.veek) | amy.veek

Submission Date:
Mar 8, 2023 2:01:21 PM MST

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-13
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.19
Static Depth to Water (ft)	83.74
Well Total Depth (ft below top of casing)	177.88
Depth to Water below ground Surface (ft)	81.55
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Mar 3, 2023 2:30:00 PM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	41
Date	Mar 6, 2023
Time	10:21:00 AM MST

Sampling

Sample Temperature (°C)	15.68
Specific Conductivity (µS/cm)	3668.39
pH (S.U.)	7.91
Oxygen Reduction Potential (mV)	-101.29
Dissolved Oxygen (mg/L)	0.06
Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time

Depth to Water (ft TOC)	94.77
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.02
Total Purged (gal)	1.00
Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.12930869569528 altitude: 1534.7683 longitude: -104.60643386959318 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Amy Veek – GCC Pueblo Environmental Engineer
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-13 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-13
Date	Mar 8, 2023
Time	10:21:00 AM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230308-1314032001-18296954682

Form Name:
Wells - GCC Pueblo Compliance Water Sampling

Submitter Name:
Amy Veek (amy.veek) | amy.veek

Submission Date:
Mar 8, 2023 1:08:23 PM MST

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-14
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.11
Static Depth to Water (ft)	90.12
Well Total Depth (ft below top of casing)	207.83
Depth to Water below ground Surface (ft)	88.01
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Mar 3, 2023 2:30:00 PM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	35
Date	Mar 6, 2023
Time	9:42:00 AM MST

Sampling

Sample Temperature (°C)	14.66
Specific Conductivity (µS/cm)	5743.91
pH (S.U.)	7.60
Oxygen Reduction Potential (mV)	-54.19
Dissolved Oxygen (mg/L)	0.00
Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time

Depth to Water (ft TOC)	73.77
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.05
Total Purged (gal)	1.20
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Amy Veek – GCC Pueblo Environmental Engineer
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-14 – Dedicated QED SS Well Wizard T1300 low-flow bladder pump
Lab Sample Name	MW-14
Date	Mar 6, 2023
Time	9:42:00 AM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230530-1314032001-18311722250

Form Name:
Wells - GCC Pueblo Compliance Water Sampling

Submitter Name:
Amy Veek (amy.veek) | amy.veek

Submission Date:
May 30, 2023 9:42:46 AM MDT

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-5
Water present to measure/sample?	No
Is the water present within 0.25 feet of the well TD?	No
Dry Well	Yes

Misc

Site Photo

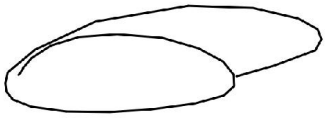


SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	70
Date	May 30, 2023
Time	9:35:00 AM MDT

Sampler

Sampler Name	Dave Bemis - GCC Pueblo
Sampler's Signature	



Wells - GCC Pueblo Compliance Water Sampling-UPDATE

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230608-1314006005-18313407902

Form Name:
Wells - GCC Pueblo Compliance Water Sampling-UPDATE

Submitter Name:
Landon Beck (lbeck@resourcehydrogeologic.com) | lbeck@resourcehydrogeologic.com

Submission Date:
Jun 8, 2023 12:23:10 PM MDT

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-6
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.52
Static Depth to Water (ft)	24.61
Well Total Depth (ft below top of casing)	56.4
Depth to Water below ground Surface (ft)	22.09
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	May 11, 2023 12:00:00 PM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Cloudy
Air Temperature (°F)	83
Date	May 30, 2023
Time	3:09:00 PM MDT
Comments	DO probe malfunction. All values reported as 50.00 to flag no valid readings.

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	May 30, 2023 3:09:00 PM MDT
Sample Temperature (°C)	18.21
Specific Conductivity (µS/cm)	5910.00
pH (S.U.)	6.97
Oxygen Reduction Potential (mV)	34.60

Dissolved Oxygen (mg/L)	50.00
Are you sure? This value seems very unlikely based on past data?	Yes
Dissolved Oxygen - Out of Range	Suspect specific probe malfunction for this parameter

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	May 30, 2023 3:12:00 PM MDT
Sample Temperature (°C)	18.14
Specific Conductivity (µS/cm)	5958.00
pH (S.U.)	6.96
Oxygen Reduction Potential (mV)	35.10
Dissolved Oxygen (mg/L)	50.00
Are you sure? This value seems very unlikely based on past data?	Yes
Dissolved Oxygen - Out of Range	Suspect specific probe malfunction for this parameter

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	May 30, 2023 3:15:00 PM MDT
Sample Temperature (°C)	18.17
Specific Conductivity (µS/cm)	5847.00
pH (S.U.)	6.96
Oxygen Reduction Potential (mV)	29.60
Dissolved Oxygen (mg/L)	50.00
Are you sure? This value seems very unlikely based on past data?	Yes
Dissolved Oxygen - Out of Range	Suspect specific probe malfunction for this parameter

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	25.85
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.08
Total Purged (gal)	0.90
Geographic Sample Location	latitude: altitude:

	longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Dave Bemis - GCC Pueblo
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-6 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-6
Sample Date/Time	May 30, 2023 3:15:00 PM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1

Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling-UPDATE

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230608-1314006005-18313407711

Form Name:
Wells - GCC Pueblo Compliance Water Sampling-UPDATE

Submitter Name:
Landon Beck (lbeck@resourcehydrogeologic.com) | lbeck@resourcehydrogeologic.com

Submission Date:
Jun 8, 2023 12:09:44 PM MDT

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-7
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.66
Static Depth to Water (ft)	24.50
Well Total Depth (ft below top of casing)	56.1
Depth to Water below ground Surface (ft)	21.84
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	May 11, 2023 12:00:00 PM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	83
Date	May 30, 2023
Time	2:46:00 PM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	May 30, 2023 2:40:00 PM MDT
Sample Temperature (°C)	18.04
Specific Conductivity (µS/cm)	6179.00
pH (S.U.)	7.06
Oxygen Reduction Potential (mV)	113.90
Dissolved Oxygen (mg/L)	2.05

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	May 30, 2023 2:43:00 PM MDT
Sample Temperature (°C)	18.14
Specific Conductivity (µS/cm)	6018.00
pH (S.U.)	7.03
Oxygen Reduction Potential (mV)	124.50
Dissolved Oxygen (mg/L)	1.95

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	May 30, 2023 2:46:00 PM MDT
Sample Temperature (°C)	18.06
Specific Conductivity (µS/cm)	5099.00
pH (S.U.)	7.03
Oxygen Reduction Potential (mV)	128.20
Dissolved Oxygen (mg/L)	1.96

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	25.46
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.08
Total Purged (gal)	0.85
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Dave Bemis - GCC Pueblo
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-7 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-7
Sample Date/Time	May 30, 2023 2:46:00 PM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1

Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling-UPDATE

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230608-1314006005-18313406445

Form Name:
Wells - GCC Pueblo Compliance Water Sampling-UPDATE

Submitter Name:
Landon Beck (lbeck@resourcehydrogeologic.com) | lbeck@resourcehydrogeologic.com

Submission Date:
Jun 8, 2023 11:47:54 AM MDT

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-8
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.16
Static Depth to Water (ft)	27.25
Well Total Depth (ft below top of casing)	65.65
Depth to Water below ground Surface (ft)	25.09
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	May 11, 2023 12:00:00 PM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Partly Sunny
Air Temperature (°F)	81
Date	May 30, 2023
Time	1:55:00 PM MDT
Comments	DO probe malfunction. DO values reported as 50.00 to flag no valid readings.

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	May 30, 2023 1:49:00 PM MDT
Sample Temperature (°C)	18.23
Specific Conductivity (µS/cm)	5829.00
pH (S.U.)	7.17
Oxygen Reduction Potential (mV)	31.70

Dissolved Oxygen (mg/L)	50.00
Are you sure? This value seems very unlikely based on past data?	Yes
Dissolved Oxygen - Out of Range	Suspect specific probe malfunction for this parameter

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	May 30, 2023 1:52:00 PM MDT
Sample Temperature (°C)	17.44
Specific Conductivity (µS/cm)	5822.00
pH (S.U.)	7.15
Oxygen Reduction Potential (mV)	17.50
Dissolved Oxygen (mg/L)	50.00
Are you sure? This value seems very unlikely based on past data?	Yes
Dissolved Oxygen - Out of Range	Suspect specific probe malfunction for this parameter

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	May 30, 2023 1:55:00 PM MDT
Sample Temperature (°C)	17.05
Specific Conductivity (µS/cm)	5892.00
pH (S.U.)	7.14
Oxygen Reduction Potential (mV)	-2.30
Dissolved Oxygen (mg/L)	50.00
Are you sure? This value seems very unlikely based on past data?	Yes
Dissolved Oxygen - Out of Range	Suspect specific probe malfunction for this parameter

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	33.70
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.07
Total Purged (gal)	1.00
Geographic Sample Location	latitude: altitude:

	longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Dave Bemis - GCC Pueblo
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-8 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-8
Sample Date/Time	May 30, 2023 1:55:00 PM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1

Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling-UPDATE

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230607-1314006005-18313252112

Form Name:
Wells - GCC Pueblo Compliance Water Sampling-UPDATE

Submitter Name:
Landon Beck (lbeck@resourcehydrogeologic.com) | lbeck@resourcehydrogeologic.com

Submission Date:
Jun 7, 2023 4:56:32 PM MDT

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-9
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.08
Static Depth to Water (ft)	26.68
Well Total Depth (ft below top of casing)	42.23
Depth to Water below ground Surface (ft)	24.60
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	May 11, 2023 12:00:00 PM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	75
Date	May 31, 2023
Time	10:28:00 AM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	May 31, 2023 10:42:00 AM MDT
Sample Temperature (°C)	19.34
Specific Conductivity (µS/cm)	5573.00
pH (S.U.)	6.90
Oxygen Reduction Potential (mV)	-202.00
Dissolved Oxygen (mg/L)	2.03

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	May 31, 2023 10:45:00 AM MDT
Sample Temperature (°C)	18.75
Specific Conductivity (µS/cm)	5796.00
pH (S.U.)	6.86
Oxygen Reduction Potential (mV)	-198.80
Dissolved Oxygen (mg/L)	2.22

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	May 31, 2023 10:48:00 AM MDT
Sample Temperature (°C)	18.57
Specific Conductivity (µS/cm)	5789.00
pH (S.U.)	6.85
Oxygen Reduction Potential (mV)	-198.00
Dissolved Oxygen (mg/L)	2.18

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	28.10
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.06
Total Purged (gal)	0.70
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Dave Bemis - GCC Pueblo
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-9 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-9
Sample Date/Time	May 31, 2023 10:48:00 AM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1

Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling-UPDATE

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230607-1314006005-18313246588

Form Name:
Wells - GCC Pueblo Compliance Water Sampling-UPDATE

Submitter Name:
Landon Beck (lbeck@resourcehydrogeologic.com) | lbeck@resourcehydrogeologic.com

Submission Date:
Jun 7, 2023 4:38:36 PM MDT

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-10
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.24
Static Depth to Water (ft)	25.50
Well Total Depth (ft below top of casing)	82.55
Depth to Water below ground Surface (ft)	23.26
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	May 11, 2023 12:00:00 PM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	75
Date	May 31, 2023
Time	11:24:00 AM MDT
Comments	DO sensor intermittent during this monitoring and non-readings reported as 50.00

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	May 31, 2023 11:18:00 AM MDT
Sample Temperature (°C)	18.97
Specific Conductivity (µS/cm)	5803.00
pH (S.U.)	7.65
Oxygen Reduction Potential (mV)	-238.60

Dissolved Oxygen (mg/L)	50.00
Are you sure? This value seems very unlikely based on past data?	Yes
Dissolved Oxygen - Out of Range	Suspect specific probe malfunction for this parameter

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	May 31, 2023 11:21:00 AM MDT
Sample Temperature (°C)	17.59
Specific Conductivity (µS/cm)	5888.00
pH (S.U.)	7.68
Oxygen Reduction Potential (mV)	-233.20
Dissolved Oxygen (mg/L)	50.00
Are you sure? This value seems very unlikely based on past data?	Yes
Dissolved Oxygen - Out of Range	Suspect specific probe malfunction for this parameter

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	May 31, 2023 11:24:00 AM MDT
Sample Temperature (°C)	17.72
Specific Conductivity (µS/cm)	6002.00
pH (S.U.)	7.68
Oxygen Reduction Potential (mV)	-231.00
Dissolved Oxygen (mg/L)	1.06

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	30.04
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.06
Total Purged (gal)	1.00
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Dave Bemis - GCC Pueblo
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-10 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-10
Sample Date/Time	May 31, 2023 11:24:00 AM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None

Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling-UPDATE

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230809-1314032001-18324385954

Form Name:
Wells - GCC Pueblo Compliance Water Sampling-UPDATE

Submitter Name:
Amy Veek (amy.veek) | amy.veek

Submission Date:
May 31, 2023 11:54:07 AM MDT

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-10
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.24
Static Depth to Water (ft)	25.50
Well Total Depth (ft below top of casing)	82.55
Depth to Water below ground Surface (ft)	23.26
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	May 11, 2023 12:00:00 AM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Partly Sunny
Air Temperature (°F)	75
Date	May 31, 2023
Time	11:24:00 AM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	May 31, 2023 11:18:00 AM MDT
Sample Temperature (°C)	18.97
Specific Conductivity (µS/cm)	5803.00
pH (S.U.)	7.65
Oxygen Reduction Potential (mV)	-238.60
Dissolved Oxygen (mg/L)	50.00

Are you sure? This value seems very unlikely based on past data?	Yes
Dissolved Oxygen - Out of Range	Suspect specific probe malfunction for this parameter

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	May 31, 2023 11:21:00 AM MDT
Sample Temperature (°C)	17.59
Specific Conductivity (µS/cm)	5888.00
pH (S.U.)	7.68
Oxygen Reduction Potential (mV)	-233.20
Dissolved Oxygen (mg/L)	50.00
Are you sure? This value seems very unlikely based on past data?	Yes
Dissolved Oxygen - Out of Range	Suspect specific probe malfunction for this parameter

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	May 31, 2023 11:24:00 AM MDT
Sample Temperature (°C)	17.72
Specific Conductivity (µS/cm)	6002.00
pH (S.U.)	7.68
Oxygen Reduction Potential (mV)	-231.00
Dissolved Oxygen (mg/L)	1.06

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	30.04
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.06
Total Purged (gal)	0.60
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Dave Bemis - GCC Pueblo
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-10 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-10
Sample Date/Time	May 31, 2023 11:24:00 AM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None

Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling-UPDATE

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230608-1314006005-18313410621

Form Name:
Wells - GCC Pueblo Compliance Water Sampling-UPDATE

Submitter Name:
Landon Beck (lbeck@resourcehydrogeologic.com) | lbeck@resourcehydrogeologic.com

Submission Date:
Jun 8, 2023 1:02:07 PM MDT

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-11
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.18
Static Depth to Water (ft)	52.18
Well Total Depth (ft below top of casing)	72.68
Depth to Water below ground Surface (ft)	50.00
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	May 11, 2023 12:00:00 PM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	75
Date	May 31, 2023
Time	9:41:00 AM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	May 31, 2023 9:35:00 AM MDT
Sample Temperature (°C)	19.17
Specific Conductivity (µS/cm)	2745.00
pH (S.U.)	7.39
Oxygen Reduction Potential (mV)	-316.00
Are you sure? This value seems very unlikely based on past data?	Yes

ORP - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Dissolved Oxygen (mg/L)	1.39

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	May 31, 2023 9:38:00 AM MDT
Sample Temperature (°C)	17.17
Specific Conductivity (µS/cm)	2817.00
pH (S.U.)	7.40
Oxygen Reduction Potential (mV)	-321.00
Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Dissolved Oxygen (mg/L)	1.00

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	May 31, 2023 9:41:00 AM MDT
Sample Temperature (°C)	16.56
Specific Conductivity (µS/cm)	2861.00
pH (S.U.)	7.39
Oxygen Reduction Potential (mV)	-322.00
Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Dissolved Oxygen (mg/L)	0.89

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	54.27
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.08
Total Purged (gal)	1.00
Geographic Sample Location	latitude: altitude: longitude: [viewMap]

Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Dave Bemis - GCC Pueblo
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-11 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-11
Sample Date/Time	May 31, 2023 9:41:00 AM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No

Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling-UPDATE

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230608-1314006005-18313410353

Form Name:
Wells - GCC Pueblo Compliance Water Sampling-UPDATE

Submitter Name:
Landon Beck (lbeck@resourcehydrogeologic.com) | lbeck@resourcehydrogeologic.com

Submission Date:
Jun 8, 2023 12:46:02 PM MDT

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-12
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.29
Static Depth to Water (ft)	65.23
Well Total Depth (ft below top of casing)	88.8
Depth to Water below ground Surface (ft)	62.94
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	May 11, 2023 12:00:00 PM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	60
Date	May 31, 2023
Time	9:02:00 AM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	May 31, 2023 8:55:00 AM MDT
Sample Temperature (°C)	22.07
Are you sure? This value seems very unlikely based on past data.	Yes
Sample Temperature - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Specific Conductivity (µS/cm)	4530.00

pH (S.U.)	7.80
Oxygen Reduction Potential (mV)	-12.30
Dissolved Oxygen (mg/L)	0.20

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	May 31, 2023 8:58:00 AM MDT
Sample Temperature (°C)	17.14
Specific Conductivity (µS/cm)	4885.00
pH (S.U.)	7.79
Oxygen Reduction Potential (mV)	30.40
Dissolved Oxygen (mg/L)	0.13

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	May 31, 2023 9:02:00 AM MDT
Sample Temperature (°C)	17.14
Specific Conductivity (µS/cm)	4903.00
pH (S.U.)	7.79
Oxygen Reduction Potential (mV)	70.10
Dissolved Oxygen (mg/L)	0.11

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	71.42
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.06
Total Purged (gal)	1.00
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Dave Bemis - GCC Pueblo

Sampler's Signature



SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-12 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-12
Sample Date/Time	May 31, 2023 9:02:00 AM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling-UPDATE

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230607-1314006005-18313239595

Form Name:
Wells - GCC Pueblo Compliance Water Sampling-UPDATE

Submitter Name:
Landon Beck (lbeck@resourcehydrogeologic.com) | lbeck@resourcehydrogeologic.com

Submission Date:
Jun 7, 2023 3:49:04 PM MDT

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-13
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.19
Static Depth to Water (ft)	119.19
Well Total Depth (ft below top of casing)	177.88
Depth to Water below ground Surface (ft)	117.00
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	May 11, 2023 12:00:00 PM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Partly Sunny
Air Temperature (°F)	75
Date	May 30, 2023
Time	12:57:00 PM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	May 30, 2023 12:51:00 PM MDT
Sample Temperature (°C)	16.67
Specific Conductivity (µS/cm)	4913.00
pH (S.U.)	7.94
Oxygen Reduction Potential (mV)	-109.70
Dissolved Oxygen (mg/L)	0.52

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	May 30, 2023 12:54:00 PM MDT
Sample Temperature (°C)	17.12
Specific Conductivity (µS/cm)	4946.00
pH (S.U.)	7.96
Oxygen Reduction Potential (mV)	-113.00
Dissolved Oxygen (mg/L)	0.23

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	May 30, 2023 12:57:00 PM MDT
Sample Temperature (°C)	17.67
Specific Conductivity (µS/cm)	4842.00
pH (S.U.)	8.00
Oxygen Reduction Potential (mV)	-116.26
Dissolved Oxygen (mg/L)	0.04

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	119.30
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.07
Total Purged (gal)	1.50
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Dave Bemis - GCC Pueblo
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-13 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-13
Sample Date/Time	May 30, 2023 12:57:00 PM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1

Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling-UPDATE

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230607-1314006005-18313201164

Form Name:
Wells - GCC Pueblo Compliance Water Sampling-UPDATE

Submitter Name:
Landon Beck (lbeck@resourcehydrogeologic.com) | lbeck@resourcehydrogeologic.com

Submission Date:
Jun 7, 2023 12:34:45 PM MDT

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-14
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.11
Static Depth to Water (ft)	86.50
Well Total Depth (ft below top of casing)	207.83
Depth to Water below ground Surface (ft)	84.39
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	May 11, 2023 12:00:00 PM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	75
Date	May 30, 2023
Time	10:54:00 AM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	May 30, 2023 10:47:00 AM MDT
Sample Temperature (°C)	17.86
Specific Conductivity (µS/cm)	8172.00
Are you sure? This value seems very unlikely based on past data.	Yes
Specific Conductivity - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate

pH (S.U.)	7.60
Oxygen Reduction Potential (mV)	-12.50
Dissolved Oxygen (mg/L)	0.01

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	May 30, 2023 10:51:00 AM MDT
Sample Temperature (°C)	17.85
Specific Conductivity (µS/cm)	8027.00
Are you sure? This value seems very unlikely based on past data.	Yes
Specific Conductivity - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
pH (S.U.)	7.61
Oxygen Reduction Potential (mV)	-6.10
Dissolved Oxygen (mg/L)	0.03

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	May 30, 2023 10:54:00 AM MDT
Sample Temperature (°C)	17.82
Specific Conductivity (µS/cm)	8043.00
Are you sure? This value seems very unlikely based on past data.	Yes
Specific Conductivity - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
pH (S.U.)	7.61
Oxygen Reduction Potential (mV)	-21.00
Dissolved Oxygen (mg/L)	0.01

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	101.50
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.05
Total Purged (gal)	1.75
Geographic Sample Location	latitude: altitude: longitude: [viewMap]

Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Dave Bemis - GCC Pueblo
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-14 – Dedicated QED SS Well Wizard T1300 low-flow bladder pump
Lab Sample Name	MW-14
Sample Date/Time	May 30, 2023 10:54:00 AM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None

Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling-UPDATE

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230809-1314032001-18324385968

Form Name:
Wells - GCC Pueblo Compliance Water Sampling-UPDATE

Submitter Name:
Amy Veek (amy.veek) | amy.veek

Submission Date:
Aug 9, 2023 10:38:03 AM MDT

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-6
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.52
Static Depth to Water (ft)	26.90
Well Total Depth (ft below top of casing)	56.4
Depth to Water below ground Surface (ft)	24.38
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	RHS AT 400
Calibration Date/Time:	Aug 2, 2023 12:00:00 AM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	95
Date	Aug 8, 2023
Time	12:42:00 PM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	Aug 8, 2023 12:35:00 PM MDT
Sample Temperature (°C)	21.64
Are you sure? This value seems very unlikely based on past data.	Yes
Sample Temperature - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Specific Conductivity (µS/cm)	5346.00

pH (S.U.)	7.02
Oxygen Reduction Potential (mV)	-49.80
Dissolved Oxygen (mg/L)	1.88

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	Aug 8, 2023 12:39:00 PM MDT
Sample Temperature (°C)	21.04
Are you sure? This value seems very unlikely based on past data.	Yes
Sample Temperature - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Specific Conductivity (µS/cm)	5161.00
pH (S.U.)	7.02
Oxygen Reduction Potential (mV)	-44.00
Dissolved Oxygen (mg/L)	1.83

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	Aug 8, 2023 12:42:00 PM MDT
Sample Temperature (°C)	21.05
Are you sure? This value seems very unlikely based on past data.	Yes
Sample Temperature - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Specific Conductivity (µS/cm)	5361.00
pH (S.U.)	7.00
Oxygen Reduction Potential (mV)	-42.60
Dissolved Oxygen (mg/L)	1.82

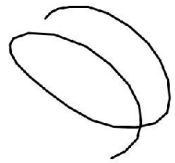
Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	26.31
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.04
Total Purged (gal)	0.60
Geographic Sample Location	latitude: altitude: longitude: [viewMap]

Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Dave Bemis - GCC Pueblo
Sampler's Signature	



SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-6 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-6
Sample Date/Time	Aug 8, 2023 12:42:00 PM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly

Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling-UPDATE

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230809-1314032001-18324385972

Form Name:
Wells - GCC Pueblo Compliance Water Sampling-UPDATE

Submitter Name:
Amy Veek (amy.veek) | amy.veek

Submission Date:
Aug 9, 2023 10:38:13 AM MDT

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-7
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.66
Static Depth to Water (ft)	26.41
Well Total Depth (ft below top of casing)	56.1
Depth to Water below ground Surface (ft)	23.75
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	RHS AT 400
Calibration Date/Time:	Aug 2, 2023 12:00:00 PM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	97
Date	Aug 8, 2023
Time	1:21:00 PM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	Aug 8, 2023 1:15:00 PM MDT
Sample Temperature (°C)	18.08
Specific Conductivity (µS/cm)	5754.00
pH (S.U.)	7.02
Oxygen Reduction Potential (mV)	20.50
Dissolved Oxygen (mg/L)	1.33

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	Aug 8, 2023 1:18:00 PM MDT
Sample Temperature (°C)	17.54
Specific Conductivity (µS/cm)	5786.00
pH (S.U.)	7.00
Oxygen Reduction Potential (mV)	10.00
Dissolved Oxygen (mg/L)	0.78

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	Aug 8, 2023 1:21:00 PM MDT
Sample Temperature (°C)	17.57
Specific Conductivity (µS/cm)	5757.00
pH (S.U.)	6.99
Oxygen Reduction Potential (mV)	8.50
Dissolved Oxygen (mg/L)	0.72

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	26.98
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.08
Total Purged (gal)	1.25
Are you sure? This purge value seems out of the expected purge requirement.	Yes
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Dave Bemis - GCC Pueblo

Sampler's Signature



SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-7 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-7
Sample Date/Time	Aug 8, 2023 1:21:00 PM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling-UPDATE

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230809-1314032001-18324385973

Form Name:
Wells - GCC Pueblo Compliance Water Sampling-UPDATE

Submitter Name:
Amy Veek (amy.veek) | amy.veek

Submission Date:
Aug 9, 2023 10:38:17 AM MDT

SITE INFORMATION

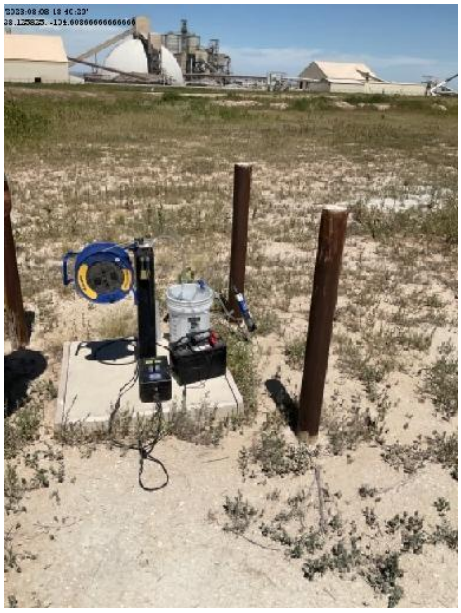
Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-8
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.16
Static Depth to Water (ft)	23.88
Well Total Depth (ft below top of casing)	65.65
Depth to Water below ground Surface (ft)	21.72
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	RHS AT 400
Calibration Date/Time:	Aug 2, 2023 12:00:00 PM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	95
Date	Aug 8, 2023
Time	2:47:00 PM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	Aug 8, 2023 2:13:00 PM MDT
Sample Temperature (°C)	21.08
Are you sure? This value seems very unlikely based on past data.	Yes
Sample Temperature - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Specific Conductivity (µS/cm)	5199.00

pH (S.U.)	7.23
Oxygen Reduction Potential (mV)	-159.70
Dissolved Oxygen (mg/L)	1.80

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	Aug 8, 2023 2:16:00 PM MDT
Sample Temperature (°C)	22.39
Are you sure? This value seems very unlikely based on past data.	Yes
Sample Temperature - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Specific Conductivity (µS/cm)	5211.00
pH (S.U.)	7.23
Oxygen Reduction Potential (mV)	-162.00
Dissolved Oxygen (mg/L)	1.69

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	Aug 8, 2023 2:19:00 PM MDT
Sample Temperature (°C)	20.48
Are you sure? This value seems very unlikely based on past data.	Yes
Sample Temperature - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Specific Conductivity (µS/cm)	5184.00
pH (S.U.)	7.22
Oxygen Reduction Potential (mV)	-65.00
Dissolved Oxygen (mg/L)	1.59

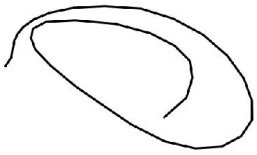
Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	29.55
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.05
Total Purged (gal)	0.75
Geographic Sample Location	latitude: altitude: longitude: [viewMap]

Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Dave Bemis - GCC Pueblo
Sampler's Signature	



SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 2

Details

Method of Sample Collection	MW-8 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-8
Sample Date/Time	Aug 8, 2023 2:19:00 PM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

LAB SAMPLE 2 OF 2

Details

Method of Sample Collection	MW-8 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-2B
Sample Date/Time	Aug 8, 2023 2:19:00 PM MDT
Lab Suite	GW-Compliance

Number of Bottles/Containers	3
Lab Sample Type	Duplicate

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid

Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling-UPDATE

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230809-1314032001-18324385965

Form Name:
Wells - GCC Pueblo Compliance Water Sampling-UPDATE

Submitter Name:
Amy Veek (amy.veek) | amy.veek

Submission Date:
Aug 9, 2023 10:37:53 AM MDT

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-9
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.08
Static Depth to Water (ft)	26.83
Well Total Depth (ft below top of casing)	42.23
Depth to Water below ground Surface (ft)	24.75
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	RHS AT 400
Calibration Date/Time:	Aug 2, 2023 12:00:00 AM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Partly Sunny
Air Temperature (°F)	80
Date	Aug 9, 2023
Time	9:03:00 AM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	Aug 9, 2023 8:58:00 AM MDT
Sample Temperature (°C)	18.25
Specific Conductivity (µS/cm)	5035.00
pH (S.U.)	6.99
Oxygen Reduction Potential (mV)	-129.10
Dissolved Oxygen (mg/L)	0.54

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	Aug 9, 2023 9:00:00 AM MDT
Sample Temperature (°C)	17.05
Specific Conductivity (µS/cm)	5174.00
pH (S.U.)	6.98
Oxygen Reduction Potential (mV)	-125.90
Dissolved Oxygen (mg/L)	0.35

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	Aug 9, 2023 9:03:00 AM MDT
Sample Temperature (°C)	17.40
Specific Conductivity (µS/cm)	5170.00
pH (S.U.)	6.97
Oxygen Reduction Potential (mV)	-123.10
Dissolved Oxygen (mg/L)	0.29

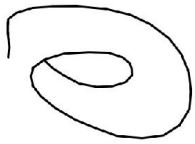
Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	28.45
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.10
Total Purged (gal)	0.75
Are you sure? This purge value seems out of the expected purge requirement.	Yes
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Dave Bemis - GCC Pueblo

Sampler's Signature



SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-9 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-9
Sample Date/Time	Aug 9, 2023 9:03:00 AM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling-UPDATE

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230809-1314032001-18324385967

Form Name:
Wells - GCC Pueblo Compliance Water Sampling-UPDATE

Submitter Name:
Amy Veek (amy.veek) | amy.veek

Submission Date:
Aug 9, 2023 10:37:59 AM MDT

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-10
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.24
Static Depth to Water (ft)	26.17
Well Total Depth (ft below top of casing)	82.55
Depth to Water below ground Surface (ft)	23.93
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	RHS AT 400
Calibration Date/Time:	Aug 2, 2023 12:00:00 PM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Partly Sunny
Air Temperature (°F)	80
Date	Aug 9, 2023
Time	9:38:00 AM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	Aug 9, 2023 9:32:00 AM MDT
Sample Temperature (°C)	17.69
Specific Conductivity (µS/cm)	5391.00
pH (S.U.)	7.81
Oxygen Reduction Potential (mV)	-195.10
Dissolved Oxygen (mg/L)	0.25

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	Aug 9, 2023 9:35:00 AM MDT
Sample Temperature (°C)	18.78
Specific Conductivity (µS/cm)	5226.00
pH (S.U.)	7.81
Oxygen Reduction Potential (mV)	-191.00
Dissolved Oxygen (mg/L)	0.18

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	Aug 9, 2023 9:38:00 AM MDT
Sample Temperature (°C)	16.84
Specific Conductivity (µS/cm)	5030.00
pH (S.U.)	7.86
Oxygen Reduction Potential (mV)	-181.20
Dissolved Oxygen (mg/L)	0.09

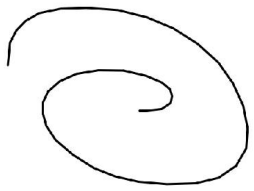
Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	31.70
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.04
Total Purged (gal)	0.75
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Dave Bemis - GCC Pueblo

Sampler's Signature



SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-10 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-10
Sample Date/Time	Aug 9, 2023 9:38:00 AM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling-UPDATE

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230809-1314032001-18324385955

Form Name:
Wells - GCC Pueblo Compliance Water Sampling-UPDATE

Submitter Name:
Amy Veek (amy.veek) | amy.veek

Submission Date:
Aug 9, 2023 10:37:35 AM MDT

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-11
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.18
Static Depth to Water (ft)	45.09
Well Total Depth (ft below top of casing)	72.68
Depth to Water below ground Surface (ft)	42.91
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	RHS AT 400
Calibration Date/Time:	Aug 2, 2023 12:00:00 PM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	90
Date	Aug 8, 2023
Time	3:43:00 PM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	Aug 8, 2023 3:37:00 PM MDT
Sample Temperature (°C)	20.58
Are you sure? This value seems very unlikely based on past data.	Yes
Sample Temperature - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Specific Conductivity (µS/cm)	2775.00

pH (S.U.)	7.38
Oxygen Reduction Potential (mV)	-307.40
Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Dissolved Oxygen (mg/L)	2.55

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	Aug 8, 2023 3:40:00 PM MDT
Sample Temperature (°C)	17.54
Specific Conductivity (µS/cm)	2675.00
pH (S.U.)	7.38
Oxygen Reduction Potential (mV)	-312.20
Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Dissolved Oxygen (mg/L)	0.85

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	Aug 8, 2023 3:43:00 PM MDT
Sample Temperature (°C)	17.52
Specific Conductivity (µS/cm)	2633.00
pH (S.U.)	7.34
Oxygen Reduction Potential (mV)	-313.60
Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Dissolved Oxygen (mg/L)	0.71

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	48.30
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.08
Total Purged (gal)	1.75

Are you sure? This purge value seems out of the expected purge requirement.	Yes
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Dave Bemis - GCC Pueblo
Sampler's Signature	



SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-11 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-11
Sample Date/Time	Aug 8, 2023 3:43:00 PM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling-UPDATE

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230809-1314032001-18324385960

Form Name:
Wells - GCC Pueblo Compliance Water Sampling-UPDATE

Submitter Name:
Amy Veek (amy.veek) | amy.veek

Submission Date:
Aug 9, 2023 10:37:49 AM MDT

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-12
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.29
Static Depth to Water (ft)	63.24
Well Total Depth (ft below top of casing)	88.8
Depth to Water below ground Surface (ft)	60.95
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	RHS AT 400
Calibration Date/Time:	Aug 2, 2023 12:00:00 PM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Partly Sunny
Air Temperature (°F)	90
Date	Aug 8, 2023
Time	4:37:00 PM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	Aug 8, 2023 4:30:00 PM MDT
Sample Temperature (°C)	18.24
Specific Conductivity (µS/cm)	4419.00
pH (S.U.)	7.84
Oxygen Reduction Potential (mV)	-142.10
Dissolved Oxygen (mg/L)	1.96

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	Aug 8, 2023 4:34:00 PM MDT
Sample Temperature (°C)	17.94
Specific Conductivity (µS/cm)	4512.00
pH (S.U.)	7.83
Oxygen Reduction Potential (mV)	-135.00
Dissolved Oxygen (mg/L)	1.38

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	Aug 8, 2023 4:37:00 PM MDT
Sample Temperature (°C)	18.99
Specific Conductivity (µS/cm)	4492.00
pH (S.U.)	7.82
Oxygen Reduction Potential (mV)	-134.60
Dissolved Oxygen (mg/L)	1.25

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	74.50
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.05
Total Purged (gal)	1.25
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Dave Bemis - GCC Pueblo

Sampler's Signature



SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-12 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-12
Sample Date/Time	Aug 8, 2023 4:37:00 PM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling-UPDATE

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230809-1314032001-18324385970

Form Name:
Wells - GCC Pueblo Compliance Water Sampling-UPDATE

Submitter Name:
Amy Veek (amy.veek) | amy.veek

Submission Date:
Aug 9, 2023 10:38:08 AM MDT

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-13
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.19
Static Depth to Water (ft)	84.08
Well Total Depth (ft below top of casing)	177.88
Depth to Water below ground Surface (ft)	81.89
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	RHS AT 400
Calibration Date/Time:	Aug 2, 2023 12:00:00 PM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	90
Date	Aug 8, 2023
Time	11:23:00 AM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	Aug 8, 2023 11:16:00 AM MDT
Sample Temperature (°C)	18.25
Specific Conductivity (µS/cm)	4105.00
pH (S.U.)	8.08
Oxygen Reduction Potential (mV)	-178.60
Dissolved Oxygen (mg/L)	0.76

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	Aug 8, 2023 11:20:00 AM MDT
Sample Temperature (°C)	17.86
Specific Conductivity (µS/cm)	4064.00
pH (S.U.)	8.14
Oxygen Reduction Potential (mV)	-183.00
Dissolved Oxygen (mg/L)	0.64

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	Aug 8, 2023 11:23:00 AM MDT
Sample Temperature (°C)	17.98
Specific Conductivity (µS/cm)	4054.00
pH (S.U.)	8.16
Oxygen Reduction Potential (mV)	-186.00
Dissolved Oxygen (mg/L)	0.57

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	87.15
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.07
Total Purged (gal)	1.80
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Dave Bemis - GCC Pueblo

Sampler's Signature



SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-13 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-13
Sample Date/Time	Aug 8, 2023 11:23:00 AM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling-UPDATE

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:
GCC_RGPP-20230809-1314032001-18324385974

Form Name:
Wells - GCC Pueblo Compliance Water Sampling-UPDATE

Submitter Name:
Amy Veek (amy.veek) | amy.veek

Submission Date:
Aug 9, 2023 10:38:22 AM MDT

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-14
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.11
Static Depth to Water (ft)	82.40
Well Total Depth (ft below top of casing)	207.83
Depth to Water below ground Surface (ft)	80.29
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	RHS AT400
Calibration Date/Time:	Aug 2, 2023 12:00:00 PM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	80
Date	Aug 8, 2023
Time	10:16:00 AM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	Aug 8, 2023 10:02:00 AM MDT
Sample Temperature (°C)	18.49
Specific Conductivity (µS/cm)	6702.00
pH (S.U.)	7.76
Oxygen Reduction Potential (mV)	-107.70
Dissolved Oxygen (mg/L)	0.43

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	Aug 8, 2023 10:09:00 AM MDT
Sample Temperature (°C)	18.61
Specific Conductivity (µS/cm)	6844.00
pH (S.U.)	7.73
Oxygen Reduction Potential (mV)	-108.20
Dissolved Oxygen (mg/L)	0.35

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	Aug 8, 2023 10:16:00 AM MDT
Sample Temperature (°C)	18.86
Specific Conductivity (µS/cm)	6875.00
pH (S.U.)	7.71
Oxygen Reduction Potential (mV)	-107.50
Dissolved Oxygen (mg/L)	0.39

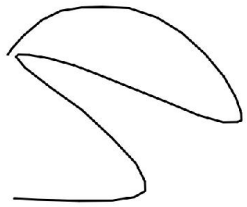
Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	92.10
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.09
Total Purged (gal)	1.60
Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.12936477633265 altitude: 1534.8644 longitude: -104.6066237908438 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Dave Bemis - GCC Pueblo

Sampler's Signature



SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-14 – Dedicated QED SS Well Wizard T1300 low-flow bladder pump
Lab Sample Name	MW-14
Sample Date/Time	Aug 8, 2023 10:16:00 AM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:	Form Name:
GCC_RGPP-20231120-1314032001-18343512284	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Veek | amy.veek	**Nov 20, 2023 3:34:14 PM MST**

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-5
Water present to measure/sample?	No
Is the water present within 0.25 feet of the well TD?	No
Dry Well	Yes

Misc

Site Photo



SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	63
Date	Nov 14, 2023
Time	10:54:00 AM MST

Sampler

Sampler Name	Amy Rodrigues-GCC Pueblo Environmental Engineer
Sampler's Signature	

Wells - GCC Pueblo Compliance Water Sampling

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:	Form Name:
GCC_RGPP-20231116-1314032001-18342751820	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Veek | amy.veek	**Nov 16, 2023 12:13:11 PM MST**

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-6
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.52
Static Depth to Water (ft)	32.12
Well Total Depth (ft below top of casing)	56.4
Depth to Water below ground Surface (ft)	29.60
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Nov 9, 2023 11:00:00 AM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	71
Date	Nov 14, 2023
Time	4:00:00 PM MST

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	Nov 16, 2023 3:50:00 PM MST
Sample Temperature (°C)	16.00
Specific Conductivity (µS/cm)	5363.86
pH (S.U.)	7.02
Oxygen Reduction Potential (mV)	-90.15
Dissolved Oxygen (mg/L)	0.00

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	Nov 14, 2023 3:55:00 PM MST
Sample Temperature (°C)	15.85
Specific Conductivity (µS/cm)	5337.82
pH (S.U.)	7.00
Oxygen Reduction Potential (mV)	-74.73
Dissolved Oxygen (mg/L)	0.00

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	Nov 14, 2023 4:00:00 PM MST
Sample Temperature (°C)	15.87
Specific Conductivity (µS/cm)	5277.74
pH (S.U.)	6.99
Oxygen Reduction Potential (mV)	-62.22
Dissolved Oxygen (mg/L)	0.00

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	33.07
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.05
Total Purged (gal)	0.75
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Amy Rodrigues-GCC Pueblo Environmental Engineer

Sampler's Signature



SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-6 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-6
Sample Date/Time	Nov 14, 2023 4:00:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:	Form Name:
GCC_RGPP-20231116-1314032001-18342751575	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Veek | amy.veek	**Nov 16, 2023 12:02:56 PM MST**

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-7
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.66
Static Depth to Water (ft)	31.76
Well Total Depth (ft below top of casing)	56.1
Depth to Water below ground Surface (ft)	29.10
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Nov 9, 2023 11:00:00 AM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	71
Date	Nov 14, 2023
Time	3:32:00 PM MST

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	Nov 14, 2023 3:22:00 PM MST
Sample Temperature (°C)	17.15
Specific Conductivity (µS/cm)	5736.52
pH (S.U.)	7.01
Oxygen Reduction Potential (mV)	-177.02
Dissolved Oxygen (mg/L)	0.00

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	Nov 14, 2023 3:27:00 PM MST
Sample Temperature (°C)	16.01
Specific Conductivity (µS/cm)	5847.61
pH (S.U.)	6.98
Oxygen Reduction Potential (mV)	-163.88
Dissolved Oxygen (mg/L)	0.00

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	Nov 14, 2023 3:32:00 PM MST
Sample Temperature (°C)	16.17
Specific Conductivity (µS/cm)	5750.10
pH (S.U.)	6.97
Oxygen Reduction Potential (mV)	-150.67
Dissolved Oxygen (mg/L)	0.00

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	31.90
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.08
Total Purged (gal)	0.75
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Amy Rodrigues - GCC Pueblo Environmental Engineer

Sampler's Signature



SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-7 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-7
Sample Date/Time	Nov 14, 2023 3:32:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:	Form Name:
GCC_RGPP-20231116-1314032001-18342745878	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Veek | amy.veek	**Nov 16, 2023 11:44:23 AM MST**

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-8
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.16
Static Depth to Water (ft)	29.93
Well Total Depth (ft below top of casing)	65.65
Depth to Water below ground Surface (ft)	27.77
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Nov 9, 2023 11:00:00 AM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	71
Date	Nov 14, 2023
Time	3:00:00 PM MST

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	Nov 14, 2023 2:50:00 PM MST
Sample Temperature (°C)	17.43
Specific Conductivity (µS/cm)	5218.07
pH (S.U.)	7.22
Oxygen Reduction Potential (mV)	-160.50
Dissolved Oxygen (mg/L)	0.00

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	Nov 14, 2023 2:55:00 PM MST
Sample Temperature (°C)	16.57
Specific Conductivity (µS/cm)	5148.21
pH (S.U.)	7.22
Oxygen Reduction Potential (mV)	-172.42
Dissolved Oxygen (mg/L)	0.00

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	Nov 14, 2023 3:00:00 PM MST
Sample Temperature (°C)	16.40
Specific Conductivity (µS/cm)	5236.59
pH (S.U.)	7.20
Oxygen Reduction Potential (mV)	-184.37
Dissolved Oxygen (mg/L)	0.00

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	38.37
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.04
Total Purged (gal)	1.20
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Amy Rodrigues - GCC Pueblo Environmental Engineer

Sampler's Signature



SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-8 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-8
Sample Date/Time	Nov 14, 2023 3:00:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:	Form Name:
GCC_RGPP-20231120-1314032001-18343465338	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Veek | amy.veek	**Nov 17, 2023 3:48:08 PM MST**

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-9
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.08
Static Depth to Water (ft)	26.72
Well Total Depth (ft below top of casing)	42.23
Depth to Water below ground Surface (ft)	24.64
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Nov 9, 2023 11:00:00 AM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Partly Sunny
Air Temperature (°F)	59
Date	Nov 15, 2023
Time	11:30:00 AM MST

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	Nov 15, 2023 11:20:00 AM MST
Sample Temperature (°C)	17.66
Specific Conductivity (µS/cm)	5204.37
pH (S.U.)	6.93
Oxygen Reduction Potential (mV)	-134.34
Dissolved Oxygen (mg/L)	0.00

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	Nov 15, 2023 11:25:00 AM MST
Sample Temperature (°C)	17.28
Specific Conductivity (µS/cm)	5278.76
pH (S.U.)	6.91
Oxygen Reduction Potential (mV)	-129.41
Dissolved Oxygen (mg/L)	0.00

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	Nov 15, 2023 11:30:00 AM MST
Sample Temperature (°C)	17.41
Specific Conductivity (µS/cm)	5216.30
pH (S.U.)	6.91
Oxygen Reduction Potential (mV)	-126.00
Dissolved Oxygen (mg/L)	0.00

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	28.61
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.07
Total Purged (gal)	0.75
Are you sure? This purge value seems out of the expected purge requirement.	Yes
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Amy Rodrigues - GCC Pueblo Environmental Engineer

Sampler's Signature



SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-9 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-9
Sample Date/Time	Nov 15, 2023 11:30:00 AM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:	Form Name:
GCC_RGPP-20231120-1314032001-18343465337	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Veek | amy.veek	**Nov 17, 2023 3:54:13 PM MST**

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-10
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.24
Static Depth to Water (ft)	25.68
Well Total Depth (ft below top of casing)	82.55
Depth to Water below ground Surface (ft)	23.44
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Nov 9, 2023 11:00:00 AM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Partly Sunny
Air Temperature (°F)	60
Date	Nov 15, 2023
Time	12:02:00 PM MST

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	Nov 15, 2023 11:52:00 AM MST
Sample Temperature (°C)	16.37
Specific Conductivity (µS/cm)	4727.14
pH (S.U.)	7.79
Oxygen Reduction Potential (mV)	-187.84
Dissolved Oxygen (mg/L)	0.00

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	Nov 15, 2023 11:57:00 AM MST
Sample Temperature (°C)	16.28
Specific Conductivity (µS/cm)	4616.55
pH (S.U.)	7.80
Oxygen Reduction Potential (mV)	-179.15
Dissolved Oxygen (mg/L)	0.00

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	Nov 15, 2023 12:02:00 PM MST
Sample Temperature (°C)	16.10
Specific Conductivity (µS/cm)	4403.02
pH (S.U.)	7.82
Oxygen Reduction Potential (mV)	-168.48
Dissolved Oxygen (mg/L)	0.00

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	32.83
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.06
Total Purged (gal)	1.00
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Amy Rodrigues- GCC Pueblo Environmental Engineer

Sampler's Signature



SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-10 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-10
Sample Date/Time	Nov 15, 2023 12:02:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:	Form Name:
GCC_RGPP-20231116-1314032001-18342756764	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Veek | amy.veek	**Nov 16, 2023 12:42:58 PM MST**

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-11
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.18
Static Depth to Water (ft)	34.24
Well Total Depth (ft below top of casing)	72.68
Depth to Water below ground Surface (ft)	32.06
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Nov 9, 2023 11:00:00 AM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	53
Date	Nov 15, 2023
Time	9:58:00 AM MST

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	Nov 15, 2023 9:48:00 AM MST
Sample Temperature (°C)	16.70
Specific Conductivity (µS/cm)	2641.61
pH (S.U.)	7.45
Oxygen Reduction Potential (mV)	-294.72
Dissolved Oxygen (mg/L)	0.00

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	Nov 15, 2023 9:53:00 AM MST
Sample Temperature (°C)	16.56
Specific Conductivity (µS/cm)	2608.76
pH (S.U.)	7.40
Oxygen Reduction Potential (mV)	-299.53
Dissolved Oxygen (mg/L)	0.00

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	Nov 15, 2023 9:58:00 AM MST
Sample Temperature (°C)	16.75
Specific Conductivity (µS/cm)	2473.81
pH (S.U.)	7.30
Oxygen Reduction Potential (mV)	-304.55
Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Dissolved Oxygen (mg/L)	0.00

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	54.26
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.08
Total Purged (gal)	1.20
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Amy Rodrigues - GCC Pueblo Environmental Engineer

Sampler's Signature



SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-11 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-11
Sample Date/Time	Nov 15, 2023 9:58:00 AM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:	Form Name:
GCC_RGPP-20231120-1314032001-18343512472	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Veek | amy.veek	**Nov 20, 2023 3:53:20 PM MST**

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-12
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.29
Static Depth to Water (ft)	60.60
Well Total Depth (ft below top of casing)	88.8
Depth to Water below ground Surface (ft)	58.31
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Nov 9, 2023 11:00:00 AM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Partly Sunny
Air Temperature (°F)	55
Date	Nov 15, 2023
Time	10:42:00 AM MST

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	Nov 15, 2023 10:32:00 AM MST
Sample Temperature (°C)	16.83
Specific Conductivity (µS/cm)	4586.54
pH (S.U.)	7.76
Oxygen Reduction Potential (mV)	-212.80
Dissolved Oxygen (mg/L)	0.00

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	Nov 15, 2023 10:37:00 AM MST
Sample Temperature (°C)	16.89
Specific Conductivity (µS/cm)	4600.16
pH (S.U.)	7.76
Oxygen Reduction Potential (mV)	-196.84
Dissolved Oxygen (mg/L)	0.00

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	Nov 15, 2023 10:42:00 AM MST
Sample Temperature (°C)	17.10
Specific Conductivity (µS/cm)	4570.41
pH (S.U.)	7.76
Oxygen Reduction Potential (mV)	-191.46
Dissolved Oxygen (mg/L)	0.00

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	66.03
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.06
Total Purged (gal)	1.25
Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.12894593692263 altitude: 1535.2816 longitude: -104.60617332729008 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Amy Rodrigues – GCC Pueblo Environmental Engineer

Sampler's Signature



SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 3

Details

Method of Sample Collection	MW-12 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-12
Sample Date/Time	Nov 15, 2023 10:42:00 AM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

LAB SAMPLE 2 OF 3

Details

Method of Sample Collection	MW-12 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-2B
Sample Date/Time	Nov 15, 2023 12:00:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Duplicate

LAB SAMPLE 3 OF 3

Details

Method of Sample Collection	MW-12 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	Method Blank
Sample Date/Time	Nov 15, 2023 1:23:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Method Blank

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:	Form Name:
GCC_RGPP-20231120-1314032001-18343512372	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Veek | amy.veek	**Nov 20, 2023 3:43:54 PM MST**

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-13
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.19
Static Depth to Water (ft)	111.52
Well Total Depth (ft below top of casing)	177.88
Depth to Water below ground Surface (ft)	109.33
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Nov 9, 2023 11:00:00 AM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	71
Date	Nov 14, 2023
Time	1:18:00 PM MST

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	Nov 14, 2023 1:08:00 PM MST
Sample Temperature (°C)	17.45
Specific Conductivity (µS/cm)	4286.43
pH (S.U.)	7.94
Oxygen Reduction Potential (mV)	-175.13
Dissolved Oxygen (mg/L)	0.00

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	Nov 14, 2023 1:13:00 PM MST
Sample Temperature (°C)	17.77
Specific Conductivity (µS/cm)	4200.30
pH (S.U.)	7.99
Oxygen Reduction Potential (mV)	-183.77
Dissolved Oxygen (mg/L)	0.00

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	Nov 14, 2023 1:18:00 PM MST
Sample Temperature (°C)	17.97
Specific Conductivity (µS/cm)	4145.22
pH (S.U.)	8.04
Oxygen Reduction Potential (mV)	-193.57
Dissolved Oxygen (mg/L)	0.00

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	110.98
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.04
Total Purged (gal)	1.75
Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.12894593692263 altitude: 1535.2832 longitude: -104.60617332729008 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Amy Rodrigues – GCC Pueblo Environmental Engineer

Sampler's Signature



SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-13 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-13
Sample Date/Time	Nov 14, 2023 1:18:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

Wells - GCC Pueblo Compliance Water Sampling

GCC Pueblo Quarry and Cement Plant
(719) 647-6800
3372 Lime Road
Pueblo, CO 81004
www.gcc.com

Reference Number:	Form Name:
GCC_RGPP-20231116-1314032001-18342751235	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Veek | amy.veek	**Nov 16, 2023 11:53:50 AM MST**

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-14
Water present to measure/sample?	Yes
Is the water present within 0.25 feet of the well TD?	No

Wellhead Stick-Up from Ground Level Reference Point to Depth to Water Level Reference Point (ft)	2.11
Static Depth to Water (ft)	99.18
Well Total Depth (ft below top of casing)	207.83
Depth to Water below ground Surface (ft)	97.07
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Nov 9, 2023 11:00:00 AM MST
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	63
Date	Nov 14, 2023
Time	12:06:00 PM MST

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	Nov 14, 2023 11:56:00 AM MST
Sample Temperature (°C)	16.96
Specific Conductivity (µS/cm)	7054.95
Are you sure? This value seems very unlikely based on past data.	Yes
Specific Conductivity - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate

pH (S.U.)	7.62
Oxygen Reduction Potential (mV)	-76.84
Dissolved Oxygen (mg/L)	0.00

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	Nov 14, 2023 12:01:00 PM MST
Sample Temperature (°C)	17.10
Specific Conductivity (µS/cm)	6921.23
pH (S.U.)	7.62
Oxygen Reduction Potential (mV)	-87.68
Dissolved Oxygen (mg/L)	0.00

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	Nov 14, 2023 12:06:00 PM MST
Sample Temperature (°C)	17.37
Specific Conductivity (µS/cm)	6832.23
pH (S.U.)	7.64
Oxygen Reduction Potential (mV)	-78.93
Dissolved Oxygen (mg/L)	0.00

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	100.40
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.05
Total Purged (gal)	2.25
Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.12894593692263 altitude: 1535.2545 longitude: -104.60617332729008 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Amy Rodrigues - GCC Pueblo Environmental Engineer

Sampler's Signature



SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-14 – Dedicated QED SS Well Wizard T1300 low-flow bladder pump
Lab Sample Name	MW-14
Sample Date/Time	Nov 14, 2023 12:06:00 PM MST
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

ACZ Labs Bottle Sticker	None
Bottle Volume (mL)	500
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	No
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

ACZ Labs Bottle Sticker	White
Bottle Volume (mL)	250
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Raw/None
Analysis	Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING 3 OF 3

Bottle Details

ACZ Labs Bottle Sticker	Green PC
Bottle Volume (mL)	125
Bottle Composition	Poly
Bottle Quantity	1
Field-Filtered to 0.45 µm (Yes/No)	Yes
Preservative (Type)	Nitric Acid
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered

ATTACHMENT 2 - GCC Groundwater Sampling Analytical Lab Reports

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

April 07, 2023

Report to:
Amy Veek
GCC Rio Grande
3372 Lime Road
Pueblo, CO 81004

cc: Landon Beck

Bill to:
Amy Veek
GCC Rio Grande
3372 Lime Road
Pueblo, CO 81004

Project ID: 183230
ACZ Project ID: L79100

Amy Veek:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on March 07, 2023. This project has been assigned to ACZ's project number, L79100. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L79100. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after April 06, 2024. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

GCC Rio Grande

April 07, 2023

Project ID: 183230
ACZ Project ID: L79100

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 8 groundwater samples from GCC Rio Grande on March 7, 2023. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L79100. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

All analyses were performed within EPA recommended holding times.

Sample Analysis

These samples were analyzed for inorganic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports. The following required further detail not provided by the Extended Qualifier Report:

1. The below is from WG563213, Qualifier: N1A, Applies to: L79100-02 and -03/FLUORIDE - Quality control sample exceeded method requirements. Samples have been run multiple times and demonstrated consistent results. It is not believed that increasing dilutions/runs will yield a better result.

GCC Rio Grande
Project ID: 183230
Sample ID: MW-14

ACZ Sample ID: ***L79100-01***
Date Sampled: *03/06/23 09:42*
Date Received: *03/07/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	5	<0.25	U		mg/L	0.25	1.25	03/17/23 14:00	keh1
Arsenic, dissolved	M200.8 ICP-MS	5	0.00531			mg/L	0.001	0.005	03/15/23 12:14	gjl
Beryllium, dissolved	M200.7 ICP	5	<0.05	U		mg/L	0.05	0.25	03/17/23 14:00	keh1
Boron, dissolved	M200.7 ICP	5	1.32			mg/L	0.15	0.5	03/17/23 14:00	keh1
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U	*	mg/L	0.00025	0.00125	03/15/23 12:14	gjl
Calcium, dissolved	M200.7 ICP	5	19.4			mg/L	0.5	2.5	03/17/23 14:00	keh1
Chromium, dissolved	M200.7 ICP	5	<0.1	U		mg/L	0.1	0.25	03/20/23 2:07	keh1
Cobalt, dissolved	M200.8 ICP-MS	5	0.000655	B	*	mg/L	0.00025	0.00125	03/15/23 12:14	gjl
Copper, dissolved	M200.7 ICP	5	<0.05	U		mg/L	0.05	0.25	03/17/23 14:00	keh1
Iron, dissolved	M200.7 ICP	5	0.807			mg/L	0.3	0.75	03/17/23 14:00	keh1
Lead, dissolved	M200.8 ICP-MS	5	<0.0005	U	*	mg/L	0.0005	0.0025	03/15/23 12:14	gjl
Lithium, dissolved	M200.7 ICP	5	0.381			mg/L	0.04	0.2	03/17/23 14:00	keh1
Magnesium, dissolved	M200.7 ICP	5	6.44			mg/L	1	5	03/17/23 14:00	keh1
Manganese, dissolved	M200.7 ICP	5	<0.05	U		mg/L	0.05	0.25	03/17/23 14:00	keh1
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	03/09/23 15:03	mlh
Nickel, dissolved	M200.7 ICP	5	<0.04	U		mg/L	0.04	0.2	03/17/23 14:00	keh1
Potassium, dissolved	M200.7 ICP	5	5.25			mg/L	1	5	03/17/23 14:00	keh1
Selenium, dissolved	M200.8 ICP-MS	5	<0.0005	U	*	mg/L	0.0005	0.00125	03/21/23 15:55	kja
Sodium, dissolved	M200.7 ICP	5	1740			mg/L	1	5	03/17/23 14:00	keh1
Vanadium, dissolved	M200.7 ICP	5	<0.05	U		mg/L	0.05	0.125	03/17/23 14:00	keh1
Zinc, dissolved	M200.7 ICP	5	<0.1	U		mg/L	0.1	0.25	03/17/23 14:00	keh1

GCC Rio Grande
Project ID: 183230
Sample ID: MW-14

ACZ Sample ID: ***L79100-01***
Date Sampled: *03/06/23 09:42*
Date Received: *03/07/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	1410			mg/L	2	20	03/11/23 0:00	emk
Carbonate as CaCO3		1	61.6			mg/L	2	20	03/11/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	03/11/23 0:00	emk
Total Alkalinity		1	1470			mg/L	2	20	03/11/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-3.7			%			04/07/23 0:00	calc
Sum of Anions			84			meq/L			04/07/23 0:00	calc
Sum of Cations			78			meq/L			04/07/23 0:00	calc
Chloride	SM4500Cl-E	25	1590		*	mg/L	25	50	03/09/23 14:34	aps/mrd
Fluoride	SM4500F-C	1	3.10		*	mg/L	0.15	0.35	03/29/23 12:39	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		75			mg/L	1	30	04/07/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	04/07/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U		mg/L	0.02	0.1	03/08/23 0:08	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U		mg/L	0.01	0.05	03/08/23 0:08	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	4690	H	*	mg/L	40	80	03/29/23 19:45	jck
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	50	460		*	mg/L	50	250	03/14/23 13:17	gkk
TDS (calculated)	Calculation		4720			mg/L			04/07/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.99						04/07/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-13

ACZ Sample ID: ***L79100-02***
Date Sampled: *03/06/23 10:21*
Date Received: *03/07/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	2	<0.1	U		mg/L	0.1	0.5	03/17/23 14:03	keh1
Arsenic, dissolved	M200.8 ICP-MS	5	<0.001	U	*	mg/L	0.001	0.005	03/15/23 12:16	gjl
Beryllium, dissolved	M200.7 ICP	2	<0.02	U		mg/L	0.02	0.1	03/17/23 14:03	keh1
Boron, dissolved	M200.7 ICP	2	1.09			mg/L	0.06	0.2	03/17/23 14:03	keh1
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U	*	mg/L	0.00025	0.00125	03/15/23 12:16	gjl
Calcium, dissolved	M200.7 ICP	2	7.60			mg/L	0.2	1	03/17/23 14:03	keh1
Chromium, dissolved	M200.7 ICP	2	<0.04	U		mg/L	0.04	0.1	03/20/23 2:10	keh1
Cobalt, dissolved	M200.8 ICP-MS	5	<0.00025	U	*	mg/L	0.00025	0.00125	03/15/23 12:16	gjl
Copper, dissolved	M200.7 ICP	2	<0.02	U		mg/L	0.02	0.1	03/17/23 14:03	keh1
Iron, dissolved	M200.7 ICP	2	<0.12	U		mg/L	0.12	0.3	03/17/23 14:03	keh1
Lead, dissolved	M200.8 ICP-MS	5	<0.0005	U	*	mg/L	0.0005	0.0025	03/15/23 12:16	gjl
Lithium, dissolved	M200.7 ICP	2	0.238			mg/L	0.016	0.08	03/17/23 14:03	keh1
Magnesium, dissolved	M200.7 ICP	2	2.21			mg/L	0.4	2	03/17/23 14:03	keh1
Manganese, dissolved	M200.7 ICP	2	<0.02	U		mg/L	0.02	0.1	03/17/23 14:03	keh1
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	03/09/23 15:06	mlh
Nickel, dissolved	M200.7 ICP	2	<0.016	U		mg/L	0.016	0.08	03/17/23 14:03	keh1
Potassium, dissolved	M200.7 ICP	2	3.07			mg/L	0.4	2	03/17/23 14:03	keh1
Selenium, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.0005	03/21/23 15:57	kja
Sodium, dissolved	M200.7 ICP	2	1060			mg/L	0.4	2	03/17/23 14:03	keh1
Vanadium, dissolved	M200.7 ICP	2	<0.02	U		mg/L	0.02	0.05	03/17/23 14:03	keh1
Zinc, dissolved	M200.7 ICP	2	<0.04	U		mg/L	0.04	0.1	03/17/23 14:03	keh1

GCC Rio Grande
Project ID: 183230
Sample ID: MW-13

ACZ Sample ID: ***L79100-02***
Date Sampled: *03/06/23 10:21*
Date Received: *03/07/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	1340			mg/L	2	20	03/11/23 0:00	emk
Carbonate as CaCO3		1	111			mg/L	2	20	03/11/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	03/11/23 0:00	emk
Total Alkalinity		1	1450			mg/L	2	20	03/11/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-3.1			%			04/07/23 0:00	calc
Sum of Anions			50			meq/L			04/07/23 0:00	calc
Sum of Cations			47			meq/L			04/07/23 0:00	calc
Chloride	SM4500Cl-E	25	674		*	mg/L	25	50	03/09/23 14:35	aps/mrd
Fluoride	SM4500F-C	1	6.49		*	mg/L	0.15	0.35	04/01/23 1:49	jck
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		28			mg/L	0.5	10	04/07/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	04/07/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U		mg/L	0.02	0.1	03/08/23 0:10	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U		mg/L	0.01	0.05	03/08/23 0:10	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	2730		*	mg/L	40	80	03/10/23 15:00	cm
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	104		*	mg/L	5	25	03/14/23 12:54	gkk
TDS (calculated)	Calculation		2740			mg/L			04/07/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.00						04/07/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-8

ACZ Sample ID: ***L79100-03***
Date Sampled: *03/06/23 13:14*
Date Received: *03/07/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	2	<0.1	U		mg/L	0.1	0.5	03/17/23 14:13	keh1
Arsenic, dissolved	M200.8 ICP-MS	2	0.00511			mg/L	0.0004	0.002	03/15/23 12:19	gjl
Beryllium, dissolved	M200.7 ICP	2	<0.02	U		mg/L	0.02	0.1	03/17/23 14:13	keh1
Boron, dissolved	M200.7 ICP	2	0.889			mg/L	0.06	0.2	03/17/23 14:13	keh1
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U	*	mg/L	0.0001	0.0005	03/15/23 12:19	gjl
Calcium, dissolved	M200.7 ICP	2	70.4			mg/L	0.2	1	03/17/23 14:13	keh1
Chromium, dissolved	M200.7 ICP	2	<0.04	U		mg/L	0.04	0.1	03/20/23 2:20	keh1
Cobalt, dissolved	M200.8 ICP-MS	2	0.000545			mg/L	0.0001	0.0005	03/15/23 12:19	gjl
Copper, dissolved	M200.7 ICP	2	<0.02	U		mg/L	0.02	0.1	03/17/23 14:13	keh1
Iron, dissolved	M200.7 ICP	2	0.860			mg/L	0.12	0.3	03/17/23 14:13	keh1
Lead, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	03/15/23 12:19	gjl
Lithium, dissolved	M200.7 ICP	2	0.364			mg/L	0.016	0.08	03/17/23 14:13	keh1
Magnesium, dissolved	M200.7 ICP	2	28.0			mg/L	0.4	2	03/17/23 14:13	keh1
Manganese, dissolved	M200.7 ICP	2	0.234			mg/L	0.02	0.1	03/17/23 14:13	keh1
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	03/09/23 15:07	mlh
Nickel, dissolved	M200.7 ICP	2	<0.016	U		mg/L	0.016	0.08	03/17/23 14:13	keh1
Potassium, dissolved	M200.7 ICP	2	5.61			mg/L	0.4	2	03/17/23 14:13	keh1
Selenium, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.0005	03/21/23 15:58	kja
Sodium, dissolved	M200.7 ICP	2	1240			mg/L	0.4	2	03/17/23 14:13	keh1
Vanadium, dissolved	M200.7 ICP	2	<0.02	U		mg/L	0.02	0.05	03/17/23 14:13	keh1
Zinc, dissolved	M200.7 ICP	2	<0.04	U		mg/L	0.04	0.1	03/17/23 14:13	keh1

GCC Rio Grande
Project ID: 183230
Sample ID: MW-8

ACZ Sample ID: ***L79100-03***
Date Sampled: *03/06/23 13:14*
Date Received: *03/07/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	1250			mg/L	2	20	03/11/23 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	03/11/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	03/11/23 0:00	emk
Total Alkalinity		1	1250			mg/L	2	20	03/11/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-2.4			%			04/07/23 0:00	calc
Sum of Anions			64			meq/L			04/07/23 0:00	calc
Sum of Cations			61			meq/L			04/07/23 0:00	calc
Chloride	SM4500Cl-E	5	280		*	mg/L	5	10	03/09/23 14:36	aps/mrd
Fluoride	SM4500F-C	1	1.03		*	mg/L	0.15	0.35	04/01/23 1:52	jck
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		291			mg/L	0.5	10	04/07/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	04/07/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U		mg/L	0.02	0.1	03/08/23 0:11	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U		mg/L	0.01	0.05	03/08/23 0:11	pjb
Residue, Filterable (TDS) @180C	SM2540C	50	3600		*	mg/L	1000	2000	03/10/23 15:03	cm
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	50	1470		*	mg/L	50	250	03/14/23 13:18	gkk
TDS (calculated)	Calculation		3860			mg/L			04/07/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.93						04/07/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-7

ACZ Sample ID: ***L79100-04***
Date Sampled: *03/06/23 13:29*
Date Received: *03/07/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	5	<0.25	U		mg/L	0.25	1.25	03/17/23 14:16	keh1
Arsenic, dissolved	M200.8 ICP-MS	10	<0.002	U	*	mg/L	0.002	0.01	03/15/23 12:21	gjl
Beryllium, dissolved	M200.7 ICP	5	<0.05	U		mg/L	0.05	0.25	03/17/23 14:16	keh1
Boron, dissolved	M200.7 ICP	5	0.322	B		mg/L	0.15	0.5	03/17/23 14:16	keh1
Cadmium, dissolved	M200.8 ICP-MS	10	<0.0005	U	*	mg/L	0.0005	0.0025	03/15/23 12:21	gjl
Calcium, dissolved	M200.7 ICP	5	384			mg/L	0.5	2.5	03/17/23 14:16	keh1
Chromium, dissolved	M200.7 ICP	5	<0.1	U		mg/L	0.1	0.25	03/20/23 2:23	keh1
Cobalt, dissolved	M200.8 ICP-MS	10	0.00402			mg/L	0.0005	0.0025	03/15/23 12:21	gjl
Copper, dissolved	M200.7 ICP	5	<0.05	U		mg/L	0.05	0.25	03/17/23 14:16	keh1
Iron, dissolved	M200.7 ICP	5	<0.3	U		mg/L	0.3	0.75	03/17/23 14:16	keh1
Lead, dissolved	M200.8 ICP-MS	10	<0.001	U	*	mg/L	0.001	0.005	03/15/23 12:21	gjl
Lithium, dissolved	M200.7 ICP	5	0.555			mg/L	0.04	0.2	03/17/23 14:16	keh1
Magnesium, dissolved	M200.7 ICP	5	449			mg/L	1	5	03/17/23 14:16	keh1
Manganese, dissolved	M200.7 ICP	5	0.060	B		mg/L	0.05	0.25	03/17/23 14:16	keh1
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	03/15/23 12:34	mlh
Nickel, dissolved	M200.7 ICP	5	<0.04	U		mg/L	0.04	0.2	03/17/23 14:16	keh1
Potassium, dissolved	M200.7 ICP	5	11.2			mg/L	1	5	03/17/23 14:16	keh1
Selenium, dissolved	M200.8 ICP-MS	10	<0.001	U	*	mg/L	0.001	0.0025	03/15/23 12:21	gjl
Sodium, dissolved	M200.7 ICP	5	706			mg/L	1	5	03/17/23 14:16	keh1
Vanadium, dissolved	M200.7 ICP	5	<0.05	U		mg/L	0.05	0.125	03/17/23 14:16	keh1
Zinc, dissolved	M200.7 ICP	5	<0.1	U		mg/L	0.1	0.25	03/17/23 14:16	keh1

GCC Rio Grande
Project ID: 183230
Sample ID: MW-7

ACZ Sample ID: ***L79100-04***
Date Sampled: *03/06/23 13:29*
Date Received: *03/07/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	545			mg/L	2	20	03/11/23 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	03/11/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	03/11/23 0:00	emk
Total Alkalinity		1	545			mg/L	2	20	03/11/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-1.7			%			04/07/23 0:00	calc
Sum of Anions			90			meq/L			04/07/23 0:00	calc
Sum of Cations			87			meq/L			04/07/23 0:00	calc
Chloride	SM4500Cl-E	1	91.3		*	mg/L	1	2	03/09/23 13:17	aps/mrd
Fluoride	SM4500F-C	1	0.55			mg/L	0.15	0.35	04/03/23 12:30	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		2810			mg/L	1	30	04/07/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		0.263			mg/L	0.02	0.1	04/07/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	0.276		*	mg/L	0.02	0.1	03/08/23 0:12	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	0.013	B	*	mg/L	0.01	0.05	03/08/23 0:12	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	6210		*	mg/L	40	80	03/10/23 15:07	cm
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	120	3630		*	mg/L	120	600	03/14/23 13:31	gkk
TDS (calculated)	Calculation		5600			mg/L			04/07/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.11						04/07/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-6

ACZ Sample ID: ***L79100-05***
Date Sampled: *03/06/23 13:45*
Date Received: *03/07/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	03/17/23 14:20	keh1
Arsenic, dissolved	M200.8 ICP-MS	5	0.00109	B	*	mg/L	0.001	0.005	03/15/23 12:23	gjl
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/17/23 14:20	keh1
Boron, dissolved	M200.7 ICP	1	0.249			mg/L	0.03	0.1	03/17/23 14:20	keh1
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U	*	mg/L	0.00025	0.00125	03/15/23 12:23	gjl
Calcium, dissolved	M200.7 ICP	1	413			mg/L	0.1	0.5	03/17/23 14:20	keh1
Chromium, dissolved	M200.7 ICP	5	<0.1	U		mg/L	0.1	0.25	03/20/23 2:26	keh1
Cobalt, dissolved	M200.8 ICP-MS	5	0.0633			mg/L	0.00025	0.00125	03/15/23 12:23	gjl
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/17/23 14:20	keh1
Iron, dissolved	M200.7 ICP	1	1.55			mg/L	0.06	0.15	03/17/23 14:20	keh1
Lead, dissolved	M200.8 ICP-MS	5	<0.0005	U	*	mg/L	0.0005	0.0025	03/15/23 12:23	gjl
Lithium, dissolved	M200.7 ICP	1	0.417			mg/L	0.008	0.04	03/17/23 14:20	keh1
Magnesium, dissolved	M200.7 ICP	1	416			mg/L	0.2	1	03/17/23 14:20	keh1
Manganese, dissolved	M200.7 ICP	1	0.839			mg/L	0.01	0.05	03/17/23 14:20	keh1
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	03/15/23 12:35	mlh
Nickel, dissolved	M200.7 ICP	1	0.102			mg/L	0.008	0.04	03/17/23 14:20	keh1
Potassium, dissolved	M200.7 ICP	1	10.7			mg/L	0.2	1	03/17/23 14:20	keh1
Selenium, dissolved	M200.8 ICP-MS	5	<0.0005	U	*	mg/L	0.0005	0.00125	03/15/23 12:23	gjl
Sodium, dissolved	M200.7 ICP	1	558			mg/L	0.2	1	03/17/23 14:20	keh1
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	03/17/23 14:20	keh1
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	03/17/23 14:20	keh1

GCC Rio Grande
Project ID: 183230
Sample ID: MW-6

ACZ Sample ID: ***L79100-05***
Date Sampled: *03/06/23 13:45*
Date Received: *03/07/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	491			mg/L	2	20	03/11/23 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	03/11/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	03/11/23 0:00	emk
Total Alkalinity		1	491			mg/L	2	20	03/11/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.6			%			04/07/23 0:00	calc
Sum of Anions			79			meq/L			04/07/23 0:00	calc
Sum of Cations			80			meq/L			04/07/23 0:00	calc
Chloride	SM4500Cl-E	1	75.5		*	mg/L	1	2	03/09/23 13:17	aps/mrd
Fluoride	SM4500F-C	1	0.52			mg/L	0.15	0.35	03/29/23 13:49	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		2740			mg/L	0.2	5	04/07/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	04/07/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	03/08/23 0:15	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	03/08/23 0:15	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	5390			mg/L	40	80	03/13/23 11:26	cm
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	120	3200		*	mg/L	120	600	03/14/23 13:32	gkk
TDS (calculated)	Calculation		4980			mg/L			04/07/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.08						04/07/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-2B

ACZ Sample ID: ***L79100-06***
Date Sampled: *03/06/23 12:00*
Date Received: *03/07/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	03/17/23 14:23	keh1
Arsenic, dissolved	M200.8 ICP-MS	2	<0.0004	U	*	mg/L	0.0004	0.002	03/15/23 12:35	gjl
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/17/23 14:23	keh1
Boron, dissolved	M200.7 ICP	1	0.291			mg/L	0.03	0.1	03/17/23 14:23	keh1
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U	*	mg/L	0.0001	0.0005	03/15/23 12:35	gjl
Calcium, dissolved	M200.7 ICP	1	388		*	mg/L	0.1	0.5	03/17/23 14:23	keh1
Chromium, dissolved	M200.7 ICP	5	<0.1	U		mg/L	0.1	0.25	03/20/23 2:29	keh1
Cobalt, dissolved	M200.8 ICP-MS	2	0.00388			mg/L	0.0001	0.0005	03/15/23 12:35	gjl
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/17/23 14:23	keh1
Iron, dissolved	M200.7 ICP	1	0.086	B		mg/L	0.06	0.15	03/17/23 14:23	keh1
Lead, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	03/15/23 12:35	gjl
Lithium, dissolved	M200.7 ICP	1	0.536			mg/L	0.008	0.04	03/17/23 14:23	keh1
Magnesium, dissolved	M200.7 ICP	1	443			mg/L	0.2	1	03/17/23 14:23	keh1
Manganese, dissolved	M200.7 ICP	1	0.071			mg/L	0.01	0.05	03/17/23 14:23	keh1
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	03/15/23 12:36	mlh
Nickel, dissolved	M200.7 ICP	1	0.0262	B		mg/L	0.008	0.04	03/17/23 14:23	keh1
Potassium, dissolved	M200.7 ICP	1	11.7			mg/L	0.2	1	03/17/23 14:23	keh1
Selenium, dissolved	M200.8 ICP-MS	5	0.00559			mg/L	0.0005	0.00125	03/22/23 22:34	kja
Sodium, dissolved	M200.7 ICP	1	677			mg/L	0.2	1	03/17/23 14:23	keh1
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	03/17/23 14:23	keh1
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	03/17/23 14:23	keh1

GCC Rio Grande
Project ID: 183230
Sample ID: MW-2B

ACZ Sample ID: ***L79100-06***
Date Sampled: *03/06/23 12:00*
Date Received: *03/07/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	504			mg/L	2	20	03/11/23 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	03/11/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	03/11/23 0:00	emk
Total Alkalinity		1	504			mg/L	2	20	03/11/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			04/07/23 0:00	calc
Sum of Anions			86			meq/L			04/07/23 0:00	calc
Sum of Cations			86			meq/L			04/07/23 0:00	calc
Chloride	SM4500Cl-E	1	88.6		*	mg/L	1	2	03/09/23 13:19	aps/mrd
Fluoride	SM4500F-C	1	0.51			mg/L	0.15	0.35	03/29/23 14:00	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		2790			mg/L	0.2	5	04/07/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		0.199			mg/L	0.02	0.1	04/07/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	0.199		*	mg/L	0.02	0.1	03/08/23 0:17	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	03/08/23 0:17	pjb
Residue, Filterable (TDS) @180C	SM2540C	5	5870	H	*	mg/L	100	200	03/21/23 15:50	svm
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	120	3480		*	mg/L	120	600	03/14/23 13:32	gkk
TDS (calculated)	Calculation		5400			mg/L			04/07/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.09						04/07/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-11

ACZ Sample ID: ***L79100-07***
Date Sampled: *03/06/23 14:07*
Date Received: *03/07/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	03/20/23 0:17	keh1
Arsenic, dissolved	M200.8 ICP-MS	1	<0.0002	U		mg/L	0.0002	0.001	03/15/23 12:37	gjl
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/17/23 8:03	keh1
Boron, dissolved	M200.7 ICP	1	0.459		*	mg/L	0.03	0.1	03/17/23 8:03	keh1
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U		mg/L	0.00005	0.00025	03/15/23 12:37	gjl
Calcium, dissolved	M200.7 ICP	1	52.6			mg/L	0.1	0.5	03/20/23 0:17	keh1
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	03/17/23 8:03	keh1
Cobalt, dissolved	M200.8 ICP-MS	1	0.000426			mg/L	0.00005	0.00025	03/15/23 12:37	gjl
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/17/23 8:03	keh1
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	03/17/23 8:03	keh1
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	03/15/23 12:37	gjl
Lithium, dissolved	M200.7 ICP	1	0.136			mg/L	0.008	0.04	03/17/23 8:03	keh1
Magnesium, dissolved	M200.7 ICP	1	27.6			mg/L	0.2	1	03/17/23 8:03	keh1
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/17/23 8:03	keh1
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	03/15/23 12:37	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	03/17/23 8:03	keh1
Potassium, dissolved	M200.7 ICP	1	3.37			mg/L	0.2	1	03/20/23 0:17	keh1
Selenium, dissolved	M200.8 ICP-MS	1	0.114		*	mg/L	0.0001	0.00025	03/21/23 16:02	kja
Sodium, dissolved	M200.7 ICP	1	435			mg/L	0.2	1	03/17/23 8:03	keh1
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	03/20/23 0:17	keh1
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	03/20/23 0:17	keh1

GCC Rio Grande
Project ID: 183230
Sample ID: MW-11

ACZ Sample ID: ***L79100-07***
Date Sampled: *03/06/23 14:07*
Date Received: *03/07/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	885			mg/L	2	20	03/11/23 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	03/11/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	03/11/23 0:00	emk
Total Alkalinity		1	885			mg/L	2	20	03/11/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-5.9			%			04/07/23 0:00	calc
Sum of Anions			27			meq/L			04/07/23 0:00	calc
Sum of Cations			24			meq/L			04/07/23 0:00	calc
Chloride	SM4500Cl-E	5	125		*	mg/L	5	10	03/09/23 14:36	aps/mrd
Fluoride	SM4500F-C	1	0.89			mg/L	0.15	0.35	03/29/23 14:04	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		245			mg/L	0.2	5	04/07/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	04/07/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	03/08/23 0:23	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	03/08/23 0:23	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	1570			mg/L	20	40	03/13/23 11:33	cm
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	50	263		*	mg/L	50	250	03/14/23 14:21	gkk
TDS (calculated)	Calculation		1450			mg/L			04/07/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.08						04/07/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-12

ACZ Sample ID: ***L79100-08***
Date Sampled: *03/06/23 14:24*
Date Received: *03/07/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	2	<0.1	U		mg/L	0.1	0.5	03/20/23 0:20	keh1
Arsenic, dissolved	M200.8 ICP-MS	2	0.00302			mg/L	0.0004	0.002	03/15/23 12:44	gjl
Beryllium, dissolved	M200.7 ICP	2	<0.02	U		mg/L	0.02	0.1	03/17/23 8:07	keh1
Boron, dissolved	M200.7 ICP	2	0.874		*	mg/L	0.06	0.2	03/17/23 8:07	keh1
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U		mg/L	0.0001	0.0005	03/15/23 12:44	gjl
Calcium, dissolved	M200.7 ICP	2	23.7			mg/L	0.2	1	03/20/23 0:20	keh1
Chromium, dissolved	M200.7 ICP	2	<0.04	U		mg/L	0.04	0.1	03/17/23 8:07	keh1
Cobalt, dissolved	M200.8 ICP-MS	2	0.000947			mg/L	0.0001	0.0005	03/15/23 12:44	gjl
Copper, dissolved	M200.7 ICP	2	<0.02	U		mg/L	0.02	0.1	03/17/23 8:07	keh1
Iron, dissolved	M200.7 ICP	2	<0.12	U		mg/L	0.12	0.3	03/17/23 8:07	keh1
Lead, dissolved	M200.8 ICP-MS	2	0.00021	B		mg/L	0.0002	0.001	03/15/23 12:44	gjl
Lithium, dissolved	M200.7 ICP	2	0.212			mg/L	0.016	0.08	03/17/23 8:07	keh1
Magnesium, dissolved	M200.7 ICP	2	8.32			mg/L	0.4	2	03/17/23 8:07	keh1
Manganese, dissolved	M200.7 ICP	2	0.041	B		mg/L	0.02	0.1	03/17/23 8:07	keh1
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	03/15/23 12:42	mlh
Nickel, dissolved	M200.7 ICP	2	0.0476	B		mg/L	0.016	0.08	03/17/23 8:07	keh1
Potassium, dissolved	M200.7 ICP	2	4.00			mg/L	0.4	2	03/20/23 0:20	keh1
Selenium, dissolved	M200.8 ICP-MS	2	0.00038	B		mg/L	0.0002	0.0005	03/22/23 22:36	kja
Sodium, dissolved	M200.7 ICP	2	967			mg/L	0.4	2	03/17/23 8:07	keh1
Vanadium, dissolved	M200.7 ICP	2	<0.02	U		mg/L	0.02	0.05	03/20/23 0:20	keh1
Zinc, dissolved	M200.7 ICP	2	<0.04	U		mg/L	0.04	0.1	03/20/23 0:20	keh1

GCC Rio Grande
Project ID: 183230
Sample ID: MW-12

ACZ Sample ID: ***L79100-08***
Date Sampled: *03/06/23 14:24*
Date Received: *03/07/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	631			mg/L	2	20	03/11/23 0:00	emk
Carbonate as CaCO3		1	3.1	B		mg/L	2	20	03/11/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	03/11/23 0:00	emk
Total Alkalinity		1	634			mg/L	2	20	03/11/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			04/07/23 0:00	calc
Sum of Anions			45			meq/L			04/07/23 0:00	calc
Sum of Cations			45			meq/L			04/07/23 0:00	calc
Chloride	SM4500Cl-E	25	1020		*	mg/L	25	50	03/09/23 14:37	aps/mrd
Fluoride	SM4500F-C	1	1.77			mg/L	0.15	0.35	03/29/23 14:08	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		93			mg/L	0.5	10	04/07/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		0.092	B		mg/L	0.02	0.1	04/07/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	0.587		*	mg/L	0.02	0.1	03/08/23 0:24	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	0.495		*	mg/L	0.01	0.05	03/08/23 0:24	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	2520			mg/L	20	40	03/13/23 11:37	cm
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	186		*	mg/L	5	25	03/14/23 14:21	gkk
TDS (calculated)	Calculation		2600			mg/L			04/07/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.97						04/07/23 0:00	calc

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1)	EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2)	EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3)	EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4)	EPA SW-846. Test Methods for Evaluating Solid Waste.
(5)	Standard Methods for the Examination of Water and Wastewater.

Comments

(1)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2)	Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3)	Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4)	An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5)	If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

GCC

ACZ Project ID: ***L79100***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG561837													
WG561837PBW1	PBW	03/10/23 16:09				8.9	mg/L		-20	20			
WG561837LCSW3	LCSW	03/10/23 16:29	WC230227-2	820.0001		828.4	mg/L	101	90	110			
WG561837LCSW6	LCSW	03/10/23 20:02	WC230227-2	820.0001		835.3	mg/L	102	90	110			
WG561837PBW2	PBW	03/10/23 20:10				10.2	mg/L		-20	20			
WG561837LCSW9	LCSW	03/10/23 23:40	WC230227-2	820.0001		846.8	mg/L	103	90	110			
WG561837PBW3	PBW	03/10/23 23:48				9.8	mg/L		-20	20			
WG561837LCSW12	LCSW	03/11/23 3:19	WC230227-2	820.0001		842.5	mg/L	103	90	110			
WG561837PBW4	PBW	03/11/23 3:27				10	mg/L		-20	20			
L79100-08DUP	DUP	03/11/23 7:32			634	632.2	mg/L				0	20	
WG561837LCSW15	LCSW	03/11/23 7:52	WC230227-2	820.0001		836.9	mg/L	102	90	110			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562245													
WG562245ICV	ICV	03/17/23 13:15	II230301-1	2		1.99	mg/L	100	95	105			
WG562245ICB	ICB	03/17/23 13:21				U	mg/L		-0.15	0.15			
WG562245PQV	PQV	03/17/23 13:25	II230314-2	.2502		.247	mg/L	99	70	130			
WG562245SIC	SIC	03/17/23 13:28	II230217-1	202.2502		204.5	mg/L	101	1	200			
WG562245LFB	LFB	03/17/23 13:34	II230315-5	1.01		1.041	mg/L	103	85	115			
L79094-02AS	AS	03/17/23 13:44	II230315-5	1.01	.14	1.185	mg/L	103	85	115			
L79094-02ASD	ASD	03/17/23 13:47	II230315-5	1.01	.14	1.243	mg/L	109	85	115	5	20	
WG562245CCV1	CCV	03/17/23 14:07	II230303-1	1		.986	mg/L	99	90	110			
WG562245CCB1	CCB	03/17/23 14:10				U	mg/L		-0.15	0.15			
L79233-02AS	AS	03/17/23 14:33	II230315-5	1.01	U	1.113	mg/L	110	85	115			
L79233-02ASD	ASD	03/17/23 14:36	II230315-5	1.01	U	1.12	mg/L	111	85	115	1	20	
WG562245CCV2	CCV	03/17/23 14:46	II230303-1	1		.978	mg/L	98	90	110			
WG562245CCB2	CCB	03/17/23 14:49				U	mg/L		-0.15	0.15			
WG562245CCV3	CCV	03/17/23 15:08	II230303-1	1		.981	mg/L	98	90	110			
WG562245CCB3	CCB	03/17/23 15:11				U	mg/L		-0.15	0.15			
WG562330													
WG562330ICV	ICV	03/19/23 23:10	II230301-1	2		2.035	mg/L	102	95	105			
WG562330ICB	ICB	03/19/23 23:16				U	mg/L		-0.15	0.15			
WG562330PQV	PQV	03/19/23 23:19	II230314-2	.2502		.234	mg/L	94	70	130			
WG562330SIC	SIC	03/19/23 23:23	II230217-1	202.2502		207.7	mg/L	103	1	200			
WG562330LFB	LFB	03/19/23 23:29	II230317-6	1.01		1.01	mg/L	100	85	115			
WG562330CCV1	CCV	03/20/23 0:01	II230303-1	1		.962	mg/L	96	90	110			
WG562330CCB1	CCB	03/20/23 0:04				U	mg/L		-0.15	0.15			
L79112-02AS	AS	03/20/23 0:37	II230317-6	1.01	U	1.047	mg/L	104	85	115			
WG562330CCV2	CCV	03/20/23 0:40	II230303-1	1		.983	mg/L	98	90	110			
WG562330CCB2	CCB	03/20/23 0:43				U	mg/L		-0.15	0.15			
L79112-02ASD	ASD	03/20/23 0:46	II230317-6	1.01	U	1.118	mg/L	111	85	115	7	20	
WG562330CCV3	CCV	03/20/23 1:02	II230303-1	1		.946	mg/L	95	90	110			
WG562330CCB3	CCB	03/20/23 1:05				U	mg/L		-0.15	0.15			

GCC

ACZ Project ID: ***L79100***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG561984													
WG561984ICV	ICV	03/15/23 11:58	MS221228-3	.05		.04737	mg/L	95	90	110			
WG561984ICB	ICB	03/15/23 12:00				U	mg/L		-0.00044	0.00044			
WG561984LFB	LFB	03/15/23 12:02	MS230220-4	.0501		.0497	mg/L	99	85	115			
WG561984CCV1	CCV	03/15/23 12:26	MS230310-4	.1002		.10218	mg/L	102	90	110			
WG561984CCB1	CCB	03/15/23 12:28				U	mg/L		-0.0006	0.0006			
L79100-05AS	AS	03/15/23 12:30	MS230220-4	.2505	.00109	.25394	mg/L	101	70	130			
L79100-05ASD	ASD	03/15/23 12:33	MS230220-4	.2505	.00109	.26063	mg/L	104	70	130	3	20	
L79100-07AS	AS	03/15/23 12:40	MS230220-4	.0501	U	.04275	mg/L	85	70	130			
L79100-07ASD	ASD	03/15/23 12:42	MS230220-4	.0501	U	.05079	mg/L	101	70	130	17	20	
WG561984CCV2	CCV	03/15/23 12:53	MS230310-4	.1002		.0998	mg/L	100	90	110			
WG561984CCB2	CCB	03/15/23 12:56				U	mg/L		-0.0006	0.0006			
WG561984CCV3	CCV	03/15/23 13:10	MS230310-4	.1002		.10484	mg/L	105	90	110			
WG561984CCB3	CCB	03/15/23 13:12				U	mg/L		-0.0006	0.0006			

Beryllium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562247													
WG562247ICV	ICV	03/17/23 6:56	II230301-1	2		2.016	mg/L	101	95	105			
WG562247ICB	ICB	03/17/23 7:02				U	mg/L		-0.03	0.03			
WG562247PQV	PQV	03/17/23 7:05	II230314-2	.05005		.052	mg/L	104	70	130			
WG562247SIC	SIC	03/17/23 7:08	II230217-1	.1001		.104	mg/L	104	80	120			
WG562247LFB	LFB	03/17/23 7:15	II230315-5	.5005		.572	mg/L	114	85	115			
WG562247CCV1	CCV	03/17/23 7:47	II230303-1	1		.988	mg/L	99	90	110			
WG562247CCB1	CCB	03/17/23 7:50				U	mg/L		-0.03	0.03			
L79103-02AS	AS	03/17/23 8:16	II230315-5	.5005	U	.481	mg/L	96	85	115			
L79103-02ASD	ASD	03/17/23 8:20	II230315-5	.5005	U	.538	mg/L	107	85	115	11	20	
WG562247CCV2	CCV	03/17/23 8:26	II230303-1	1		.977	mg/L	98	90	110			
WG562247CCB2	CCB	03/17/23 8:29				U	mg/L		-0.03	0.03			
WG562247CCV3	CCV	03/17/23 8:49	II230303-1	1		.933	mg/L	93	90	110			
WG562247CCB3	CCB	03/17/23 8:52				U	mg/L		-0.03	0.03			
WG562245													
WG562245ICV	ICV	03/17/23 13:15	II230301-1	2		1.992	mg/L	100	95	105			
WG562245ICB	ICB	03/17/23 13:21				U	mg/L		-0.03	0.03			
WG562245PQV	PQV	03/17/23 13:25	II230314-2	.05005		.051	mg/L	102	70	130			
WG562245SIC	SIC	03/17/23 13:28	II230217-1	.1001		.101	mg/L	101	80	120			
WG562245LFB	LFB	03/17/23 13:34	II230315-5	.5005		.501	mg/L	100	85	115			
L79094-02AS	AS	03/17/23 13:44	II230315-5	.5005	U	.481	mg/L	96	85	115			
L79094-02ASD	ASD	03/17/23 13:47	II230315-5	.5005	U	.532	mg/L	106	85	115	10	20	
WG562245CCV1	CCV	03/17/23 14:07	II230303-1	1		.996	mg/L	100	90	110			
WG562245CCB1	CCB	03/17/23 14:10				U	mg/L		-0.03	0.03			
L79233-02AS	AS	03/17/23 14:33	II230315-5	.5005	U	.495	mg/L	99	85	115			
L79233-02ASD	ASD	03/17/23 14:36	II230315-5	.5005	U	.502	mg/L	100	85	115	1	20	
WG562245CCV2	CCV	03/17/23 14:46	II230303-1	1		.993	mg/L	99	90	110			
WG562245CCB2	CCB	03/17/23 14:49				U	mg/L		-0.03	0.03			
WG562245CCV3	CCV	03/17/23 15:08	II230303-1	1		.993	mg/L	99	90	110			
WG562245CCB3	CCB	03/17/23 15:11				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L79100***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562247													
WG562247ICV	ICV	03/17/23 6:56	II230301-1	2		2.084	mg/L	104	95	105			
WG562247ICB	ICB	03/17/23 7:02				U	mg/L		-0.09	0.09			
WG562247PQV	PQV	03/17/23 7:05	II230314-2	.1001		.109	mg/L	109	70	130			
WG562247SIC	SIC	03/17/23 7:08	II230217-1	.1001		.102	mg/L	102	80	120			
WG562247LFB	LFB	03/17/23 7:15	II230315-5	.5005		.577	mg/L	115	85	115			
WG562247CCV1	CCV	03/17/23 7:47	II230303-1	1		1.015	mg/L	102	90	110			
WG562247CCB1	CCB	03/17/23 7:50				U	mg/L		-0.09	0.09			
L79103-02AS	AS	03/17/23 8:16	II230315-5	.5005	.046	.554	mg/L	101	85	115			
L79103-02ASD	ASD	03/17/23 8:20	II230315-5	.5005	.046	.625	mg/L	116	85	115	12	20	MA
WG562247CCV2	CCV	03/17/23 8:26	II230303-1	1		1.013	mg/L	101	90	110			
WG562247CCB2	CCB	03/17/23 8:29				U	mg/L		-0.09	0.09			
WG562247CCV3	CCV	03/17/23 8:49	II230303-1	1		.981	mg/L	98	90	110			
WG562247CCB3	CCB	03/17/23 8:52				U	mg/L		-0.09	0.09			
WG562245													
WG562245ICV	ICV	03/17/23 13:15	II230301-1	2		2.04	mg/L	102	95	105			
WG562245ICB	ICB	03/17/23 13:21				U	mg/L		-0.09	0.09			
WG562245PQV	PQV	03/17/23 13:25	II230314-2	.1001		.099	mg/L	99	70	130			
WG562245SIC	SIC	03/17/23 13:28	II230217-1	.1001		.095	mg/L	95	80	120			
WG562245LFB	LFB	03/17/23 13:34	II230315-5	.5005		.505	mg/L	101	85	115			
L79094-02AS	AS	03/17/23 13:44	II230315-5	.5005	U	.493	mg/L	99	85	115			
L79094-02ASD	ASD	03/17/23 13:47	II230315-5	.5005	U	.543	mg/L	108	85	115	10	20	
WG562245CCV1	CCV	03/17/23 14:07	II230303-1	1		1.012	mg/L	101	90	110			
WG562245CCB1	CCB	03/17/23 14:10				U	mg/L		-0.09	0.09			
L79233-02AS	AS	03/17/23 14:33	II230315-5	.5005	U	.559	mg/L	112	85	115			
L79233-02ASD	ASD	03/17/23 14:36	II230315-5	.5005	U	.561	mg/L	112	85	115	0	20	
WG562245CCV2	CCV	03/17/23 14:46	II230303-1	1		1.012	mg/L	101	90	110			
WG562245CCB2	CCB	03/17/23 14:49				U	mg/L		-0.09	0.09			
WG562245CCV3	CCV	03/17/23 15:08	II230303-1	1		1.008	mg/L	101	90	110			
WG562245CCB3	CCB	03/17/23 15:11				U	mg/L		-0.09	0.09			

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG561984													
WG561984ICV	ICV	03/15/23 11:58	MS221228-3	.05		.046782	mg/L	94	90	110			
WG561984ICB	ICB	03/15/23 12:00				U	mg/L		-0.00011	0.00011			
WG561984LFB	LFB	03/15/23 12:02	MS230220-4	.05005		.048512	mg/L	97	85	115			
WG561984CCV1	CCV	03/15/23 12:26	MS230310-4	.1001		.097707	mg/L	98	90	110			
WG561984CCB1	CCB	03/15/23 12:28				U	mg/L		-0.00015	0.00015			
L79100-05AS	AS	03/15/23 12:30	MS230220-4	.25025	U	.234077	mg/L	94	70	130			
L79100-05ASD	ASD	03/15/23 12:33	MS230220-4	.25025	U	.235927	mg/L	94	70	130	1	20	
L79100-07AS	AS	03/15/23 12:40	MS230220-4	.05005	U	.042943	mg/L	86	70	130			
L79100-07ASD	ASD	03/15/23 12:42	MS230220-4	.05005	U	.050034	mg/L	100	70	130	15	20	
WG561984CCV2	CCV	03/15/23 12:53	MS230310-4	.1001		.098025	mg/L	98	90	110			
WG561984CCB2	CCB	03/15/23 12:56				U	mg/L		-0.00015	0.00015			
WG561984CCV3	CCV	03/15/23 13:10	MS230310-4	.1001		.101208	mg/L	101	90	110			
WG561984CCB3	CCB	03/15/23 13:12				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: ***L79100***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562245													
WG562245ICV	ICV	03/17/23 13:15	II230301-1	100		97.68	mg/L	98	95	105			
WG562245ICB	ICB	03/17/23 13:21				U	mg/L		-0.3	0.3			
WG562245PQV	PQV	03/17/23 13:25	II230314-2	.504		.55	mg/L	109	70	130			
WG562245SIC	SIC	03/17/23 13:28	II230217-1	202.104		195.3	mg/L	97	1	200			
WG562245LFB	LFB	03/17/23 13:34	II230315-5	67.99026		68.33	mg/L	100	85	115			
L79094-02AS	AS	03/17/23 13:44	II230315-5	67.99026	1.16	71.11	mg/L	103	85	115			
L79094-02ASD	ASD	03/17/23 13:47	II230315-5	67.99026	1.16	73.35	mg/L	106	85	115	3	20	
WG562245CCV1	CCV	03/17/23 14:07	II230303-1	50		48.52	mg/L	97	90	110			
WG562245CCB1	CCB	03/17/23 14:10				U	mg/L		-0.3	0.3			
L79233-02AS	AS	03/17/23 14:33	II230315-5	67.99026	506	538.9	mg/L	48	85	115			M3
L79233-02ASD	ASD	03/17/23 14:36	II230315-5	67.99026	506	528.2	mg/L	33	85	115	2	20	M3
WG562245CCV2	CCV	03/17/23 14:46	II230303-1	50		48.36	mg/L	97	90	110			
WG562245CCB2	CCB	03/17/23 14:49				U	mg/L		-0.3	0.3			
WG562245CCV3	CCV	03/17/23 15:08	II230303-1	50		48.29	mg/L	97	90	110			
WG562245CCB3	CCB	03/17/23 15:11				U	mg/L		-0.3	0.3			
WG562330													
WG562330ICV	ICV	03/19/23 23:10	II230301-1	100		98.49	mg/L	98	95	105			
WG562330ICB	ICB	03/19/23 23:16				U	mg/L		-0.3	0.3			
WG562330PQV	PQV	03/19/23 23:19	II230314-2	.504		.56	mg/L	111	70	130			
WG562330SIC	SIC	03/19/23 23:23	II230217-1	202.104		195.9	mg/L	97	1	200			
WG562330LFB	LFB	03/19/23 23:29	II230317-6	67.99026		66.24	mg/L	97	85	115			
WG562330CCV1	CCV	03/20/23 0:01	II230303-1	50		47.98	mg/L	96	90	110			
WG562330CCB1	CCB	03/20/23 0:04				U	mg/L		-0.3	0.3			
L79112-02AS	AS	03/20/23 0:37	II230317-6	67.99026	6.92	72.46	mg/L	96	85	115			
WG562330CCV2	CCV	03/20/23 0:40	II230303-1	50		47.98	mg/L	96	90	110			
WG562330CCB2	CCB	03/20/23 0:43				U	mg/L		-0.3	0.3			
L79112-02ASD	ASD	03/20/23 0:46	II230317-6	67.99026	6.92	75.88	mg/L	101	85	115	5	20	
WG562330CCV3	CCV	03/20/23 1:02	II230303-1	50		47.94	mg/L	96	90	110			
WG562330CCB3	CCB	03/20/23 1:05				U	mg/L		-0.3	0.3			

GCC

ACZ Project ID: ***L79100***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Chloride SM4500Cl-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG561754													
WG561754ICV	ICV	03/09/23 13:06	WI220502-12	54.945		53.74	mg/L	98	90	110			
WG561754ICB	ICB	03/09/23 13:06				U	mg/L		-3	3			
WG561754LFB	LFB	03/09/23 13:07	WI230202-6	30		29.12	mg/L	97	90	110			
WG561754CCV1	CCV	03/09/23 13:12	WI221021-5	49.95		47.12	mg/L	94	90	110			
WG561754CCB1	CCB	03/09/23 13:13				U	mg/L		-3	3			
WG561754CCV2	CCV	03/09/23 13:18	WI221021-5	49.95		48.42	mg/L	97	90	110			
WG561754CCB2	CCB	03/09/23 13:18				U	mg/L		-3	3			
WG561754CCV3	CCV	03/09/23 13:21	WI221021-5	49.95		49.78	mg/L	100	90	110			
WG561754CCB3	CCB	03/09/23 13:22				U	mg/L		-3	3			
WG561754CCV8	CCV	03/09/23 14:32	WI221021-5	49.95		48.21	mg/L	97	90	110			
WG561754CCB8	CCB	03/09/23 14:32				U	mg/L		-3	3			
L79100-01AS	AS	03/09/23 14:34	25XCL	30	1590	1607.81	mg/L	59	90	110			M3
L79100-02DUP	DUP	03/09/23 14:35			674	646.98	mg/L				4	20	
WG561754CCV9	CCV	03/09/23 14:37	WI221021-5	49.95		48.4	mg/L	97	90	110			
WG561754CCB9	CCB	03/09/23 14:38				U	mg/L		-3	3			
WG561754CCV10	CCV	03/09/23 15:08	WI221021-5	49.95		46.98	mg/L	94	90	110			
WG561754CCB10	CCB	03/09/23 15:08				U	mg/L		-3	3			
WG561754CCV11	CCV	03/09/23 15:09	WI221021-5	49.95		48.49	mg/L	97	90	110			
WG561754CCB11	CCB	03/09/23 15:10				U	mg/L		-3	3			

GCC

ACZ Project ID: ***L79100***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Chromium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562247													
WG562247ICV	ICV	03/17/23 6:56	II230301-1	2		2.028	mg/L	101	95	105			
WG562247ICB	ICB	03/17/23 7:02				U	mg/L		-0.06	0.06			
WG562247PQV	PQV	03/17/23 7:05	II230314-2	.05005		.047	mg/L	94	70	130			
WG562247SIC	SIC	03/17/23 7:08	II230217-1	.10015		.105	mg/L	105	80	120			
WG562247LFB	LFB	03/17/23 7:15	II230315-5	.5005		.566	mg/L	113	85	115			
WG562247CCV1	CCV	03/17/23 7:47	II230303-1	1		.997	mg/L	100	90	110			
WG562247CCB1	CCB	03/17/23 7:50				U	mg/L		-0.06	0.06			
L79103-02AS	AS	03/17/23 8:16	II230315-5	.5005	U	.478	mg/L	96	85	115			
L79103-02ASD	ASD	03/17/23 8:20	II230315-5	.5005	U	.537	mg/L	107	85	115	12	20	
WG562247CCV2	CCV	03/17/23 8:26	II230303-1	1		.982	mg/L	98	90	110			
WG562247CCB2	CCB	03/17/23 8:29				U	mg/L		-0.06	0.06			
WG562247CCV3	CCV	03/17/23 8:49	II230303-1	1		.934	mg/L	93	90	110			
WG562247CCB3	CCB	03/17/23 8:52				U	mg/L		-0.06	0.06			
WG562331													
WG562331ICV	ICV	03/20/23 1:22	II230301-1	2		1.988	mg/L	99	95	105			
WG562331ICB	ICB	03/20/23 1:28				U	mg/L		-0.06	0.06			
WG562331PQV	PQV	03/20/23 1:31	II230314-2	.05005		.043	mg/L	86	70	130			
WG562331SIC	SIC	03/20/23 1:34	II230217-1	.10015		.096	mg/L	96	80	120			
WG562331LFB	LFB	03/20/23 1:41	II230317-6	.5005		.51	mg/L	102	85	115			
L79094-02AS	AS	03/20/23 1:50	II230317-6	.5005	U	.492	mg/L	98	85	115			
L79094-02ASD	ASD	03/20/23 1:54	II230317-6	.5005	U	.514	mg/L	103	85	115	4	20	
WG562331CCV1	CCV	03/20/23 2:13	II230303-1	1		.972	mg/L	97	90	110			
WG562331CCB1	CCB	03/20/23 2:16				U	mg/L		-0.06	0.06			
L79233-03AS	AS	03/20/23 2:42	II230317-6	.5005	U	.492	mg/L	98	85	115			
L79233-03ASD	ASD	03/20/23 2:46	II230317-6	.5005	U	.495	mg/L	99	85	115	1	20	
WG562331CCV2	CCV	03/20/23 2:52	II230303-1	1		.978	mg/L	98	90	110			
WG562331CCB2	CCB	03/20/23 2:55				U	mg/L		-0.06	0.06			
WG562331CCV3	CCV	03/20/23 3:14	II230303-1	1		.969	mg/L	97	90	110			
WG562331CCB3	CCB	03/20/23 3:18				U	mg/L		-0.06	0.06			

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG561984													
WG561984ICV	ICV	03/15/23 11:58	MS221228-3	.05		.050074	mg/L	100	90	110			
WG561984ICB	ICB	03/15/23 12:00				U	mg/L		-0.00011	0.00011			
WG561984LFB	LFB	03/15/23 12:02	MS230220-4	.05005		.05172	mg/L	103	85	115			
WG561984CCV1	CCV	03/15/23 12:26	MS230310-4	.1001		.10501	mg/L	105	90	110			
WG561984CCB1	CCB	03/15/23 12:28				U	mg/L		-0.00015	0.00015			
L79100-05AS	AS	03/15/23 12:30	MS230220-4	.25025	.0633	.316366	mg/L	101	70	130			
L79100-05ASD	ASD	03/15/23 12:33	MS230220-4	.25025	.0633	.31805	mg/L	102	70	130	1	20	
L79100-07AS	AS	03/15/23 12:40	MS230220-4	.05005	.000426	.047629	mg/L	94	70	130			
L79100-07ASD	ASD	03/15/23 12:42	MS230220-4	.05005	.000426	.055933	mg/L	111	70	130	16	20	
WG561984CCV2	CCV	03/15/23 12:53	MS230310-4	.1001		.104458	mg/L	104	90	110			
WG561984CCB2	CCB	03/15/23 12:56				U	mg/L		-0.00015	0.00015			
WG561984CCV3	CCV	03/15/23 13:10	MS230310-4	.1001		.107635	mg/L	108	90	110			
WG561984CCB3	CCB	03/15/23 13:12				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: ***L79100***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Copper, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562247													
WG562247ICV	ICV	03/17/23 6:56	II230301-1	2		2	mg/L	100	95	105			
WG562247ICB	ICB	03/17/23 7:02				U	mg/L		-0.03	0.03			
WG562247PQV	PQV	03/17/23 7:05	II230314-2	.05005		.051	mg/L	102	70	130			
WG562247SIC	SIC	03/17/23 7:08	II230217-1	.1001		.103	mg/L	103	80	120			
WG562247LFB	LFB	03/17/23 7:15	II230315-5	.5005		.572	mg/L	114	85	115			
WG562247CCV1	CCV	03/17/23 7:47	II230303-1	1		.979	mg/L	98	90	110			
WG562247CCB1	CCB	03/17/23 7:50				U	mg/L		-0.03	0.03			
L79103-02AS	AS	03/17/23 8:16	II230315-5	.5005	.057	.535	mg/L	96	85	115			
L79103-02ASD	ASD	03/17/23 8:20	II230315-5	.5005	.057	.593	mg/L	107	85	115	10	20	
WG562247CCV2	CCV	03/17/23 8:26	II230303-1	1		.972	mg/L	97	90	110			
WG562247CCB2	CCB	03/17/23 8:29				U	mg/L		-0.03	0.03			
WG562247CCV3	CCV	03/17/23 8:49	II230303-1	1		.933	mg/L	93	90	110			
WG562247CCB3	CCB	03/17/23 8:52				U	mg/L		-0.03	0.03			
WG562245													
WG562245ICV	ICV	03/17/23 13:15	II230301-1	2		1.994	mg/L	100	95	105			
WG562245ICB	ICB	03/17/23 13:21				U	mg/L		-0.03	0.03			
WG562245PQV	PQV	03/17/23 13:25	II230314-2	.05005		.05	mg/L	100	70	130			
WG562245SIC	SIC	03/17/23 13:28	II230217-1	.1001		.096	mg/L	96	80	120			
WG562245LFB	LFB	03/17/23 13:34	II230315-5	.5005		.491	mg/L	98	85	115			
L79094-02AS	AS	03/17/23 13:44	II230315-5	.5005	U	.477	mg/L	95	85	115			
L79094-02ASD	ASD	03/17/23 13:47	II230315-5	.5005	U	.522	mg/L	104	85	115	9	20	
WG562245CCV1	CCV	03/17/23 14:07	II230303-1	1		.998	mg/L	100	90	110			
WG562245CCB1	CCB	03/17/23 14:10				U	mg/L		-0.03	0.03			
L79233-02AS	AS	03/17/23 14:33	II230315-5	.5005	U	.509	mg/L	102	85	115			
L79233-02ASD	ASD	03/17/23 14:36	II230315-5	.5005	U	.507	mg/L	101	85	115	0	20	
WG562245CCV2	CCV	03/17/23 14:46	II230303-1	1		.987	mg/L	99	90	110			
WG562245CCB2	CCB	03/17/23 14:49				U	mg/L		-0.03	0.03			
WG562245CCV3	CCV	03/17/23 15:08	II230303-1	1		.996	mg/L	100	90	110			
WG562245CCB3	CCB	03/17/23 15:11				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L79100***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Fluoride SM4500F-C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562898													
WG562898ICV	ICV	03/29/23 11:09	WC230329-1	2.002		2.07	mg/L	103	90	110			
WG562898ICB	ICB	03/29/23 11:15				U	mg/L		-0.3	0.3			
L79035-01AS	AS	03/29/23 11:33	WC221227-7	5.02	.89	4.15	mg/L	65	90	110			M2
L79035-01ASD	ASD	03/29/23 11:39	WC221227-7	5.02	.89	4.19	mg/L	66	90	110	1	20	M2
WG562898LFB3	LFB	03/29/23 12:20	WC221227-7	5.02		5.31	mg/L	106	90	110			
WG562898CCB1	CCB	03/29/23 12:51				U	mg/L		-0.3	0.3			
WG562898CCV2	CCV	03/29/23 13:32	WC230329-1	2.002		2.184	mg/L	109	90	110			
WG562898CCB2	CCB	03/29/23 13:40				U	mg/L		-0.3	0.3			
L79100-05AS	AS	03/29/23 13:53	WC221227-7	5.02	.52	5.19	mg/L	93	90	110			
L79100-05ASD	ASD	03/29/23 13:56	WC221227-7	5.02	.52	5.09	mg/L	91	90	110	2	20	
WG562898CCV3	CCV	03/29/23 14:17	WC230329-1	2.002		2.065	mg/L	103	90	110			
WG562898CCB3	CCB	03/29/23 14:25				U	mg/L		-0.3	0.3			
WG562898CCV4	CCV	03/29/23 14:49	WC230329-1	2.002		1.989	mg/L	99	90	110			
WG562898CCB4	CCB	03/29/23 14:57				U	mg/L		-0.3	0.3			
WG563213													
WG563213ICV	ICV	03/31/23 20:31	WC230329-1	2.002		2.1	mg/L	105	90	110			
WG563213ICB	ICB	03/31/23 20:39				U	mg/L		-0.3	0.3			
WG563213PQV	PQV	03/31/23 20:44	WC230330-1	.3514		.37	mg/L	105	70	130			
WG563213LFB1	LFB	03/31/23 20:48	WC221227-7	5.02		5.31	mg/L	106	90	110			
WG563213CCV1	CCV	03/31/23 21:37	WC230329-1	2.002		2.175	mg/L	109	90	110			
WG563213CCB1	CCB	03/31/23 21:45				U	mg/L		-0.3	0.3			
WG563213CCB2	CCB	03/31/23 22:56				U	mg/L		-0.3	0.3			
WG563213LFB2	LFB	03/31/23 23:30	WC221227-7	5.02		5.24	mg/L	104	90	110			
WG563213CCV3	CCV	03/31/23 23:50	WC230329-1	2.002		2.195	mg/L	110	90	110			
WG563213CCB3	CCB	03/31/23 23:58				U	mg/L		-0.3	0.3			
L78017-05AS	AS	04/01/23 0:51	WC221227-7	5.02	U	5.12	mg/L	102	90	110			
WG563213CCB4	CCB	04/01/23 1:03				U	mg/L		-0.3	0.3			
L78017-05ASD	ASD	04/01/23 1:08	WC221227-7	5.02	U	5.09	mg/L	101	90	110	1	20	
WG563213CCV5	CCV	04/01/23 1:56	WC230329-1	2.002		2.185	mg/L	109	90	110			
WG563213CCB5	CCB	04/01/23 2:04				U	mg/L		-0.3	0.3			
WG563267													
WG563267ICV	ICV	04/03/23 11:38	WC230329-1	2.002		2.04	mg/L	102	90	110			
WG563267ICB	ICB	04/03/23 11:43				U	mg/L		-0.3	0.3			
WG563267PQV	PQV	04/03/23 11:48	WC230330-1	.3514		.37	mg/L	105	70	130			
WG563267LFB	LFB	04/03/23 11:52	WC221227-7	5.02		4.91	mg/L	98	90	110			
L49989-213AS	AS	04/03/23 12:01	WC221227-7	5.02	U	5.05	mg/L	101	90	110			
L49989-213ASD	ASD	04/03/23 12:06	WC221227-7	5.02	U	5.02	mg/L	100	90	110	1	20	
WG563267CCV1	CCV	04/03/23 12:38	WC230329-1	2.002		2.071	mg/L	103	90	110			
WG563267CCB1	CCB	04/03/23 12:46				U	mg/L		-0.3	0.3			
WG563267CCV2	CCV	04/03/23 13:45	WC230329-1	2.002		2.18	mg/L	109	90	110			
WG563267CCB2	CCB	04/03/23 13:53				U	mg/L		-0.3	0.3			
WG563267CCV3	CCV	04/03/23 14:27	WC230329-1	2.002		2.129	mg/L	106	90	110			
WG563267CCB3	CCB	04/03/23 14:35				U	mg/L		-0.3	0.3			

GCC

ACZ Project ID: ***L79100***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Iron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562247													
WG562247ICV	ICV	03/17/23 6:56	II230301-1	2		1.934	mg/L	97	95	105			
WG562247ICB	ICB	03/17/23 7:02				U	mg/L		-0.18	0.18			
WG562247PQV	PQV	03/17/23 7:05	II230314-2	.1506		.148	mg/L	98	70	130			
WG562247SIC	SIC	03/17/23 7:08	II230217-1	200.9506		187.9	mg/L	94	1	200			
WG562247LFB	LFB	03/17/23 7:15	II230315-5	1.004		1.101	mg/L	110	85	115			
WG562247CCV1	CCV	03/17/23 7:47	II230303-1	1		.955	mg/L	96	90	110			
WG562247CCB1	CCB	03/17/23 7:50				U	mg/L		-0.18	0.18			
L79103-02AS	AS	03/17/23 8:16	II230315-5	1.004	U	.926	mg/L	92	85	115			
L79103-02ASD	ASD	03/17/23 8:20	II230315-5	1.004	U	1.041	mg/L	104	85	115	12	20	
WG562247CCV2	CCV	03/17/23 8:26	II230303-1	1		.945	mg/L	95	90	110			
WG562247CCB2	CCB	03/17/23 8:29				U	mg/L		-0.18	0.18			
WG562247CCV3	CCV	03/17/23 8:49	II230303-1	1		.901	mg/L	90	90	110			
WG562247CCB3	CCB	03/17/23 8:52				U	mg/L		-0.18	0.18			
WG562245													
WG562245ICV	ICV	03/17/23 13:15	II230301-1	2		1.91	mg/L	96	95	105			
WG562245ICB	ICB	03/17/23 13:21				U	mg/L		-0.18	0.18			
WG562245PQV	PQV	03/17/23 13:25	II230314-2	.1506		.141	mg/L	94	70	130			
WG562245SIC	SIC	03/17/23 13:28	II230217-1	200.9506		187.5	mg/L	93	1	200			
WG562245LFB	LFB	03/17/23 13:34	II230315-5	1.004		.96	mg/L	96	85	115			
L79094-02AS	AS	03/17/23 13:44	II230315-5	1.004	.067	.991	mg/L	92	85	115			
L79094-02ASD	ASD	03/17/23 13:47	II230315-5	1.004	.067	1.085	mg/L	101	85	115	9	20	
WG562245CCV1	CCV	03/17/23 14:07	II230303-1	1		.963	mg/L	96	90	110			
WG562245CCB1	CCB	03/17/23 14:10				U	mg/L		-0.18	0.18			
L79233-02AS	AS	03/17/23 14:33	II230315-5	1.004	U	.962	mg/L	96	85	115			
L79233-02ASD	ASD	03/17/23 14:36	II230315-5	1.004	U	.966	mg/L	96	85	115	0	20	
WG562245CCV2	CCV	03/17/23 14:46	II230303-1	1		.942	mg/L	94	90	110			
WG562245CCB2	CCB	03/17/23 14:49				U	mg/L		-0.18	0.18			
WG562245CCV3	CCV	03/17/23 15:08	II230303-1	1		.951	mg/L	95	90	110			
WG562245CCB3	CCB	03/17/23 15:11				U	mg/L		-0.18	0.18			

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG561984													
WG561984ICV	ICV	03/15/23 11:58	MS221228-3	.05		.04902	mg/L	98	90	110			
WG561984ICB	ICB	03/15/23 12:00				U	mg/L		-0.00022	0.00022			
WG561984LFB	LFB	03/15/23 12:02	MS230220-4	.05005		.05013	mg/L	100	85	115			
WG561984CCV1	CCV	03/15/23 12:26	MS230310-4	.25025		.25272	mg/L	101	90	110			
WG561984CCB1	CCB	03/15/23 12:28				U	mg/L		-0.0003	0.0003			
L79100-05AS	AS	03/15/23 12:30	MS230220-4	.25025	U	.25859	mg/L	103	70	130			
L79100-05ASD	ASD	03/15/23 12:33	MS230220-4	.25025	U	.2642	mg/L	106	70	130	2	20	
L79100-07AS	AS	03/15/23 12:40	MS230220-4	.05005	U	.0495	mg/L	99	70	130			
L79100-07ASD	ASD	03/15/23 12:42	MS230220-4	.05005	U	.05799	mg/L	116	70	130	16	20	
WG561984CCV2	CCV	03/15/23 12:53	MS230310-4	.25025		.25416	mg/L	102	90	110			
WG561984CCB2	CCB	03/15/23 12:56				U	mg/L		-0.0003	0.0003			
WG561984CCV3	CCV	03/15/23 13:10	MS230310-4	.25025		.25814	mg/L	103	90	110			
WG561984CCB3	CCB	03/15/23 13:12				U	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: ***L79100***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562247													
WG562247ICV	ICV	03/17/23 6:56	II230301-1	2		1.9728	mg/L	99	95	105			
WG562247ICB	ICB	03/17/23 7:02				U	mg/L		-0.024	0.024			
WG562247PQV	PQV	03/17/23 7:05	II230314-2	.03992		.0386	mg/L	97	70	130			
WG562247SIC	SIC	03/17/23 7:08	II230217-1	.0998		.1002	mg/L	100	80	120			
WG562247LFB	LFB	03/17/23 7:15	II230315-5	1.003		1.089	mg/L	109	85	115			
WG562247CCV1	CCV	03/17/23 7:47	II230303-1	1		.9573	mg/L	96	90	110			
WG562247CCB1	CCB	03/17/23 7:50				U	mg/L		-0.024	0.024			
L79103-02AS	AS	03/17/23 8:16	II230315-5	1.003	.0267	1.008	mg/L	98	85	115			
L79103-02ASD	ASD	03/17/23 8:20	II230315-5	1.003	.0267	1.041	mg/L	101	85	115	3	20	
WG562247CCV2	CCV	03/17/23 8:26	II230303-1	1		.9473	mg/L	95	90	110			
WG562247CCB2	CCB	03/17/23 8:29				U	mg/L		-0.024	0.024			
WG562247CCV3	CCV	03/17/23 8:49	II230303-1	1		.9074	mg/L	91	90	110			
WG562247CCB3	CCB	03/17/23 8:52				U	mg/L		-0.024	0.024			
WG562245													
WG562245ICV	ICV	03/17/23 13:15	II230301-1	2		1.9535	mg/L	98	95	105			
WG562245ICB	ICB	03/17/23 13:21				U	mg/L		-0.024	0.024			
WG562245PQV	PQV	03/17/23 13:25	II230314-2	.03992		.0401	mg/L	100	70	130			
WG562245SIC	SIC	03/17/23 13:28	II230217-1	.0998		.0918	mg/L	92	80	120			
WG562245LFB	LFB	03/17/23 13:34	II230315-5	1.003		.9384	mg/L	94	85	115			
L79094-02AS	AS	03/17/23 13:44	II230315-5	1.003	U	.9664	mg/L	96	85	115			
L79094-02ASD	ASD	03/17/23 13:47	II230315-5	1.003	U	1.022	mg/L	102	85	115	6	20	
WG562245CCV1	CCV	03/17/23 14:07	II230303-1	1		.9692	mg/L	97	90	110			
WG562245CCB1	CCB	03/17/23 14:10				U	mg/L		-0.024	0.024			
L79233-02AS	AS	03/17/23 14:33	II230315-5	1.003	.0331	1.038	mg/L	100	85	115			
L79233-02ASD	ASD	03/17/23 14:36	II230315-5	1.003	.0331	1.062	mg/L	103	85	115	2	20	
WG562245CCV2	CCV	03/17/23 14:46	II230303-1	1		.9677	mg/L	97	90	110			
WG562245CCB2	CCB	03/17/23 14:49				U	mg/L		-0.024	0.024			
WG562245CCV3	CCV	03/17/23 15:08	II230303-1	1		.9701	mg/L	97	90	110			
WG562245CCB3	CCB	03/17/23 15:11				U	mg/L		-0.024	0.024			

GCC

ACZ Project ID: ***L79100***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562247													
WG562247ICV	ICV	03/17/23 6:56	II230301-1	100		97.24	mg/L	97	95	105			
WG562247ICB	ICB	03/17/23 7:02				U	mg/L		-0.6	0.6			
WG562247PQV	PQV	03/17/23 7:05	II230314-2	1.001		1.16	mg/L	116	70	130			
WG562247SIC	SIC	03/17/23 7:08	II230217-1	201.261		201.1	mg/L	100	1	200			
WG562247LFB	LFB	03/17/23 7:15	II230315-5	49.9979		56.23	mg/L	112	85	115			
WG562247CCV1	CCV	03/17/23 7:47	II230303-1	50		47.6	mg/L	95	90	110			
WG562247CCB1	CCB	03/17/23 7:50				U	mg/L		-0.6	0.6			
L79103-02AS	AS	03/17/23 8:16	II230315-5	49.9979	26.4	75.73	mg/L	99	85	115			
L79103-02ASD	ASD	03/17/23 8:20	II230315-5	49.9979	26.4	77.2	mg/L	102	85	115	2	20	
WG562247CCV2	CCV	03/17/23 8:26	II230303-1	50		46.92	mg/L	94	90	110			
WG562247CCB2	CCB	03/17/23 8:29				U	mg/L		-0.6	0.6			
WG562247CCV3	CCV	03/17/23 8:49	II230303-1	50		44.83	mg/L	90	90	110			
WG562247CCB3	CCB	03/17/23 8:52				U	mg/L		-0.6	0.6			
WG562245													
WG562245ICV	ICV	03/17/23 13:15	II230301-1	100		95.56	mg/L	96	95	105			
WG562245ICB	ICB	03/17/23 13:21				.26	mg/L		-0.6	0.6			
WG562245PQV	PQV	03/17/23 13:25	II230314-2	1.001		1.18	mg/L	118	70	130			
WG562245SIC	SIC	03/17/23 13:28	II230217-1	201.261		197.8	mg/L	98	1	200			
WG562245LFB	LFB	03/17/23 13:34	II230315-5	49.9979		48.87	mg/L	98	85	115			
L79094-02AS	AS	03/17/23 13:44	II230315-5	49.9979	.96	50.89	mg/L	100	85	115			
L79094-02ASD	ASD	03/17/23 13:47	II230315-5	49.9979	.96	52.67	mg/L	103	85	115	3	20	
WG562245CCV1	CCV	03/17/23 14:07	II230303-1	50		47.28	mg/L	95	90	110			
WG562245CCB1	CCB	03/17/23 14:10				U	mg/L		-0.6	0.6			
L79233-02AS	AS	03/17/23 14:33	II230315-5	49.9979	54.4	100.6	mg/L	92	85	115			
L79233-02ASD	ASD	03/17/23 14:36	II230315-5	49.9979	54.4	100.3	mg/L	92	85	115	0	20	
WG562245CCV2	CCV	03/17/23 14:46	II230303-1	50		47.05	mg/L	94	90	110			
WG562245CCB2	CCB	03/17/23 14:49				U	mg/L		-0.6	0.6			
WG562245CCV3	CCV	03/17/23 15:08	II230303-1	50		46.7	mg/L	93	90	110			
WG562245CCB3	CCB	03/17/23 15:11				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L79100***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Manganese, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562247													
WG562247ICV	ICV	03/17/23 6:56	II230301-1	2		1.97	mg/L	99	95	105			
WG562247ICB	ICB	03/17/23 7:02				U	mg/L		-0.03	0.03			
WG562247PQV	PQV	03/17/23 7:05	II230314-2	.0498		.049	mg/L	98	70	130			
WG562247SIC	SIC	03/17/23 7:08	II230217-1	49.9998		49.47	mg/L	99	1	200			
WG562247LFB	LFB	03/17/23 7:15	II230315-5	.4995		.56	mg/L	112	85	115			
WG562247CCV1	CCV	03/17/23 7:47	II230303-1	1		.969	mg/L	97	90	110			
WG562247CCB1	CCB	03/17/23 7:50				U	mg/L		-0.03	0.03			
L79103-02AS	AS	03/17/23 8:16	II230315-5	.4995	U	.473	mg/L	95	85	115			
L79103-02ASD	ASD	03/17/23 8:20	II230315-5	.4995	U	.529	mg/L	106	85	115	11	20	
WG562247CCV2	CCV	03/17/23 8:26	II230303-1	1		.957	mg/L	96	90	110			
WG562247CCB2	CCB	03/17/23 8:29				U	mg/L		-0.03	0.03			
WG562247CCV3	CCV	03/17/23 8:49	II230303-1	1		.914	mg/L	91	90	110			
WG562247CCB3	CCB	03/17/23 8:52				U	mg/L		-0.03	0.03			
WG562245													
WG562245ICV	ICV	03/17/23 13:15	II230301-1	2		1.943	mg/L	97	95	105			
WG562245ICB	ICB	03/17/23 13:21				U	mg/L		-0.03	0.03			
WG562245PQV	PQV	03/17/23 13:25	II230314-2	.0498		.048	mg/L	96	70	130			
WG562245SIC	SIC	03/17/23 13:28	II230217-1	49.9998		47.49	mg/L	95	1	200			
WG562245LFB	LFB	03/17/23 13:34	II230315-5	.4995		.491	mg/L	98	85	115			
L79094-02AS	AS	03/17/23 13:44	II230315-5	.4995	.036	.505	mg/L	94	85	115			
L79094-02ASD	ASD	03/17/23 13:47	II230315-5	.4995	.036	.558	mg/L	105	85	115	10	20	
WG562245CCV1	CCV	03/17/23 14:07	II230303-1	1		.981	mg/L	98	90	110			
WG562245CCB1	CCB	03/17/23 14:10				U	mg/L		-0.03	0.03			
L79233-02AS	AS	03/17/23 14:33	II230315-5	.4995	.02	.495	mg/L	95	85	115			
L79233-02ASD	ASD	03/17/23 14:36	II230315-5	.4995	.02	.503	mg/L	97	85	115	2	20	
WG562245CCV2	CCV	03/17/23 14:46	II230303-1	1		.971	mg/L	97	90	110			
WG562245CCB2	CCB	03/17/23 14:49				U	mg/L		-0.03	0.03			
WG562245CCV3	CCV	03/17/23 15:08	II230303-1	1		.97	mg/L	97	90	110			
WG562245CCB3	CCB	03/17/23 15:11				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L79100***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury, dissolved M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG561626													
WG561626ICV	ICV	03/09/23 13:50	HG230227-3	.005005		.00516	mg/L	103	90	110			
WG561626ICB	ICB	03/09/23 13:51				U	mg/L		-0.0006	0.0006			
WG561715													
WG561715CCV1	CCV	03/09/23 14:39	HG230227-3	.005005		.00504	mg/L	101	90	110			
WG561715CCB1	CCB	03/09/23 14:40				U	mg/L		-0.0002	0.0002			
WG561715PQV	PQV	03/09/23 14:41	HG230227-5	.001001		.00105	mg/L	105	70	130			
WG561715LRB	LRB	03/09/23 14:42				U	mg/L		-0.00044	0.00044			
WG561715LFB	LFB	03/09/23 14:43	HG230227-6	.002002		.002	mg/L	100	85	115			
WG561715CCV2	CCV	03/09/23 14:50	HG230227-3	.005005		.00491	mg/L	98	90	110			
WG561715CCB2	CCB	03/09/23 14:51				U	mg/L		-0.0002	0.0002			
WG561715CCV3	CCV	03/09/23 15:01	HG230227-3	.005005		.00474	mg/L	95	90	110			
WG561715CCB3	CCB	03/09/23 15:02				U	mg/L		-0.0002	0.0002			
L79100-01LFM	LFM	03/09/23 15:04	HG230227-6	.002002	U	.00062	mg/L	31	85	115			M2
L79100-01LFMD	LFMD	03/09/23 15:05	HG230227-6	.002002	U	.00065	mg/L	32	85	115	5	20	M2
WG561715CCV4	CCV	03/09/23 15:08	HG230227-3	.005005		.00471	mg/L	94	90	110			
WG561715CCB4	CCB	03/09/23 15:09				U	mg/L		-0.0002	0.0002			
WG561715CCB5	CCB	03/09/23 15:25				U	mg/L		-0.0002	0.0002			
WG561992													
WG561992ICV	ICV	03/15/23 11:36	HG230313-3	.005005		.00515	mg/L	103	95	105			
WG561992ICB	ICB	03/15/23 11:37				U	mg/L		-0.0002	0.0002			
WG561995													
WG561995CCV1	CCV	03/15/23 12:16	HG230313-3	.005005		.00508	mg/L	101	90	110			
WG561995CCB1	CCB	03/15/23 12:17				U	mg/L		-0.0002	0.0002			
WG561995PQV	PQV	03/15/23 12:18	HG230313-5	.001001		.00098	mg/L	98	70	130			
WG561995LRB	LRB	03/15/23 12:19				U	mg/L		-0.00044	0.00044			
WG561995LFB	LFB	03/15/23 12:20	HG230313-6	.002002		.00195	mg/L	97	85	115			
WG561995CCV2	CCV	03/15/23 12:28	HG230313-3	.005005		.00516	mg/L	103	90	110			
WG561995CCB2	CCB	03/15/23 12:28				U	mg/L		-0.0002	0.0002			
L79100-07LFM	LFM	03/15/23 12:38	HG230313-6	.002002	U	.002	mg/L	100	85	115			
WG561995CCV3	CCV	03/15/23 12:39	HG230313-3	.005005		.00513	mg/L	102	90	110			
WG561995CCB3	CCB	03/15/23 12:40				U	mg/L		-0.0002	0.0002			
L79100-07LFMD	LFMD	03/15/23 12:41	HG230313-6	.002002	U	.00198	mg/L	99	85	115	1	20	
WG561995CCV4	CCV	03/15/23 12:47	HG230313-3	.005005		.00501	mg/L	100	90	110			
WG561995CCB4	CCB	03/15/23 12:48				U	mg/L		-0.0002	0.0002			

GCC

ACZ Project ID: ***L79100***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nickel, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562247													
WG562247ICV	ICV	03/17/23 6:56	II230301-1	2.002		1.9965	mg/L	100	95	105			
WG562247ICB	ICB	03/17/23 7:02				U	mg/L		-0.024	0.024			
WG562247PQV	PQV	03/17/23 7:05	II230314-2	.04016		.04	mg/L	100	70	130			
WG562247SIC	SIC	03/17/23 7:08	II230217-1	.1004		.0943	mg/L	94	80	120			
WG562247LFB	LFB	03/17/23 7:15	II230315-5	.5		.567	mg/L	113	85	115			
WG562247CCV1	CCV	03/17/23 7:47	II230303-1	1.001		.977	mg/L	98	90	110			
WG562247CCB1	CCB	03/17/23 7:50				U	mg/L		-0.024	0.024			
L79103-02AS	AS	03/17/23 8:16	II230315-5	.5	U	.471	mg/L	94	85	115			
L79103-02ASD	ASD	03/17/23 8:20	II230315-5	.5	U	.5365	mg/L	107	85	115	13	20	
WG562247CCV2	CCV	03/17/23 8:26	II230303-1	1.001		.9749	mg/L	97	90	110			
WG562247CCB2	CCB	03/17/23 8:29				U	mg/L		-0.024	0.024			
WG562247CCV3	CCV	03/17/23 8:49	II230303-1	1.001		.9327	mg/L	93	90	110			
WG562247CCB3	CCB	03/17/23 8:52				U	mg/L		-0.024	0.024			
WG562245													
WG562245ICV	ICV	03/17/23 13:15	II230301-1	2.002		1.9495	mg/L	97	95	105			
WG562245ICB	ICB	03/17/23 13:21				U	mg/L		-0.024	0.024			
WG562245PQV	PQV	03/17/23 13:25	II230314-2	.04016		.0446	mg/L	111	70	130			
WG562245SIC	SIC	03/17/23 13:28	II230217-1	.1004		.0893	mg/L	89	80	120			
WG562245LFB	LFB	03/17/23 13:34	II230315-5	.5		.4916	mg/L	98	85	115			
L79094-02AS	AS	03/17/23 13:44	II230315-5	.5	U	.478	mg/L	96	85	115			
L79094-02ASD	ASD	03/17/23 13:47	II230315-5	.5	U	.5196	mg/L	104	85	115	8	20	
WG562245CCV1	CCV	03/17/23 14:07	II230303-1	1.001		.9854	mg/L	98	90	110			
WG562245CCB1	CCB	03/17/23 14:10				U	mg/L		-0.024	0.024			
L79233-02AS	AS	03/17/23 14:33	II230315-5	.5	U	.4998	mg/L	100	85	115			
L79233-02ASD	ASD	03/17/23 14:36	II230315-5	.5	U	.4992	mg/L	100	85	115	0	20	
WG562245CCV2	CCV	03/17/23 14:46	II230303-1	1.001		.9689	mg/L	97	90	110			
WG562245CCB2	CCB	03/17/23 14:49				U	mg/L		-0.024	0.024			
WG562245CCV3	CCV	03/17/23 15:08	II230303-1	1.001		.9753	mg/L	97	90	110			
WG562245CCB3	CCB	03/17/23 15:11				U	mg/L		-0.024	0.024			

GCC

ACZ Project ID: ***L79100***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nitrate/Nitrite as N M353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG561594													
WG561594ICV	ICV	03/07/23 23:46	WI230301-5	2.416		2.384	mg/L	99	90	110			
WG561594ICB	ICB	03/07/23 23:47				U	mg/L		-0.02	0.02			
WG561594LFB	LFB	03/07/23 23:51	WI230228-3	2		2.028	mg/L	101	90	110			
WG561594CCV1	CCV	03/08/23 0:01	WI230307-1	2		2.038	mg/L	102	90	110			
WG561594CCB1	CCB	03/08/23 0:05				U	mg/L		-0.02	0.02			
L79100-04AS	AS	03/08/23 0:13	WI230228-3	2	.276	2.394	mg/L	106	90	110			
L79100-05DUP	DUP	03/08/23 0:16			U	U	mg/L				0	20	RA
WG561594CCV2	CCV	03/08/23 0:18	WI230307-1	2		2.027	mg/L	101	90	110			
WG561594CCB2	CCB	03/08/23 0:22				U	mg/L		-0.02	0.02			
WG561594CCV3	CCV	03/08/23 0:27	WI230307-1	2		2.037	mg/L	102	90	110			
WG561594CCB3	CCB	03/08/23 0:31				U	mg/L		-0.02	0.02			
WG561594CCV4	CCV	03/08/23 0:35	WI230307-1	2		2.022	mg/L	101	90	110			
WG561594CCB4	CCB	03/08/23 0:38				U	mg/L		-0.02	0.02			
L79058-01AS	AS	03/08/23 0:41	WI230228-3	10	5.06	15.413	mg/L	104	90	110			
L79058-02DUP	DUP	03/08/23 0:43			5	4.964	mg/L				1	20	
WG561594CCV5	CCV	03/08/23 0:47	WI230307-1	2		2.026	mg/L	101	90	110			
WG561594CCB5	CCB	03/08/23 0:50				U	mg/L		-0.02	0.02			

Nitrite as N M353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG561594													
WG561594ICV	ICV	03/07/23 23:46	WI230301-5	.608		.593	mg/L	98	90	110			
WG561594ICB	ICB	03/07/23 23:47				U	mg/L		-0.01	0.01			
WG561594LFB	LFB	03/07/23 23:51	WI230228-3	1		1.021	mg/L	102	90	110			
L79058-01AS	AS	03/07/23 23:54	WI230228-3	1	.36	1.383	mg/L	102	90	110			
L79058-02DUP	DUP	03/07/23 23:56			.342	.341	mg/L				0	20	
WG561594CCV1	CCV	03/08/23 0:01	WI230307-1	1		.996	mg/L	100	90	110			
WG561594CCB1	CCB	03/08/23 0:05				U	mg/L		-0.01	0.01			
L79100-04AS	AS	03/08/23 0:13	WI230228-3	1	.013	1.097	mg/L	108	90	110			
L79100-05DUP	DUP	03/08/23 0:16			U	U	mg/L				0	20	RA
WG561594CCV2	CCV	03/08/23 0:18	WI230307-1	1		.995	mg/L	100	90	110			
WG561594CCB2	CCB	03/08/23 0:22				U	mg/L		-0.01	0.01			
WG561594CCV3	CCV	03/08/23 0:27	WI230307-1	1		1.007	mg/L	101	90	110			
WG561594CCB3	CCB	03/08/23 0:31				U	mg/L		-0.01	0.01			

GCC

ACZ Project ID: ***L79100***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562245													
WG562245ICV	ICV	03/17/23 13:15	II230301-1	20		19.85	mg/L	99	95	105			
WG562245ICB	ICB	03/17/23 13:21				U	mg/L		-0.6	0.6			
WG562245PQV	PQV	03/17/23 13:25	II230314-2	1.005		1.09	mg/L	108	70	130			
WG562245SIC	SIC	03/17/23 13:28	II230217-1	1.005		.99	mg/L	99	80	120			
WG562245LFB	LFB	03/17/23 13:34	II230315-5	99.95693		101.9	mg/L	102	85	115			
L79094-02AS	AS	03/17/23 13:44	II230315-5	99.95693	.53	103	mg/L	103	85	115			
L79094-02ASD	ASD	03/17/23 13:47	II230315-5	99.95693	.53	107	mg/L	107	85	115	4	20	
WG562245CCV1	CCV	03/17/23 14:07	II230303-1	10		9.91	mg/L	99	90	110			
WG562245CCB1	CCB	03/17/23 14:10				U	mg/L		-0.6	0.6			
L79233-02AS	AS	03/17/23 14:33	II230315-5	99.95693	5.39	111.8	mg/L	106	85	115			
L79233-02ASD	ASD	03/17/23 14:36	II230315-5	99.95693	5.39	113.3	mg/L	108	85	115	1	20	
WG562245CCV2	CCV	03/17/23 14:46	II230303-1	10		9.85	mg/L	99	90	110			
WG562245CCB2	CCB	03/17/23 14:49				U	mg/L		-0.6	0.6			
WG562245CCV3	CCV	03/17/23 15:08	II230303-1	10		9.84	mg/L	98	90	110			
WG562245CCB3	CCB	03/17/23 15:11				U	mg/L		-0.6	0.6			
WG562330													
WG562330ICV	ICV	03/19/23 23:10	II230301-1	20		20.11	mg/L	101	95	105			
WG562330ICB	ICB	03/19/23 23:16				U	mg/L		-0.6	0.6			
WG562330PQV	PQV	03/19/23 23:19	II230314-2	1.005		1.13	mg/L	112	70	130			
WG562330SIC	SIC	03/19/23 23:23	II230217-1	1.005		1.09	mg/L	108	80	120			
WG562330LFB	LFB	03/19/23 23:29	II230317-6	99.95693		98.64	mg/L	99	85	115			
WG562330CCV1	CCV	03/20/23 0:01	II230303-1	10		9.64	mg/L	96	90	110			
WG562330CCB1	CCB	03/20/23 0:04				U	mg/L		-0.6	0.6			
L79112-02AS	AS	03/20/23 0:37	II230317-6	99.95693	1.66	100.4	mg/L	99	85	115			
WG562330CCV2	CCV	03/20/23 0:40	II230303-1	10		9.72	mg/L	97	90	110			
WG562330CCB2	CCB	03/20/23 0:43				U	mg/L		-0.6	0.6			
L79112-02ASD	ASD	03/20/23 0:46	II230317-6	99.95693	1.66	104.9	mg/L	103	85	115	4	20	
WG562330CCV3	CCV	03/20/23 1:02	II230303-1	10		9.65	mg/L	97	90	110			
WG562330CCB3	CCB	03/20/23 1:05				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L79100***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG561850													
WG561850PBW	PBW	03/10/23 14:03				U	mg/L		-20	20			
WG561850LCSW	LCSW	03/10/23 14:06	PCN624421	1000		988	mg/L	99	80	120			
L79119-03DUP	DUP	03/10/23 15:25			U	U	mg/L				0	10	RA
WG561933													
WG561933PBW	PBW	03/13/23 11:20				U	mg/L		-20	20			
WG561933LCSW	LCSW	03/13/23 11:23	PCN624421	1000		990	mg/L	99	80	120			
L79101-06DUP	DUP	03/13/23 12:01			410	410	mg/L				0	10	
WG562497													
WG562497PBW	PBW	03/21/23 15:45				U	mg/L		-20	20			
WG562497LCSW	LCSW	03/21/23 15:46	PCN624426	1000		968	mg/L	97	80	120			
L79324-01DUP	DUP	03/21/23 16:08			530	524	mg/L				1	10	
WG563044													
WG563044PBW	PBW	03/29/23 19:35				U	mg/L		-20	20			
WG563044LCSW	LCSW	03/29/23 19:37	PCN624437	1000		996	mg/L	100	80	120			
L79405-01DUP	DUP	03/29/23 20:06			398	396	mg/L				1	10	

GCC

ACZ Project ID: ***L79100***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG561984													
WG561984ICV	ICV	03/15/23 11:58	MS221228-3	.05		.04927	mg/L	99	90	110			
WG561984ICB	ICB	03/15/23 12:00				U	mg/L		-0.00022	0.00022			
WG561984LFB	LFB	03/15/23 12:02	MS230220-4	.05005		.0513	mg/L	102	85	115			
WG561984CCV1	CCV	03/15/23 12:26	MS230310-4	.1001		.10404	mg/L	104	90	110			
WG561984CCB1	CCB	03/15/23 12:28				U	mg/L		-0.0003	0.0003			
L79100-05AS	AS	03/15/23 12:30	MS230220-4	.25025	U	.2571	mg/L	103	70	130			
L79100-05ASD	ASD	03/15/23 12:33	MS230220-4	.25025	U	.27326	mg/L	109	70	130	6	20	
WG561984CCV2	CCV	03/15/23 12:53	MS230310-4	.1001		.1024	mg/L	102	90	110			
WG561984CCV3	CCV	03/15/23 13:10	MS230310-4	.1001		.10715	mg/L	107	90	110			
WG561984CCB3	CCB	03/15/23 13:12				.00025	mg/L		-0.0003	0.0003			
WG562440													
WG562440ICV	ICV	03/21/23 15:28	MS230321-2	.05		.05151	mg/L	103	90	110			
WG562440ICB	ICB	03/21/23 15:29				U	mg/L		-0.00022	0.00022			
WG562440LFB	LFB	03/21/23 15:31	MS230315-2	.05005		.05054	mg/L	101	85	115			
WG562440CCV1	CCV	03/21/23 15:46	MS230310-4	.1001		.09971	mg/L	100	90	110			
WG562440CCB1	CCB	03/21/23 15:48				U	mg/L		-0.0003	0.0003			
L78932-01AS	AS	03/21/23 15:49	MS230315-2	.05005	.00049	.05281	mg/L	105	70	130			
L78932-01ASD	ASD	03/21/23 15:51	MS230315-2	.05005	.00049	.05437	mg/L	108	70	130	3	20	
WG562440CCV2	CCV	03/21/23 16:08	MS230310-4	.1001		.09727	mg/L	97	90	110			
WG562440CCB2	CCB	03/21/23 16:09				.00465	mg/L		-0.0003	0.0003			BE
L79115-03AS	AS	03/21/23 16:17	MS230315-2	.05005	.00205	.05297	mg/L	102	70	130			
L79115-03ASD	ASD	03/21/23 16:18	MS230315-2	.05005	.00205	.05285	mg/L	101	70	130	0	20	
WG562440CCV3	CCV	03/21/23 16:24	MS230310-4	.1001		.09709	mg/L	97	90	110			
WG562602													
WG562602ICV	ICV	03/22/23 22:25	MS230321-2	.05		.05226	mg/L	105	90	110			
WG562602ICB	ICB	03/22/23 22:27				U	mg/L		-0.00022	0.00022			
WG562602LFB	LFB	03/22/23 22:29	MS230315-2	.05005		.05189	mg/L	104	85	115			
WG562602CCV1	CCV	03/22/23 22:43	MS230310-4	.1001		.09479	mg/L	95	90	110			
WG562602CCB1	CCB	03/22/23 22:45				U	mg/L		-0.0003	0.0003			
L79115-03AS	AS	03/22/23 22:49	MS230315-2	.05005	.00014	.05383	mg/L	107	70	130			
L79115-03ASD	ASD	03/22/23 22:50	MS230315-2	.05005	.00014	.05303	mg/L	106	70	130	1	20	
WG562602CCV2	CCV	03/22/23 23:05	MS230310-4	.1001		.09705	mg/L	97	90	110			
WG562602CCB2	CCB	03/22/23 23:07				U	mg/L		-0.0003	0.0003			
WG562602CCV3	CCV	03/22/23 23:16	MS230310-4	.1001		.09885	mg/L	99	90	110			
WG562602CCB3	CCB	03/22/23 23:18				U	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: ***L79100***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562247													
WG562247ICV	ICV	03/17/23 6:56	II230301-1	100		100.06	mg/L	100	95	105			
WG562247ICB	ICB	03/17/23 7:02				U	mg/L		-0.6	0.6			
WG562247PQV	PQV	03/17/23 7:05	II230314-2	1.002		1.03	mg/L	103	70	130			
WG562247SIC	SIC	03/17/23 7:08	II230217-1	1.002		1.07	mg/L	107	80	120			
WG562247LFB	LFB	03/17/23 7:15	II230315-5	100.0157		113.5	mg/L	113	85	115			
WG562247CCV1	CCV	03/17/23 7:47	II230303-1	50		49.05	mg/L	98	90	110			
WG562247CCB1	CCB	03/17/23 7:50				U	mg/L		-0.6	0.6			
L79103-02AS	AS	03/17/23 8:16	II230315-5	100.0157	55.4	157.8	mg/L	102	85	115			
L79103-02ASD	ASD	03/17/23 8:20	II230315-5	100.0157	55.4	159.2	mg/L	104	85	115	1	20	
WG562247CCV2	CCV	03/17/23 8:26	II230303-1	50		48.56	mg/L	97	90	110			
WG562247CCB2	CCB	03/17/23 8:29				U	mg/L		-0.6	0.6			
WG562247CCV3	CCV	03/17/23 8:49	II230303-1	50		46.53	mg/L	93	90	110			
WG562247CCB3	CCB	03/17/23 8:52				U	mg/L		-0.6	0.6			
WG562245													
WG562245ICV	ICV	03/17/23 13:15	II230301-1	100		99.07	mg/L	99	95	105			
WG562245ICB	ICB	03/17/23 13:21				U	mg/L		-0.6	0.6			
WG562245PQV	PQV	03/17/23 13:25	II230314-2	1.002		1.06	mg/L	106	70	130			
WG562245SIC	SIC	03/17/23 13:28	II230217-1	1.002		1.04	mg/L	104	80	120			
WG562245LFB	LFB	03/17/23 13:34	II230315-5	100.0157		100.1	mg/L	100	85	115			
L79094-02AS	AS	03/17/23 13:44	II230315-5	100.0157	1.71	103.5	mg/L	102	85	115			
L79094-02ASD	ASD	03/17/23 13:47	II230315-5	100.0157	1.71	107.2	mg/L	105	85	115	4	20	
WG562245CCV1	CCV	03/17/23 14:07	II230303-1	50		49.48	mg/L	99	90	110			
WG562245CCB1	CCB	03/17/23 14:10				U	mg/L		-0.6	0.6			
L79233-02AS	AS	03/17/23 14:33	II230315-5	100.0157	53.3	155.3	mg/L	102	85	115			
L79233-02ASD	ASD	03/17/23 14:36	II230315-5	100.0157	53.3	155.8	mg/L	102	85	115	0	20	
WG562245CCV2	CCV	03/17/23 14:46	II230303-1	50		49.27	mg/L	99	90	110			
WG562245CCB2	CCB	03/17/23 14:49				U	mg/L		-0.6	0.6			
WG562245CCV3	CCV	03/17/23 15:08	II230303-1	50		49.33	mg/L	99	90	110			
WG562245CCB3	CCB	03/17/23 15:11				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L79100***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sulfate D516-02/-07/-11 - TURBIDIMETRIC

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG561965													
WG561965ICB	ICB	03/14/23 9:49				U	mg/L		-3	3			
WG561965ICV	ICV	03/14/23 9:49	WI230311-1	19.54		19.2	mg/L	98	90	110			
WG561965CCV1	CCV	03/14/23 12:21	WI230311-2	25		25.3	mg/L	101	90	110			
WG561965CCB1	CCB	03/14/23 12:21				U	mg/L		-3	3			
WG561965LFB	LFB	03/14/23 12:21	WI230119-9	10		10.5	mg/L	105	90	110			
WG561965CCV2	CCV	03/14/23 12:23	WI230311-2	25		25	mg/L	100	90	110			
WG561965CCB2	CCB	03/14/23 12:23				U	mg/L		-3	3			
WG561965CCV3	CCV	03/14/23 12:53	WI230311-2	25		25.4	mg/L	102	90	110			
WG561965CCB3	CCB	03/14/23 12:53				U	mg/L		-3	3			
L79100-02AS	AS	03/14/23 12:54	SO4TURB5X	10	104	111.8	mg/L	78	90	110			M3
WG561965CCV4	CCV	03/14/23 12:55	WI230311-2	25		24.6	mg/L	98	90	110			
WG561965CCB4	CCB	03/14/23 12:55				U	mg/L		-3	3			
WG561965CCV5	CCV	03/14/23 13:16	WI230311-2	25		25.3	mg/L	101	90	110			
WG561965CCB5	CCB	03/14/23 13:16				U	mg/L		-3	3			
WG561965CCV6	CCV	03/14/23 13:18	WI230311-2	25		24.5	mg/L	98	90	110			
WG561965CCB6	CCB	03/14/23 13:18				U	mg/L		-3	3			
L79100-01DUP	DUP	03/14/23 13:19			460	461.4	mg/L				0	20	RA
WG561965CCV7	CCV	03/14/23 13:21	WI230311-2	25		25.2	mg/L	101	90	110			
WG561965CCB7	CCB	03/14/23 13:21				U	mg/L		-3	3			
WG561965CCV8	CCV	03/14/23 13:31	WI230311-2	25		25.4	mg/L	102	90	110			
WG561965CCB8	CCB	03/14/23 13:31				U	mg/L		-3	3			
WG561965CCV9	CCV	03/14/23 13:33	WI230311-2	25		25.2	mg/L	101	90	110			
WG561965CCB9	CCB	03/14/23 13:33				U	mg/L		-3	3			
WG561991													
WG561991ICB	ICB	03/14/23 9:49				U	mg/L		-3	3			
WG561991ICV	ICV	03/14/23 9:49	WI230311-1	19.54		19.2	mg/L	98	90	110			
WG561991CCV1	CCV	03/14/23 13:49	WI230311-2	25		25.5	mg/L	102	90	110			
WG561991CCB1	CCB	03/14/23 13:49				U	mg/L		-3	3			
WG561991LFB	LFB	03/14/23 13:49	WI230119-9	10		10.8	mg/L	108	90	110			
L76864-20DUP	DUP	03/14/23 13:49			7.1	7.3	mg/L				3	20	RA
WG561991CCV2	CCV	03/14/23 13:51	WI230311-2	25		25	mg/L	100	90	110			
WG561991CCB2	CCB	03/14/23 13:51				U	mg/L		-3	3			
WG561991CCV3	CCV	03/14/23 14:19	WI230311-2	25		25.4	mg/L	102	90	110			
WG561991CCB3	CCB	03/14/23 14:19				U	mg/L		-3	3			
L79100-07AS	AS	03/14/23 14:21	SO4TURB50X	10	263	278.4	mg/L	154	90	110			M3
WG561991CCV4	CCV	03/14/23 14:23	WI230311-2	25		25.4	mg/L	102	90	110			
WG561991CCB4	CCB	03/14/23 14:23				U	mg/L		-3	3			
WG561991CCV5	CCV	03/14/23 14:26	WI230311-2	25		25.3	mg/L	101	90	110			
WG561991CCB5	CCB	03/14/23 14:26				U	mg/L		-3	3			
WG561991CCV6	CCV	03/14/23 14:41	WI230311-2	25		24.7	mg/L	99	90	110			
WG561991CCB6	CCB	03/14/23 14:41				U	mg/L		-3	3			
WG561991CCV7	CCV	03/14/23 14:44	WI230311-2	25		24.9	mg/L	100	90	110			
WG561991CCB7	CCB	03/14/23 14:44				U	mg/L		-3	3			
WG561991CCV8	CCV	03/14/23 15:01	WI230311-2	25		24.8	mg/L	99	90	110			
WG561991CCB8	CCB	03/14/23 15:01				U	mg/L		-3	3			
WG561991CCV9	CCV	03/14/23 15:02	WI230311-2	25		24.9	mg/L	100	90	110			
WG561991CCB9	CCB	03/14/23 15:02				U	mg/L		-3	3			

GCC

ACZ Project ID: ***L79100***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Vanadium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562245													
WG562245ICV	ICV	03/17/23 13:15	II230301-1	2		2.026	mg/L	101	95	105			
WG562245ICB	ICB	03/17/23 13:21				U	mg/L		-0.015	0.015			
WG562245PQV	PQV	03/17/23 13:25	II230314-2	.025025		.028	mg/L	112	70	130			
WG562245SIC	SIC	03/17/23 13:28	II230217-1	.1001		.099	mg/L	99	80	120			
WG562245LFB	LFB	03/17/23 13:34	II230315-5	.5005		.5184	mg/L	104	85	115			
L79094-02AS	AS	03/17/23 13:44	II230315-5	.5005	U	.5319	mg/L	106	85	115			
L79094-02ASD	ASD	03/17/23 13:47	II230315-5	.5005	U	.55	mg/L	110	85	115	3	20	
WG562245CCV1	CCV	03/17/23 14:07	II230303-1	1		1.013	mg/L	101	90	110			
WG562245CCB1	CCB	03/17/23 14:10				U	mg/L		-0.03	0.03			
L79233-02AS	AS	03/17/23 14:33	II230315-5	.5005	U	.5345	mg/L	107	85	115			
L79233-02ASD	ASD	03/17/23 14:36	II230315-5	.5005	U	.535	mg/L	107	85	115	0	20	
WG562245CCV2	CCV	03/17/23 14:46	II230303-1	1		1.004	mg/L	100	90	110			
WG562245CCB2	CCB	03/17/23 14:49				U	mg/L		-0.03	0.03			
WG562245CCV3	CCV	03/17/23 15:08	II230303-1	1		1.01	mg/L	101	90	110			
WG562245CCB3	CCB	03/17/23 15:11				U	mg/L		-0.03	0.03			
WG562330													
WG562330ICV	ICV	03/19/23 23:10	II230301-1	2		2.075	mg/L	104	95	105			
WG562330ICB	ICB	03/19/23 23:16				U	mg/L		-0.015	0.015			
WG562330PQV	PQV	03/19/23 23:19	II230314-2	.025025		.023	mg/L	92	70	130			
WG562330SIC	SIC	03/19/23 23:23	II230217-1	.1001		.099	mg/L	99	80	120			
WG562330LFB	LFB	03/19/23 23:29	II230317-6	.5005		.5084	mg/L	102	85	115			
WG562330CCV1	CCV	03/20/23 0:01	II230303-1	1		.999	mg/L	100	90	110			
WG562330CCB1	CCB	03/20/23 0:04				U	mg/L		-0.03	0.03			
L79112-02AS	AS	03/20/23 0:37	II230317-6	.5005	U	.5097	mg/L	102	85	115			
WG562330CCV2	CCV	03/20/23 0:40	II230303-1	1		1.006	mg/L	101	90	110			
WG562330CCB2	CCB	03/20/23 0:43				U	mg/L		-0.03	0.03			
L79112-02ASD	ASD	03/20/23 0:46	II230317-6	.5005	U	.536	mg/L	107	85	115	5	20	
WG562330CCV3	CCV	03/20/23 1:02	II230303-1	1		1.004	mg/L	100	90	110			
WG562330CCB3	CCB	03/20/23 1:05				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L79100***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Zinc, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562245													
WG562245ICV	ICV	03/17/23 13:15	II230301-1	2		1.924	mg/L	96	95	105			
WG562245ICB	ICB	03/17/23 13:21				U	mg/L		-0.06	0.06			
WG562245PQV	PQV	03/17/23 13:25	II230314-2	.0501		.052	mg/L	104	70	130			
WG562245SIC	SIC	03/17/23 13:28	II230217-1	.1002		.094	mg/L	94	80	120			
WG562245LFB	LFB	03/17/23 13:34	II230315-5	.50045		.517	mg/L	103	85	115			
L79094-02AS	AS	03/17/23 13:44	II230315-5	.50045	U	.534	mg/L	107	85	115			
L79094-02ASD	ASD	03/17/23 13:47	II230315-5	.50045	U	.551	mg/L	110	85	115	3	20	
WG562245CCV1	CCV	03/17/23 14:07	II230303-1	1		.978	mg/L	98	90	110			
WG562245CCB1	CCB	03/17/23 14:10				U	mg/L		-0.06	0.06			
L79233-02AS	AS	03/17/23 14:33	II230315-5	.50045	U	.529	mg/L	106	85	115			
L79233-02ASD	ASD	03/17/23 14:36	II230315-5	.50045	U	.529	mg/L	106	85	115	0	20	
WG562245CCV2	CCV	03/17/23 14:46	II230303-1	1		.96	mg/L	96	90	110			
WG562245CCB2	CCB	03/17/23 14:49				U	mg/L		-0.06	0.06			
WG562245CCV3	CCV	03/17/23 15:08	II230303-1	1		.956	mg/L	96	90	110			
WG562245CCB3	CCB	03/17/23 15:11				U	mg/L		-0.06	0.06			
WG562330													
WG562330ICV	ICV	03/19/23 23:10	II230301-1	2		1.975	mg/L	99	95	105			
WG562330ICB	ICB	03/19/23 23:16				U	mg/L		-0.06	0.06			
WG562330PQV	PQV	03/19/23 23:19	II230314-2	.0501		.053	mg/L	106	70	130			
WG562330SIC	SIC	03/19/23 23:23	II230217-1	.1002		.099	mg/L	99	80	120			
WG562330LFB	LFB	03/19/23 23:29	II230317-6	.50045		.511	mg/L	102	85	115			
WG562330CCV1	CCV	03/20/23 0:01	II230303-1	1		.969	mg/L	97	90	110			
WG562330CCB1	CCB	03/20/23 0:04				U	mg/L		-0.06	0.06			
L79112-02AS	AS	03/20/23 0:37	II230317-6	.50045	U	.516	mg/L	103	85	115			
WG562330CCV2	CCV	03/20/23 0:40	II230303-1	1		.97	mg/L	97	90	110			
WG562330CCB2	CCB	03/20/23 0:43				U	mg/L		-0.06	0.06			
L79112-02ASD	ASD	03/20/23 0:46	II230317-6	.50045	U	.538	mg/L	108	85	115	4	20	
WG562330CCV3	CCV	03/20/23 1:02	II230303-1	1		.965	mg/L	97	90	110			
WG562330CCB3	CCB	03/20/23 1:05				U	mg/L		-0.06	0.06			

GCC Rio Grande ACZ Project ID: ***L79100***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L79100-01	WG561984	Cadmium, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG561754	Chloride	SM4500Cl-E	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG561984	Cobalt, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG562898	Fluoride	SM4500F-C	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500F-C	VC	CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [< MDL].
	WG561984	Lead, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG561715	Mercury, dissolved	M245.1 CVAA	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG563044	Residue, Filterable (TDS) @180C	SM2540C	H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
	WG562440	Selenium, dissolved	M200.8 ICP-MS	BE	Target analyte in continuing calibration blank (CCB) at or above the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG561965	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L79100-02	WG561984	Arsenic, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
		Cadmium, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG561754	Chloride	SM4500Cl-E	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG561984	Cobalt, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG563213	Fluoride	SM4500F-C	N1A	See Case Narrative.
	WG561984	Lead, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG561715	Mercury, dissolved	M245.1 CVAA	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG561850	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG562440	Selenium, dissolved	M200.8 ICP-MS	BE	Target analyte in continuing calibration blank (CCB) at or above the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG561965	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

GCC Rio Grande ACZ Project ID: ***L79100***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L79100-03	WG561984	Cadmium, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG561754	Chloride	SM4500Cl-E	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG563213	Fluoride	SM4500F-C	N1A	See Case Narrative.
	WG561984	Lead, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG561715	Mercury, dissolved	M245.1 CVAA	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG561850	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG562440	Selenium, dissolved	M200.8 ICP-MS	BE	Target analyte in continuing calibration blank (CCB) at or above the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG561965	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L79100-04	WG561984	Arsenic, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
		Cadmium, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG561754	Chloride	SM4500Cl-E	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG561984	Lead, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG561594	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG561850	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG561984	Selenium, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG561965	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

GCC Rio Grande ACZ Project ID: ***L79100***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L79100-05	WG561984	Arsenic, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
		Cadmium, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG561754	Chloride	SM4500Cl-E	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG561984	Lead, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG561594	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG561984	Selenium, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG561965	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L79100-06	WG561984	Arsenic, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
		Cadmium, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG562245	Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG561754	Chloride	SM4500Cl-E	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG561984	Lead, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG561594	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG562497	Residue, Filterable (TDS) @180C	SM2540C	H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
	WG561965	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

GCC Rio Grande ACZ Project ID: ***L79100***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L79100-07	WG562247	Boron, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG561754	Chloride	SM4500Cl-E	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG561594	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG562440	Selenium, dissolved	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG561991	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L79100-08	WG562247	Boron, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG561754	Chloride	SM4500Cl-E	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG561594	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG561991	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

No certification qualifiers associated with this analysis

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

GCC Rio Grande
183230

ACZ Project ID: L79100
Date Received: 03/07/2023 11:13
Received By:
Date Printed: 3/8/2023

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]	X		
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?			X
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
4532	3.5	<=6.0	15	Yes

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

GCC Rio Grande
183230

ACZ Project ID: L79100
Date Received: 03/07/2023 11:13
Received By:
Date Printed: 3/8/2023

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L79100

CHAIN of CUSTODY

Report to:

Name: Amy Veek	Address: 3372 Lime Road
Company: GCC Rio Grande Inc	Pueblo CO 81004
E-mail: aveek@gcc.com	Telephone: 719-647-6861

Copy of Report to:

Name: Landon Beck	E-mail: lbeck@resourcehydrogeologic.com
Company: Resource Hydrogeologic	Telephone: (970) 459-4865

Invoice to:

Name: Amy Veek	Address: 3372 Lime Road
Company: GCC Rio Grande Inc	Pueblo CO 81004
E-mail: aveek@gcc.com	Telephone: 719-647-6861

Copy of Invoice to:

Name:	Address:
Company:	
E-mail:	Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes No ✓

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Amy Veek Sampler's Site Information State CO Zip code 81004 Time Zone MDT

*Sampler's Signature: [signature]

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: GW-COMPLIANCE

PO#: 183230

Reporting state for compliance testing:

Check box if samples include NRC licensed material?

ANALYSES REQUESTED (attach list or use quote number)

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	GW-COMpliance
MW-14	3/6/2023 09:42	GW	3	✓
MW-13	3/6/2023 10:21	GW	3	✓
MW-8	3/6/2023 13:14	GW	3	✓
MW-7	3/6/2023 13:29	GW	3	✓
MW-6	3/6/2023 13:45	GW	3	✓
MW-2B	3/6/2023 12:00	GW	3	✓
MW-11	3/6/2023 14:07	GW	3	✓
MW-12	3/6/2023 14:24	GW	3	✓

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
[signature]	3/6/23 15:15	[signature]	3/7/23 1113

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

L79100 Chain of Custod

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

April 03, 2023

Report to:
Amy Veek
GCC Rio Grande
3372 Lime Road
Pueblo, CO 81004

cc: Landon Beck

Bill to:
Amy Veek
GCC Rio Grande
3372 Lime Road
Pueblo, CO 81004

Project ID: 183230
ACZ Project ID: L79125

Amy Veek:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on March 08, 2023. This project has been assigned to ACZ's project number, L79125. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L79125. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after April 02, 2024. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

GCC Rio Grande
Project ID: 183230
Sample ID: MW-9

ACZ Sample ID: ***L79125-01***
Date Sampled: *03/07/23 14:19*
Date Received: *03/08/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	03/21/23 16:15	keh1
Arsenic, dissolved	M200.8 ICP-MS	1	0.00061	B		mg/L	0.0002	0.001	03/17/23 13:42	kja
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/21/23 16:15	keh1
Boron, dissolved	M200.7 ICP	1	1.32		*	mg/L	0.03	0.1	03/21/23 16:15	keh1
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U		mg/L	0.00005	0.00025	03/17/23 13:42	kja
Calcium, dissolved	M200.7 ICP	1	409			mg/L	0.1	0.5	03/21/23 16:15	keh1
Chromium, dissolved	M200.7 ICP	5	<0.1	U		mg/L	0.1	0.25	03/24/23 22:49	wtc
Cobalt, dissolved	M200.8 ICP-MS	1	0.00356			mg/L	0.00005	0.00025	03/17/23 13:42	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/21/23 16:15	keh1
Iron, dissolved	M200.7 ICP	1	0.943			mg/L	0.06	0.15	03/21/23 16:15	keh1
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	03/17/23 13:42	kja
Lithium, dissolved	M200.7 ICP	1	0.381			mg/L	0.008	0.04	03/21/23 16:15	keh1
Magnesium, dissolved	M200.7 ICP	1	156			mg/L	0.2	1	03/21/23 16:15	keh1
Manganese, dissolved	M200.7 ICP	1	0.460		*	mg/L	0.01	0.05	03/21/23 16:15	keh1
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	03/15/23 13:09	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	03/21/23 16:15	keh1
Potassium, dissolved	M200.7 ICP	1	9.00			mg/L	0.2	1	03/21/23 16:15	keh1
Selenium, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.00025	03/17/23 13:42	kja
Sodium, dissolved	M200.7 ICP	5	779			mg/L	1	5	03/27/23 16:24	keh1
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	03/21/23 16:15	keh1
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	03/21/23 16:15	keh1

GCC Rio Grande
Project ID: 183230
Sample ID: MW-9

ACZ Sample ID: ***L79125-01***
Date Sampled: *03/07/23 14:19*
Date Received: *03/08/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	389			mg/L	2	20	03/20/23 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	03/20/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	03/20/23 0:00	emk
Total Alkalinity		1	389			mg/L	2	20	03/20/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-0.7			%			04/03/23 0:00	calc
Sum of Anions			69			meq/L			04/03/23 0:00	calc
Sum of Cations			68			meq/L			04/03/23 0:00	calc
Chloride	SM4500Cl-E	1	44.4		*	mg/L	1	2	03/16/23 13:49	aps
Fluoride	SM4500F-C	1	0.44			mg/L	0.15	0.35	04/03/23 12:33	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		1660			mg/L	0.2	5	04/03/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	04/03/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	03/08/23 23:52	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	03/08/23 23:52	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	4600	H	*	mg/L	40	80	03/21/23 15:54	svm
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	100	2850		*	mg/L	100	500	03/15/23 11:39	bls
TDS (calculated)	Calculation		4490			mg/L			04/03/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.02						04/03/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-10

ACZ Sample ID: ***L79125-02***
Date Sampled: *03/07/23 14:30*
Date Received: *03/08/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	03/21/23 16:18	keh1
Arsenic, dissolved	M200.8 ICP-MS	1	0.00182			mg/L	0.0002	0.001	03/17/23 13:48	kja
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/21/23 16:18	keh1
Boron, dissolved	M200.7 ICP	1	1.33		*	mg/L	0.03	0.1	03/21/23 16:18	keh1
Cadmium, dissolved	M200.8 ICP-MS	1	0.000052	B		mg/L	0.00005	0.00025	03/17/23 13:48	kja
Calcium, dissolved	M200.7 ICP	1	40.4			mg/L	0.1	0.5	03/21/23 16:18	keh1
Chromium, dissolved	M200.7 ICP	2	<0.04	U		mg/L	0.04	0.1	03/25/23 20:26	wtc
Cobalt, dissolved	M200.8 ICP-MS	1	0.000165	B		mg/L	0.00005	0.00025	03/17/23 13:48	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/21/23 16:18	keh1
Iron, dissolved	M200.7 ICP	1	0.467			mg/L	0.06	0.15	03/21/23 16:18	keh1
Lead, dissolved	M200.8 ICP-MS	1	0.00028	B		mg/L	0.0001	0.0005	03/17/23 13:48	kja
Lithium, dissolved	M200.7 ICP	1	0.304			mg/L	0.008	0.04	03/21/23 16:18	keh1
Magnesium, dissolved	M200.7 ICP	1	12.4			mg/L	0.2	1	03/21/23 16:18	keh1
Manganese, dissolved	M200.7 ICP	1	0.025	B	*	mg/L	0.01	0.05	03/21/23 16:18	keh1
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	03/15/23 13:14	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	03/21/23 16:18	keh1
Potassium, dissolved	M200.7 ICP	1	5.94			mg/L	0.2	1	03/21/23 16:18	keh1
Selenium, dissolved	M200.8 ICP-MS	1	0.00014	B		mg/L	0.0001	0.00025	03/17/23 13:48	kja
Sodium, dissolved	M200.7 ICP	2	1090			mg/L	0.4	2	03/25/23 20:26	wtc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	03/21/23 16:18	keh1
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	03/21/23 16:18	keh1

GCC Rio Grande
Project ID: 183230
Sample ID: MW-10

ACZ Sample ID: ***L79125-02***
Date Sampled: *03/07/23 14:30*
Date Received: *03/08/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	696			mg/L	2	20	03/20/23 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	03/20/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	03/20/23 0:00	emk
Total Alkalinity		1	696		*	mg/L	2	20	03/20/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-8.9			%			04/03/23 0:00	calc
Sum of Anions			61			meq/L			04/03/23 0:00	calc
Sum of Cations			51			meq/L			04/03/23 0:00	calc
Chloride	SM4500Cl-E	5	375		*	mg/L	5	10	03/16/23 14:27	aps
Fluoride	SM4500F-C	1	1.15			mg/L	0.15	0.35	04/03/23 12:51	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		152			mg/L	0.2	5	04/03/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	04/03/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	03/08/23 23:54	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	03/08/23 23:54	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	3890			mg/L	40	80	03/14/23 11:31	cm
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	100	1730		*	mg/L	100	500	03/15/23 11:40	bls
TDS (calculated)	Calculation		3680			mg/L			04/03/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.06						04/03/23 0:00	calc

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1)	EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2)	EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3)	EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4)	EPA SW-846. Test Methods for Evaluating Solid Waste.
(5)	Standard Methods for the Examination of Water and Wastewater.

Comments

(1)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2)	Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3)	Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4)	An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5)	If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

GCC

ACZ Project ID: ***L79125***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562393													
WG562393PBW1	PBW	03/20/23 20:03				3.7	mg/L		-20	20			
WG562393LCSW3	LCSW	03/20/23 20:23	WC230315-1	820.0001		795.1	mg/L	97	90	110			
L79125-01DUP	DUP	03/20/23 21:50			389	392.5	mg/L				1	20	
L79213-02DUP	DUP	03/20/23 23:15			14.6	15.5	mg/L				6	20	RA
WG562393LCSW6	LCSW	03/20/23 23:34	WC230315-1	820.0001		805.2	mg/L	98	90	110			
WG562393PBW2	PBW	03/20/23 23:42				10.2	mg/L		-20	20			
WG562393LCSW9	LCSW	03/21/23 2:40	WC230315-1	820.0001		824	mg/L	100	90	110			
WG562393PBW3	PBW	03/21/23 2:48				9.2	mg/L		-20	20			
WG562393LCSW12	LCSW	03/21/23 5:19	WC230315-1	820.0001		827.8	mg/L	101	90	110			
WG562393PBW4	PBW	03/21/23 5:27				10.1	mg/L		-20	20			
WG562393LCSW15	LCSW	03/21/23 8:49	WC230315-1	820.0001		833.2	mg/L	102	90	110			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562307													
WG562307ICV	ICV	03/21/23 14:52	II230301-1	2		1.983	mg/L	99	95	105			
WG562307ICB	ICB	03/21/23 14:58				U	mg/L		-0.15	0.15			
WG562307PQV	PQV	03/21/23 15:01	II230314-2	.2502		.247	mg/L	99	70	130			
WG562307SIC	SIC	03/21/23 15:04	II230217-1	202.2502		207	mg/L	102	1	200			
WG562307LFB	LFB	03/21/23 15:11	II230317-6	1.01		1.01	mg/L	100	85	115			
WG562307CCV1	CCV	03/21/23 15:42	II230303-1	1		.991	mg/L	99	90	110			
WG562307CCB1	CCB	03/21/23 15:46				U	mg/L		-0.15	0.15			
WG562307CCV2	CCV	03/21/23 16:22	II230303-1	1		1.021	mg/L	102	90	110			
WG562307CCB2	CCB	03/21/23 16:25				U	mg/L		-0.15	0.15			
L79205-03AS	AS	03/21/23 16:38	II230317-6	1.01	U	1.121	mg/L	111	85	115			
L79205-03ASD	ASD	03/21/23 16:41	II230317-6	1.01	U	1.103	mg/L	109	85	115	2	20	
WG562307CCV3	CCV	03/21/23 16:44	II230303-1	1		.965	mg/L	97	90	110			
WG562307CCB3	CCB	03/21/23 16:47				U	mg/L		-0.15	0.15			

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562149													
WG562149ICV	ICV	03/17/23 12:53	MS221228-3	.05		.05076	mg/L	102	90	110			
WG562149ICB	ICB	03/17/23 12:54				U	mg/L		-0.00044	0.00044			
WG562149LFB	LFB	03/17/23 12:56	MS230315-2	.0501		.04906	mg/L	98	85	115			
WG562149CCV1	CCV	03/17/23 13:11	MS230310-4	.1002		.09771	mg/L	98	90	110			
WG562149CCB1	CCB	03/17/23 13:13				U	mg/L		-0.0006	0.0006			
WG562149CCV2	CCV	03/17/23 13:33	MS230310-4	.1002		.09769	mg/L	97	90	110			
WG562149CCB2	CCB	03/17/23 13:35				U	mg/L		-0.0006	0.0006			
L79125-01AS	AS	03/17/23 13:44	MS230315-2	.0501	.00061	.04872	mg/L	96	70	130			
L79125-01ASD	ASD	03/17/23 13:46	MS230315-2	.0501	.00061	.04823	mg/L	95	70	130	1	20	
WG562149CCV3	CCV	03/17/23 13:52	MS230310-4	.1002		.09188	mg/L	92	90	110			
WG562149CCB3	CCB	03/17/23 13:53				U	mg/L		-0.0006	0.0006			

GCC

ACZ Project ID: ***L79125***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Beryllium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562307													
WG562307ICV	ICV	03/21/23 14:52	II230301-1	2		2	mg/L	100	95	105			
WG562307ICB	ICB	03/21/23 14:58				U	mg/L		-0.03	0.03			
WG562307PQV	PQV	03/21/23 15:01	II230314-2	.05005		.051	mg/L	102	70	130			
WG562307SIC	SIC	03/21/23 15:04	II230217-1	.1001		.1	mg/L	100	80	120			
WG562307LFB	LFB	03/21/23 15:11	II230317-6	.5005		.499	mg/L	100	85	115			
WG562307CCV1	CCV	03/21/23 15:42	II230303-1	1		.989	mg/L	99	90	110			
WG562307CCB1	CCB	03/21/23 15:46				U	mg/L		-0.03	0.03			
WG562307CCV2	CCV	03/21/23 16:22	II230303-1	1		1.037	mg/L	104	90	110			
WG562307CCB2	CCB	03/21/23 16:25				U	mg/L		-0.03	0.03			
L79205-03AS	AS	03/21/23 16:38	II230317-6	.5005	U	.511	mg/L	102	85	115			
L79205-03ASD	ASD	03/21/23 16:41	II230317-6	.5005	U	.54	mg/L	108	85	115	6	20	
WG562307CCV3	CCV	03/21/23 16:44	II230303-1	1		.985	mg/L	99	90	110			
WG562307CCB3	CCB	03/21/23 16:47				U	mg/L		-0.03	0.03			

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562307													
WG562307ICV	ICV	03/21/23 14:52	II230301-1	2		2.056	mg/L	103	95	105			
WG562307ICB	ICB	03/21/23 14:58				U	mg/L		-0.09	0.09			
WG562307PQV	PQV	03/21/23 15:01	II230314-2	.1001		.102	mg/L	102	70	130			
WG562307SIC	SIC	03/21/23 15:04	II230217-1	.1001		.097	mg/L	97	80	120			
WG562307LFB	LFB	03/21/23 15:11	II230317-6	.5005		.499	mg/L	100	85	115			
WG562307CCV1	CCV	03/21/23 15:42	II230303-1	1		1.02	mg/L	102	90	110			
WG562307CCB1	CCB	03/21/23 15:46				U	mg/L		-0.09	0.09			
WG562307CCV2	CCV	03/21/23 16:22	II230303-1	1		1.06	mg/L	106	90	110			
WG562307CCB2	CCB	03/21/23 16:25				U	mg/L		-0.09	0.09			
L79205-03AS	AS	03/21/23 16:38	II230317-6	.5005	.031	.592	mg/L	112	85	115			
L79205-03ASD	ASD	03/21/23 16:41	II230317-6	.5005	.031	.622	mg/L	118	85	115	5	20	MA
WG562307CCV3	CCV	03/21/23 16:44	II230303-1	1		1.008	mg/L	101	90	110			
WG562307CCB3	CCB	03/21/23 16:47				U	mg/L		-0.09	0.09			

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562149													
WG562149ICV	ICV	03/17/23 12:53	MS221228-3	.05		.051145	mg/L	102	90	110			
WG562149ICB	ICB	03/17/23 12:54				U	mg/L		-0.00011	0.00011			
WG562149LFB	LFB	03/17/23 12:56	MS230315-2	.05005		.049532	mg/L	99	85	115			
WG562149CCV1	CCV	03/17/23 13:11	MS230310-4	.1001		.09751	mg/L	97	90	110			
WG562149CCB1	CCB	03/17/23 13:13				.00006	mg/L		-0.00015	0.00015			
WG562149CCV2	CCV	03/17/23 13:33	MS230310-4	.1001		.097613	mg/L	98	90	110			
WG562149CCB2	CCB	03/17/23 13:35				.00005	mg/L		-0.00015	0.00015			
L79125-01AS	AS	03/17/23 13:44	MS230315-2	.05005	U	.047334	mg/L	95	70	130			
L79125-01ASD	ASD	03/17/23 13:46	MS230315-2	.05005	U	.047088	mg/L	94	70	130	1	20	
WG562149CCV3	CCV	03/17/23 13:52	MS230310-4	.1001		.097776	mg/L	98	90	110			
WG562149CCB3	CCB	03/17/23 13:53				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: ***L79125***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562307													
WG562307ICV	ICV	03/21/23 14:52	II230301-1	100		98.57	mg/L	99	95	105			
WG562307ICB	ICB	03/21/23 14:58				U	mg/L		-0.3	0.3			
WG562307PQV	PQV	03/21/23 15:01	II230314-2	.504		.52	mg/L	103	70	130			
WG562307SIC	SIC	03/21/23 15:04	II230217-1	202.104		197.1	mg/L	98	1	200			
WG562307LFB	LFB	03/21/23 15:11	II230317-6	67.99026		67.31	mg/L	99	85	115			
WG562307CCV1	CCV	03/21/23 15:42	II230303-1	50		48.8	mg/L	98	90	110			
WG562307CCB1	CCB	03/21/23 15:46				U	mg/L		-0.3	0.3			
WG562307CCV2	CCV	03/21/23 16:22	II230303-1	50		50.6	mg/L	101	90	110			
WG562307CCB2	CCB	03/21/23 16:25				U	mg/L		-0.3	0.3			
L79205-03AS	AS	03/21/23 16:38	II230317-6	67.99026	67.7	137.2	mg/L	102	85	115			
L79205-03ASD	ASD	03/21/23 16:41	II230317-6	67.99026	67.7	138	mg/L	103	85	115	1	20	
WG562307CCV3	CCV	03/21/23 16:44	II230303-1	50		48.26	mg/L	97	90	110			
WG562307CCB3	CCB	03/21/23 16:47				U	mg/L		-0.3	0.3			

Chloride SM4500Cl-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562220													
WG562220ICV	ICV	03/16/23 13:34	WI220502-12	54.945		51.44	mg/L	94	90	110			
WG562220ICB	ICB	03/16/23 13:35				U	mg/L		-3	3			
WG562220LFB1	LFB	03/16/23 13:35	WI230202-6	30		26.96	mg/L	90	90	110			
WG562220CCV1	CCV	03/16/23 13:40	WI221021-5	49.95		47.93	mg/L	96	90	110			
WG562220CCB1	CCB	03/16/23 13:41				U	mg/L		-3	3			
L76864-20AS	AS	03/16/23 13:45	WI230202-6	30	U	25.98	mg/L	87	90	110			M2
WG562220CCV2	CCV	03/16/23 13:46	WI221021-5	49.95		49.47	mg/L	99	90	110			
WG562220CCB2	CCB	03/16/23 13:47				U	mg/L		-3	3			
WG562220LFB2	LFB	03/16/23 13:50	WI230202-6	30		27.32	mg/L	91	90	110			
WG562220CCV3	CCV	03/16/23 13:52	WI221021-5	49.95		47.47	mg/L	95	90	110			
WG562220CCB3	CCB	03/16/23 13:53				U	mg/L		-3	3			
WG562220CCV4	CCV	03/16/23 13:57	WI221021-5	49.95		48.31	mg/L	97	90	110			
WG562220CCB4	CCB	03/16/23 13:58				U	mg/L		-3	3			
WG562220CCV7	CCV	03/16/23 14:26	WI221021-5	49.95		48.39	mg/L	97	90	110			
WG562220CCB7	CCB	03/16/23 14:26				U	mg/L		-3	3			
L79059-02DUP	DUP	03/16/23 14:27			99.1	103.03	mg/L				4	20	
WG562220CCV8	CCV	03/16/23 14:28	WI221021-5	49.95		49.11	mg/L	98	90	110			
WG562220CCB8	CCB	03/16/23 14:29				U	mg/L		-3	3			

GCC

ACZ Project ID: ***L79125***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Chromium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562706													
WG562706ICV	ICV	03/24/23 21:55	II230320-1	2		1.981	mg/L	99	95	105			
WG562706ICB	ICB	03/24/23 22:01				U	mg/L		-0.06	0.06			
WG562706PQV	PQV	03/24/23 22:04	II230321-6	.05005		.045	mg/L	90	70	130			
WG562706SIC	SIC	03/24/23 22:07	II230321-8	.1001		.094	mg/L	94	80	120			
WG562706LFB	LFB	03/24/23 22:13	II230317-6	.5005		.496	mg/L	99	85	115			
L78015-09AS	AS	03/24/23 22:22	II230317-6	.5005	U	.511	mg/L	102	85	115			
L78015-09ASD	ASD	03/24/23 22:25	II230317-6	.5005	U	.509	mg/L	102	85	115	0	20	
WG562706CCV1	CCV	03/24/23 22:43	II230320-2	1		.988	mg/L	99	90	110			
WG562706CCB1	CCB	03/24/23 22:46				U	mg/L		-0.06	0.06			
WG562706CCV2	CCV	03/24/23 23:21	II230320-2	1		.962	mg/L	96	90	110			
WG562706CCB2	CCB	03/24/23 23:24				U	mg/L		-0.06	0.06			
WG562706CCV3	CCV	03/24/23 23:42	II230320-2	1		.96	mg/L	96	90	110			
WG562706CCB3	CCB	03/24/23 23:45				U	mg/L		-0.06	0.06			
WG562707													
WG562707ICV	ICV	03/25/23 19:11	II230320-1	2		1.985	mg/L	99	95	105			
WG562707ICB	ICB	03/25/23 19:17				U	mg/L		-0.06	0.06			
WG562707PQV	PQV	03/25/23 19:20	II230321-6	.05005		.058	mg/L	116	70	130			
WG562707SIC	SIC	03/25/23 19:23	II230321-8	.1001		.106	mg/L	106	80	120			
WG562707LFB	LFB	03/25/23 19:29	II230317-6	.5005		.516	mg/L	103	85	115			
WG562707CCV1	CCV	03/25/23 19:59	II230320-2	1		1.003	mg/L	100	90	110			
WG562707CCB1	CCB	03/25/23 20:02				U	mg/L		-0.06	0.06			
L78769-03AS	AS	03/25/23 20:14	II230317-6	10.01	U	10.304	mg/L	103	85	115			
L78769-03ASD	ASD	03/25/23 20:17	II230317-6	10.01	U	10.038	mg/L	100	85	115	3	20	
WG562707CCV2	CCV	03/25/23 20:35	II230320-2	1		1.017	mg/L	102	90	110			
WG562707CCB2	CCB	03/25/23 20:38				U	mg/L		-0.06	0.06			
WG562707CCV3	CCV	03/25/23 20:57	II230320-2	1		.998	mg/L	100	90	110			
WG562707CCB3	CCB	03/25/23 21:00				U	mg/L		-0.06	0.06			

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562149													
WG562149ICV	ICV	03/17/23 12:53	MS221228-3	.05		.05138	mg/L	103	90	110			
WG562149ICB	ICB	03/17/23 12:54				U	mg/L		-0.00011	0.00011			
WG562149LFB	LFB	03/17/23 12:56	MS230315-2	.05005		.049771	mg/L	99	85	115			
WG562149CCV1	CCV	03/17/23 13:11	MS230310-4	.1001		.0966	mg/L	97	90	110			
WG562149CCB1	CCB	03/17/23 13:13				.000054	mg/L		-0.00015	0.00015			
WG562149CCV2	CCV	03/17/23 13:33	MS230310-4	.1001		.099448	mg/L	99	90	110			
WG562149CCB2	CCB	03/17/23 13:35				U	mg/L		-0.00015	0.00015			
L79125-01AS	AS	03/17/23 13:44	MS230315-2	.05005	.00356	.052726	mg/L	98	70	130			
L79125-01ASD	ASD	03/17/23 13:46	MS230315-2	.05005	.00356	.053072	mg/L	99	70	130	1	20	
WG562149CCV3	CCV	03/17/23 13:52	MS230310-4	.1001		.099525	mg/L	99	90	110			
WG562149CCB3	CCB	03/17/23 13:53				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: ***L79125***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Copper, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562307													
WG562307ICV	ICV	03/21/23 14:52	II230301-1	2		1.99	mg/L	100	95	105			
WG562307ICB	ICB	03/21/23 14:58				U	mg/L		-0.03	0.03			
WG562307PQV	PQV	03/21/23 15:01	II230314-2	.05005		.048	mg/L	96	70	130			
WG562307SIC	SIC	03/21/23 15:04	II230217-1	.1001		.106	mg/L	106	80	120			
WG562307LFB	LFB	03/21/23 15:11	II230317-6	.5005		.491	mg/L	98	85	115			
WG562307CCV1	CCV	03/21/23 15:42	II230303-1	1		.995	mg/L	100	90	110			
WG562307CCB1	CCB	03/21/23 15:46				U	mg/L		-0.03	0.03			
WG562307CCV2	CCV	03/21/23 16:22	II230303-1	1		1.035	mg/L	104	90	110			
WG562307CCB2	CCB	03/21/23 16:25				U	mg/L		-0.03	0.03			
L79205-03AS	AS	03/21/23 16:38	II230317-6	.5005	U	.507	mg/L	101	85	115			
L79205-03ASD	ASD	03/21/23 16:41	II230317-6	.5005	U	.538	mg/L	107	85	115	6	20	
WG562307CCV3	CCV	03/21/23 16:44	II230303-1	1		.981	mg/L	98	90	110			
WG562307CCB3	CCB	03/21/23 16:47				U	mg/L		-0.03	0.03			

Fluoride SM4500F-C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG563267													
WG563267ICV	ICV	04/03/23 11:38	WC230329-1	2.002		2.04	mg/L	102	90	110			
WG563267ICB	ICB	04/03/23 11:43				U	mg/L		-0.3	0.3			
WG563267PQV	PQV	04/03/23 11:48	WC230330-1	.3514		.37	mg/L	105	70	130			
WG563267LFB	LFB	04/03/23 11:52	WC221227-7	5.02		4.91	mg/L	98	90	110			
L49989-213AS	AS	04/03/23 12:01	WC221227-7	5.02	U	5.05	mg/L	101	90	110			
L49989-213ASD	ASD	04/03/23 12:06	WC221227-7	5.02	U	5.02	mg/L	100	90	110	1	20	
WG563267CCV1	CCV	04/03/23 12:38	WC230329-1	2.002		2.071	mg/L	103	90	110			
WG563267CCB1	CCB	04/03/23 12:46				U	mg/L		-0.3	0.3			
WG563267CCV2	CCV	04/03/23 13:45	WC230329-1	2.002		2.18	mg/L	109	90	110			
WG563267CCB2	CCB	04/03/23 13:53				U	mg/L		-0.3	0.3			
WG563267CCV3	CCV	04/03/23 14:27	WC230329-1	2.002		2.129	mg/L	106	90	110			
WG563267CCB3	CCB	04/03/23 14:35				U	mg/L		-0.3	0.3			

Iron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562307													
WG562307ICV	ICV	03/21/23 14:52	II230301-1	2		1.913	mg/L	96	95	105			
WG562307ICB	ICB	03/21/23 14:58				U	mg/L		-0.18	0.18			
WG562307PQV	PQV	03/21/23 15:01	II230314-2	.1506		.14	mg/L	93	70	130			
WG562307SIC	SIC	03/21/23 15:04	II230217-1	200.9506		189.8	mg/L	94	1	200			
WG562307LFB	LFB	03/21/23 15:11	II230317-6	1.004		.996	mg/L	99	85	115			
WG562307CCV1	CCV	03/21/23 15:42	II230303-1	1		.957	mg/L	96	90	110			
WG562307CCB1	CCB	03/21/23 15:46				U	mg/L		-0.18	0.18			
WG562307CCV2	CCV	03/21/23 16:22	II230303-1	1		1.001	mg/L	100	90	110			
WG562307CCB2	CCB	03/21/23 16:25				U	mg/L		-0.18	0.18			
L79205-03AS	AS	03/21/23 16:38	II230317-6	1.004	.094	1.1	mg/L	100	85	115			
L79205-03ASD	ASD	03/21/23 16:41	II230317-6	1.004	.094	1.162	mg/L	106	85	115	5	20	
WG562307CCV3	CCV	03/21/23 16:44	II230303-1	1		.941	mg/L	94	90	110			
WG562307CCB3	CCB	03/21/23 16:47				U	mg/L		-0.18	0.18			

GCC

ACZ Project ID: ***L79125***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562149													
WG562149ICV	ICV	03/17/23 12:53	MS221228-3	.05		.05172	mg/L	103	90	110			
WG562149ICB	ICB	03/17/23 12:54				U	mg/L		-0.00022	0.00022			
WG562149LFB	LFB	03/17/23 12:56	MS230315-2	.05005		.05034	mg/L	101	85	115			
WG562149CCV1	CCV	03/17/23 13:11	MS230310-4	.25025		.24181	mg/L	97	90	110			
WG562149CCB1	CCB	03/17/23 13:13				.00015	mg/L		-0.0003	0.0003			
WG562149CCV2	CCV	03/17/23 13:33	MS230310-4	.25025		.24477	mg/L	98	90	110			
WG562149CCB2	CCB	03/17/23 13:35				.00012	mg/L		-0.0003	0.0003			
L79125-01AS	AS	03/17/23 13:44	MS230315-2	.05005	U	.05361	mg/L	107	70	130			
L79125-01ASD	ASD	03/17/23 13:46	MS230315-2	.05005	U	.05315	mg/L	106	70	130	1	20	
WG562149CCV3	CCV	03/17/23 13:52	MS230310-4	.25025		.24257	mg/L	97	90	110			
WG562149CCB3	CCB	03/17/23 13:53				.00011	mg/L		-0.0003	0.0003			

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562307													
WG562307ICV	ICV	03/21/23 14:52	II230301-1	2		1.9612	mg/L	98	95	105			
WG562307ICB	ICB	03/21/23 14:58				U	mg/L		-0.024	0.024			
WG562307PQV	PQV	03/21/23 15:01	II230314-2	.03992		.0429	mg/L	107	70	130			
WG562307SIC	SIC	03/21/23 15:04	II230217-1	.0998		.103	mg/L	103	80	120			
WG562307LFB	LFB	03/21/23 15:11	II230317-6	1.003		.9529	mg/L	95	85	115			
WG562307CCV1	CCV	03/21/23 15:42	II230303-1	1		.9689	mg/L	97	90	110			
WG562307CCB1	CCB	03/21/23 15:46				U	mg/L		-0.024	0.024			
WG562307CCV2	CCV	03/21/23 16:22	II230303-1	1		1.021	mg/L	102	90	110			
WG562307CCB2	CCB	03/21/23 16:25				U	mg/L		-0.024	0.024			
L79205-03AS	AS	03/21/23 16:38	II230317-6	1.003	.0425	.9963	mg/L	95	85	115			
L79205-03ASD	ASD	03/21/23 16:41	II230317-6	1.003	.0425	1.175	mg/L	113	85	115	16	20	
WG562307CCV3	CCV	03/21/23 16:44	II230303-1	1		.9678	mg/L	97	90	110			
WG562307CCB3	CCB	03/21/23 16:47				U	mg/L		-0.024	0.024			

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562307													
WG562307ICV	ICV	03/21/23 14:52	II230301-1	100		96.62	mg/L	97	95	105			
WG562307ICB	ICB	03/21/23 14:58				U	mg/L		-0.6	0.6			
WG562307PQV	PQV	03/21/23 15:01	II230314-2	1.001		1.07	mg/L	107	70	130			
WG562307SIC	SIC	03/21/23 15:04	II230217-1	201.261		197.5	mg/L	98	1	200			
WG562307LFB	LFB	03/21/23 15:11	II230317-6	49.9979		48.28	mg/L	97	85	115			
WG562307CCV1	CCV	03/21/23 15:42	II230303-1	50		47.53	mg/L	95	90	110			
WG562307CCB1	CCB	03/21/23 15:46				U	mg/L		-0.6	0.6			
WG562307CCV2	CCV	03/21/23 16:22	II230303-1	50		49.23	mg/L	98	90	110			
WG562307CCB2	CCB	03/21/23 16:25				U	mg/L		-0.6	0.6			
L79205-03AS	AS	03/21/23 16:38	II230317-6	49.9979	4.32	54.96	mg/L	101	85	115			
L79205-03ASD	ASD	03/21/23 16:41	II230317-6	49.9979	4.32	54.65	mg/L	101	85	115	1	20	
WG562307CCV3	CCV	03/21/23 16:44	II230303-1	50		47.21	mg/L	94	90	110			
WG562307CCB3	CCB	03/21/23 16:47				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L79125***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Manganese, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562307													
WG562307ICV	ICV	03/21/23 14:52	II230301-1	2		1.957	mg/L	98	95	105			
WG562307ICB	ICB	03/21/23 14:58				U	mg/L		-0.03	0.03			
WG562307PQV	PQV	03/21/23 15:01	II230314-2	.0498		.048	mg/L	96	70	130			
WG562307SIC	SIC	03/21/23 15:04	II230217-1	49.9998		48.56	mg/L	97	1	200			
WG562307LFB	LFB	03/21/23 15:11	II230317-6	.4995		.49	mg/L	98	85	115			
WG562307CCV1	CCV	03/21/23 15:42	II230303-1	1		.969	mg/L	97	90	110			
WG562307CCB1	CCB	03/21/23 15:46				U	mg/L		-0.03	0.03			
WG562307CCV2	CCV	03/21/23 16:22	II230303-1	1		1.02	mg/L	102	90	110			
WG562307CCB2	CCB	03/21/23 16:25				U	mg/L		-0.03	0.03			
L79205-03AS	AS	03/21/23 16:38	II230317-6	.4995	9.79	9.891	mg/L	20	85	115			M3
L79205-03ASD	ASD	03/21/23 16:41	II230317-6	.4995	9.79	10.06	mg/L	54	85	115	2	20	M3
WG562307CCV3	CCV	03/21/23 16:44	II230303-1	1		.969	mg/L	97	90	110			
WG562307CCB3	CCB	03/21/23 16:47				U	mg/L		-0.03	0.03			

Mercury, dissolved M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG561992													
WG561992ICV	ICV	03/15/23 11:36	HG230313-3	.005005		.00515	mg/L	103	95	105			
WG561992ICB	ICB	03/15/23 11:37				U	mg/L		-0.0002	0.0002			
WG561997													
WG561997CCV1	CCV	03/15/23 12:49	HG230313-3	.005005		.00489	mg/L	98	90	110			
WG561997CCB1	CCB	03/15/23 12:50				U	mg/L		-0.0002	0.0002			
WG561997PQV	PQV	03/15/23 12:51	HG230313-5	.001001		.00099	mg/L	99	70	130			
WG561997LRB	LRB	03/15/23 12:52				U	mg/L		-0.00044	0.00044			
WG561997LFB	LFB	03/15/23 12:53	HG230313-6	.002002		.00197	mg/L	98	85	115			
WG561997CCV2	CCV	03/15/23 13:01	HG230313-3	.005005		.00513	mg/L	102	90	110			
WG561997CCB2	CCB	03/15/23 13:02				U	mg/L		-0.0002	0.0002			
L79125-01LFM	LFM	03/15/23 13:10	HG230313-6	.002002	U	.00203	mg/L	101	85	115			
L79125-01LFMD	LFMD	03/15/23 13:11	HG230313-6	.002002	U	.00192	mg/L	96	85	115	6	20	
WG561997CCV3	CCV	03/15/23 13:12	HG230313-3	.005005		.00504	mg/L	101	90	110			
WG561997CCB3	CCB	03/15/23 13:13				U	mg/L		-0.0002	0.0002			
WG561997CCV4	CCV	03/15/23 13:21	HG230313-3	.005005		.0051	mg/L	102	90	110			
WG561997CCB4	CCB	03/15/23 13:22				U	mg/L		-0.0002	0.0002			

GCC

ACZ Project ID: ***L79125***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nickel, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562307													
WG562307ICV	ICV	03/21/23 14:52	II230301-1	2.002		1.982	mg/L	99	95	105			
WG562307ICB	ICB	03/21/23 14:58				U	mg/L		-0.024	0.024			
WG562307PQV	PQV	03/21/23 15:01	II230314-2	.04016		.0393	mg/L	98	70	130			
WG562307SIC	SIC	03/21/23 15:04	II230217-1	.1004		.0924	mg/L	92	80	120			
WG562307LFB	LFB	03/21/23 15:11	II230317-6	.5		.4912	mg/L	98	85	115			
WG562307CCV1	CCV	03/21/23 15:42	II230303-1	1.001		.9889	mg/L	99	90	110			
WG562307CCB1	CCB	03/21/23 15:46				U	mg/L		-0.024	0.024			
WG562307CCV2	CCV	03/21/23 16:22	II230303-1	1.001		1.029	mg/L	103	90	110			
WG562307CCB2	CCB	03/21/23 16:25				U	mg/L		-0.024	0.024			
L79205-03AS	AS	03/21/23 16:38	II230317-6	.5	U	.4986	mg/L	100	85	115			
L79205-03ASD	ASD	03/21/23 16:41	II230317-6	.5	U	.5244	mg/L	105	85	115	5	20	
WG562307CCV3	CCV	03/21/23 16:44	II230303-1	1.001		.9781	mg/L	98	90	110			
WG562307CCB3	CCB	03/21/23 16:47				U	mg/L		-0.024	0.024			

Nitrate/Nitrite as N M353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG561700													
WG561700ICV	ICV	03/08/23 23:24	WI230301-5	2.416		2.374	mg/L	98	90	110			
WG561700ICB	ICB	03/08/23 23:26				U	mg/L		-0.02	0.02			
WG561700PQV	PQV	03/08/23 23:30	WI230228-4	.1		.102	mg/L	102	70	130			
WG561700LFB	LFB	03/08/23 23:31	WI230228-3	2		2.07	mg/L	104	90	110			
WG561700CCV1	CCV	03/08/23 23:40	WI230307-1	2		2.044	mg/L	102	90	110			
WG561700CCB1	CCB	03/08/23 23:43				U	mg/L		-0.02	0.02			
L79125-01AS	AS	03/08/23 23:53	WI230228-3	2	U	2.112	mg/L	106	90	110			
L79125-02DUP	DUP	03/08/23 23:55			U	U	mg/L				0	20	RA
WG561700CCV2	CCV	03/08/23 23:57	WI230307-1	2		2.021	mg/L	101	90	110			
WG561700CCB2	CCB	03/09/23 0:00				U	mg/L		-0.02	0.02			
WG561700CCV3	CCV	03/09/23 0:15	WI230307-1	2		2.021	mg/L	101	90	110			
WG561700CCB3	CCB	03/09/23 0:18				U	mg/L		-0.02	0.02			

Nitrite as N M353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG561700													
WG561700ICV	ICV	03/08/23 23:24	WI230301-5	.608		.599	mg/L	99	90	110			
WG561700ICB	ICB	03/08/23 23:26				U	mg/L		-0.01	0.01			
WG561700PQV	PQV	03/08/23 23:30	WI230228-4	.05		.049	mg/L	98	70	130			
WG561700LFB	LFB	03/08/23 23:31	WI230228-3	1		1.018	mg/L	102	90	110			
WG561700CCV1	CCV	03/08/23 23:40	WI230307-1	1		1.003	mg/L	100	90	110			
WG561700CCB1	CCB	03/08/23 23:43				U	mg/L		-0.01	0.01			
L79125-01AS	AS	03/08/23 23:53	WI230228-3	1	U	1.065	mg/L	107	90	110			
L79125-02DUP	DUP	03/08/23 23:55			U	U	mg/L				0	20	RA
WG561700CCV2	CCV	03/08/23 23:57	WI230307-1	1		1.003	mg/L	100	90	110			
WG561700CCB2	CCB	03/09/23 0:00				U	mg/L		-0.01	0.01			
WG561700CCV3	CCV	03/09/23 0:15	WI230307-1	1		.998	mg/L	100	90	110			
WG561700CCB3	CCB	03/09/23 0:18				U	mg/L		-0.01	0.01			

GCC

ACZ Project ID: ***L79125***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562307													
WG562307ICV	ICV	03/21/23 14:52	II230301-1	20		19.98	mg/L	100	95	105			
WG562307ICB	ICB	03/21/23 14:58				U	mg/L		-0.6	0.6			
WG562307PQV	PQV	03/21/23 15:01	II230314-2	1.005		1.08	mg/L	107	70	130			
WG562307SIC	SIC	03/21/23 15:04	II230217-1	1.005		1.05	mg/L	104	80	120			
WG562307LFB	LFB	03/21/23 15:11	II230317-6	99.95693		98.95	mg/L	99	85	115			
WG562307CCV1	CCV	03/21/23 15:42	II230303-1	10		9.8	mg/L	98	90	110			
WG562307CCB1	CCB	03/21/23 15:46				U	mg/L		-0.6	0.6			
WG562307CCV2	CCV	03/21/23 16:22	II230303-1	10		10.36	mg/L	104	90	110			
WG562307CCB2	CCB	03/21/23 16:25				U	mg/L		-0.6	0.6			
L79205-03AS	AS	03/21/23 16:38	II230317-6	99.95693	.66	106.8	mg/L	106	85	115			
L79205-03ASD	ASD	03/21/23 16:41	II230317-6	99.95693	.66	105.5	mg/L	105	85	115	1	20	
WG562307CCV3	CCV	03/21/23 16:44	II230303-1	10		9.83	mg/L	98	90	110			
WG562307CCB3	CCB	03/21/23 16:47				U	mg/L		-0.6	0.6			

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562013													
WG562013PBW	PBW	03/14/23 11:05				U	mg/L		-20	20			
WG562013LCSW	LCSW	03/14/23 11:08	PCN624421	1000		980	mg/L	98	80	120			
L79135-02DUP	DUP	03/14/23 11:44			1230	1228	mg/L				0	10	
WG562497													
WG562497PBW	PBW	03/21/23 15:45				U	mg/L		-20	20			
WG562497LCSW	LCSW	03/21/23 15:46	PCN624426	1000		968	mg/L	97	80	120			
L79324-01DUP	DUP	03/21/23 16:08			530	524	mg/L				1	10	

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562149													
WG562149ICV	ICV	03/17/23 12:53	MS221228-3	.05		.05243	mg/L	105	90	110			
WG562149ICB	ICB	03/17/23 12:54				U	mg/L		-0.00022	0.00022			
WG562149LFB	LFB	03/17/23 12:56	MS230315-2	.05005		.04944	mg/L	99	85	115			
WG562149CCV1	CCV	03/17/23 13:11	MS230310-4	.1001		.09851	mg/L	98	90	110			
WG562149CCB1	CCB	03/17/23 13:13				U	mg/L		-0.0003	0.0003			
WG562149CCV2	CCV	03/17/23 13:33	MS230310-4	.1001		.09901	mg/L	99	90	110			
WG562149CCB2	CCB	03/17/23 13:35				U	mg/L		-0.0003	0.0003			
L79125-01AS	AS	03/17/23 13:44	MS230315-2	.05005	U	.05309	mg/L	106	70	130			
L79125-01ASD	ASD	03/17/23 13:46	MS230315-2	.05005	U	.05361	mg/L	107	70	130	1	20	
WG562149CCV3	CCV	03/17/23 13:52	MS230310-4	.1001		.09347	mg/L	93	90	110			
WG562149CCB3	CCB	03/17/23 13:53				U	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: ***L79125***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562707													
WG562707ICV	ICV	03/25/23 19:11	II230320-1	100		98.76	mg/L	99	95	105			
WG562707ICB	ICB	03/25/23 19:17				U	mg/L		-0.6	0.6			
WG562707PQV	PQV	03/25/23 19:20	II230321-6	1.000141		.97	mg/L	97	70	130			
WG562707SIC	SIC	03/25/23 19:23	II230321-8	1.000141		1	mg/L	100	80	120			
WG562707LFB	LFB	03/25/23 19:29	II230317-6	100.0157		100.7	mg/L	101	85	115			
WG562707CCV1	CCV	03/25/23 19:59	II230320-2	50		49.31	mg/L	99	90	110			
WG562707CCB1	CCB	03/25/23 20:02				U	mg/L		-0.6	0.6			
L78769-03AS	AS	03/25/23 20:14	II230317-6	2000.314	36.7	2214	mg/L	109	85	115			
L78769-03ASD	ASD	03/25/23 20:17	II230317-6	2000.314	36.7	2202	mg/L	108	85	115	1	20	
WG562707CCV2	CCV	03/25/23 20:35	II230320-2	50		50.08	mg/L	100	90	110			
WG562707CCB2	CCB	03/25/23 20:38				U	mg/L		-0.6	0.6			
WG562707CCV3	CCV	03/25/23 20:57	II230320-2	50		48.89	mg/L	98	90	110			
WG562707CCB3	CCB	03/25/23 21:00				U	mg/L		-0.6	0.6			
WG562801													
WG562801ICV	ICV	03/27/23 16:02	II230320-1	100		97.29	mg/L	97	95	105			
WG562801ICB	ICB	03/27/23 16:08				U	mg/L		-0.6	0.6			
WG562801PQV	PQV	03/27/23 16:11	II230321-6	1.000141		.99	mg/L	99	70	130			
WG562801SIC	SIC	03/27/23 16:15	II230321-8	1.000141		1.01	mg/L	101	80	120			
WG562801LFB	LFB	03/27/23 16:21	II230317-6	100.0157		96.34	mg/L	96	85	115			
L79236-04AS	AS	03/27/23 16:40	II230317-6	500.0785	335	824.5	mg/L	98	85	115			
L79236-04ASD	ASD	03/27/23 16:43	II230317-6	500.0785	335	853	mg/L	104	85	115	3	20	
WG562801CCV1	CCV	03/27/23 16:53	II230320-2	50		48.02	mg/L	96	90	110			
WG562801CCB1	CCB	03/27/23 16:56				U	mg/L		-0.6	0.6			
WG562801CCV2	CCV	03/27/23 17:31	II230320-2	50		46.17	mg/L	92	90	110			
WG562801CCB2	CCB	03/27/23 17:34				U	mg/L		-0.6	0.6			
WG562801CCV3	CCV	03/27/23 17:53	II230320-2	50		48.17	mg/L	96	90	110			
WG562801CCB3	CCB	03/27/23 17:57				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L79125***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sulfate D516-02/-07/-11 - TURBIDIMETRIC

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562094													
WG562094ICB	ICB	03/15/23 11:02				U	mg/L		-3	3			
WG562094ICV	ICV	03/15/23 11:02	WI230311-1	19.54		19.4	mg/L	99	90	110			
WG562094CCV1	CCV	03/15/23 11:11	WI230311-2	25		25.2	mg/L	101	90	110			
WG562094CCB1	CCB	03/15/23 11:11				U	mg/L		-3	3			
WG562094LFB	LFB	03/15/23 11:11	WI230119-9	10		10.2	mg/L	102	90	110			
WG562094CCV2	CCV	03/15/23 11:13	WI230311-2	25		24.7	mg/L	99	90	110			
WG562094CCB2	CCB	03/15/23 11:13				U	mg/L		-3	3			
WG562094CCV3	CCV	03/15/23 11:15	WI230311-2	25		24.4	mg/L	98	90	110			
WG562094CCB3	CCB	03/15/23 11:15				U	mg/L		-3	3			
WG562094CCV4	CCV	03/15/23 11:16	WI230311-2	25		24.8	mg/L	99	90	110			
WG562094CCB4	CCB	03/15/23 11:16				U	mg/L		-3	3			
WG562094CCV5	CCV	03/15/23 11:27	WI230311-2	25		25.2	mg/L	101	90	110			
WG562094CCB5	CCB	03/15/23 11:27				U	mg/L		-3	3			
L79117-03DUP	DUP	03/15/23 11:29			58.5	58.8	mg/L				1	20	
WG562094CCV6	CCV	03/15/23 11:31	WI230311-2	25		25	mg/L	100	90	110			
WG562094CCB6	CCB	03/15/23 11:31				U	mg/L		-3	3			
L79135-01DUP	DUP	03/15/23 11:32			740	728.9	mg/L				2	20	
WG562094CCV7	CCV	03/15/23 11:34	WI230311-2	25		24.8	mg/L	99	90	110			
WG562094CCB7	CCB	03/15/23 11:34				U	mg/L		-3	3			
L79135-02AS	AS	03/15/23 11:35	SO4TURB50X	10	725	719.6	mg/L	-54	90	110			M3
WG562094CCV8	CCV	03/15/23 11:37	WI230311-2	25		24.7	mg/L	99	90	110			
WG562094CCB8	CCB	03/15/23 11:37				U	mg/L		-3	3			
L79117-04AS	AS	03/15/23 11:38	SO4TURB25X	10	261	272.3	mg/L	113	90	110			M3
WG562094CCV9	CCV	03/15/23 11:42	WI230311-2	25		24.9	mg/L	100	90	110			
WG562094CCB9	CCB	03/15/23 11:42				U	mg/L		-3	3			

Vanadium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562307													
WG562307ICV	ICV	03/21/23 14:52	II230301-1	2		2.037	mg/L	102	95	105			
WG562307ICB	ICB	03/21/23 14:58				U	mg/L		-0.015	0.015			
WG562307PQV	PQV	03/21/23 15:01	II230314-2	.025025		.025	mg/L	100	70	130			
WG562307SIC	SIC	03/21/23 15:04	II230217-1	.1001		.099	mg/L	99	80	120			
WG562307LFB	LFB	03/21/23 15:11	II230317-6	.5005		.5057	mg/L	101	85	115			
WG562307CCV1	CCV	03/21/23 15:42	II230303-1	1		1.015	mg/L	102	90	110			
WG562307CCB1	CCB	03/21/23 15:46				U	mg/L		-0.03	0.03			
WG562307CCV2	CCV	03/21/23 16:22	II230303-1	1		1.053	mg/L	105	90	110			
WG562307CCB2	CCB	03/21/23 16:25				U	mg/L		-0.03	0.03			
L79205-03AS	AS	03/21/23 16:38	II230317-6	.5005	U	.5398	mg/L	108	85	115			
L79205-03ASD	ASD	03/21/23 16:41	II230317-6	.5005	U	.532	mg/L	106	85	115	1	20	
WG562307CCV3	CCV	03/21/23 16:44	II230303-1	1		1	mg/L	100	90	110			
WG562307CCB3	CCB	03/21/23 16:47				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L79125***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Zinc, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG562307													
WG562307ICV	ICV	03/21/23 14:52	II230301-1	2		1.956	mg/L	98	95	105			
WG562307ICB	ICB	03/21/23 14:58				U	mg/L		-0.06	0.06			
WG562307PQV	PQV	03/21/23 15:01	II230314-2	.0501		.049	mg/L	98	70	130			
WG562307SIC	SIC	03/21/23 15:04	II230217-1	.1002		.098	mg/L	98	80	120			
WG562307LFB	LFB	03/21/23 15:11	II230317-6	.50045		.512	mg/L	102	85	115			
WG562307CCV1	CCV	03/21/23 15:42	II230303-1	1		.967	mg/L	97	90	110			
WG562307CCB1	CCB	03/21/23 15:46				U	mg/L		-0.06	0.06			
WG562307CCV2	CCV	03/21/23 16:22	II230303-1	1		1.012	mg/L	101	90	110			
WG562307CCB2	CCB	03/21/23 16:25				U	mg/L		-0.06	0.06			
L79205-03AS	AS	03/21/23 16:38	II230317-6	.50045	2.26	2.692	mg/L	88	85	115			
L79205-03ASD	ASD	03/21/23 16:41	II230317-6	.50045	2.26	2.717	mg/L	93	85	115	1	20	
WG562307CCV3	CCV	03/21/23 16:44	II230303-1	1		.955	mg/L	96	90	110			
WG562307CCB3	CCB	03/21/23 16:47				U	mg/L		-0.06	0.06			

GCC Rio Grande

ACZ Project ID: ***L79125***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L79125-01	WG562307	Boron, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG562220	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG562307	Manganese, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG561700	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG562497	Residue, Filterable (TDS) @180C	SM2540C	H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
	WG562094	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L79125-02	WG562307	Boron, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG562220	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG562307	Manganese, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG561700	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG562094	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG562393	Total Alkalinity	SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

Certification Qualifiers

GCC Rio Grande ACZ Project ID: ***L79125***

No certification qualifiers associated with this analysis

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

GCC Rio Grande
183230

ACZ Project ID: L79125
Date Received: 03/08/2023 11:55
Received By:
Date Printed: 3/9/2023

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]	X		
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?			X
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
7108	-1.1	<=6.0	15	N/A

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

GCC Rio Grande
183230

ACZ Project ID: L79125
Date Received: 03/08/2023 11:55
Received By:
Date Printed: 3/9/2023

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L79125

CHAIN of CUSTODY

Report to:

Name: Amy Veek	Address: 3372 Lime Road
Company: GCC Rio Grande Inc	Pueblo CO 81004
E-mail: aveek@gcc.com	Telephone: 719-647-6861

Copy of Report to:

Name: Landon Beck	E-mail: lbeck@resourcehydrogeologic.com
Company: Resource Hydrogeologic	Telephone: (970) 459-4865

Invoice to:

Name: Amy Veek	Address: 3372 Lime Road
Company: GCC Rio Grande Inc	Pueblo CO 81004
E-mail: aveek@gcc.com	Telephone: 719-647-6861

Copy of Invoice to:

Name:	Address:
Company:	
E-mail:	Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes No ✓

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Amy Veek **Sampler's Site Information** State CO Zip code 81004 Time Zone MDT

***Sampler's Signature:** Amy Veek

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: GW-COMPLIANCE

PO#: 183230

Reporting state for compliance testing:

Check box if samples include NRC licensed material?

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	GW-COmpliance							
MW-9	3/7/2023 14:19	GW	3	✓							
MW-10	3/7/2023 14:30	GW	3	✓							

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
Amy Veek	3/7/23 15:45		3/8/23 1155

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

L79125 Chain of Custod

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

June 26, 2023

Report to:
Amy Veek
GCC Rio Grande
3372 Lime Road
Pueblo, CO 81004

cc: Landon Beck

Bill to:
Amy Veek
GCC Rio Grande
3372 Lime Road
Pueblo, CO 81004

Project ID: 183230
ACZ Project ID: L80783

Amy Veek:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on May 31, 2023. This project has been assigned to ACZ's project number, L80783. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L80783. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after June 25, 2024. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Case Narrative

GCC Rio Grande

June 26, 2023

Project ID: 183230
ACZ Project ID: L80783

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 5 groundwater samples from GCC Rio Grande on May 31, 2023. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L80783. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

All analyses were performed within EPA recommended holding times except for parameters flagged with an "H2" requiring re-analysis after the hold time had expired.

Sample Analysis

These samples were analyzed for inorganic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports. The following required further detail not provided by the Extended Qualifier Report:

1. The below is from WG568035, Qualifier: N1, Applies to: L80783-04 and -05/TOTAL DISSOLVED SOLIDS - Method required dry cycles in 180'C oven for at least 1 hour. Samples were in the 180'C oven for a dry cycle less than 1 hour. All quality controls were passing and sample constant weights obtained.

GCC Rio Grande
Project ID: 183230
Sample ID: MW-14

ACZ Sample ID: ***L80783-01***
Date Sampled: *05/30/23 10:54*
Date Received: *05/31/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.053	B		mg/L	0.05	0.25	06/07/23 3:39	keh1
Arsenic, dissolved	M200.8 ICP-MS	5	0.00408	B		mg/L	0.001	0.005	06/13/23 16:43	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 3:39	keh1
Boron, dissolved	M200.7 ICP	1	1.21			mg/L	0.03	0.1	06/07/23 3:39	keh1
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U		mg/L	0.00025	0.00125	06/13/23 16:43	gjl/scp
Calcium, dissolved	M200.7 ICP	1	17.1		*	mg/L	0.1	0.5	06/07/23 3:39	keh1
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 3:39	keh1
Cobalt, dissolved	M200.8 ICP-MS	5	0.000622	B		mg/L	0.00025	0.00125	06/13/23 16:43	gjl/scp
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 3:39	keh1
Iron, dissolved	M200.7 ICP	1	0.678			mg/L	0.06	0.15	06/07/23 3:39	keh1
Lead, dissolved	M200.8 ICP-MS	5	0.00084	B		mg/L	0.0005	0.0025	06/13/23 16:43	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.495			mg/L	0.008	0.04	06/07/23 3:39	keh1
Magnesium, dissolved	M200.7 ICP	1	5.47			mg/L	0.2	1	06/07/23 3:39	keh1
Manganese, dissolved	M200.7 ICP	1	0.035	B	*	mg/L	0.01	0.05	06/07/23 3:39	keh1
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/06/23 11:02	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	06/07/23 3:39	keh1
Potassium, dissolved	M200.7 ICP	1	5.01			mg/L	0.2	1	06/07/23 3:39	keh1
Selenium, dissolved	M200.8 ICP-MS	20	<0.002	U	*	mg/L	0.002	0.005	06/19/23 17:21	gjl/scp
Sodium, dissolved	M200.7 ICP	2	1770			mg/L	0.4	2	06/07/23 21:49	keh1
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	06/07/23 3:39	keh1
Zinc, dissolved	M200.7 ICP	1	0.063			mg/L	0.02	0.05	06/07/23 3:39	keh1

GCC Rio Grande
Project ID: 183230
Sample ID: MW-14

ACZ Sample ID: ***L80783-01***
Date Sampled: *05/30/23 10:54*
Date Received: *05/31/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	1490			mg/L	2	20	06/10/23 0:00	jck
Carbonate as CaCO3		1	<2	U		mg/L	2	20	06/10/23 0:00	jck
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	06/10/23 0:00	jck
Total Alkalinity		1	1490			mg/L	2	20	06/10/23 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-4.8			%			06/26/23 0:00	calc
Sum of Anions			87			meq/L			06/26/23 0:00	calc
Sum of Cations			79			meq/L			06/26/23 0:00	calc
Chloride	SM4500Cl-E	25	1730		*	mg/L	25	50	06/06/23 17:13	aps
Fluoride	SM4500F-C	1	2.61			mg/L	0.15	0.35	06/15/23 18:29	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		65			mg/L	0.2	5	06/26/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	06/26/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U		mg/L	0.02	0.1	06/01/23 0:20	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	06/01/23 0:20	pjb
Residue, Filterable (TDS) @180C	SM2540C	5	4710		*	mg/L	100	200	06/05/23 12:37	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	50	414		*	mg/L	50	250	06/15/23 12:39	aps
TDS (calculated)	Calculation		4850			mg/L			06/26/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.97						06/26/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-13

ACZ Sample ID: ***L80783-02***
Date Sampled: *05/30/23 12:57*
Date Received: *05/31/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/07/23 3:42	keh1
Arsenic, dissolved	M200.8 ICP-MS	2	0.00044	B		mg/L	0.0004	0.002	06/13/23 16:45	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 3:42	keh1
Boron, dissolved	M200.7 ICP	1	1.04			mg/L	0.03	0.1	06/07/23 3:42	keh1
Cadmium, dissolved	M200.8 ICP-MS	2	0.000123	B		mg/L	0.0001	0.0005	06/13/23 16:45	gjl/scp
Calcium, dissolved	M200.7 ICP	1	6.22		*	mg/L	0.1	0.5	06/07/23 3:42	keh1
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 3:42	keh1
Cobalt, dissolved	M200.8 ICP-MS	2	0.000220	B		mg/L	0.0001	0.0005	06/13/23 16:45	gjl/scp
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 3:42	keh1
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	06/07/23 3:42	keh1
Lead, dissolved	M200.8 ICP-MS	2	0.00043	B		mg/L	0.0002	0.001	06/13/23 16:45	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.276			mg/L	0.008	0.04	06/07/23 3:42	keh1
Magnesium, dissolved	M200.7 ICP	1	1.82			mg/L	0.2	1	06/07/23 3:42	keh1
Manganese, dissolved	M200.7 ICP	1	<0.01	U	*	mg/L	0.01	0.05	06/07/23 3:42	keh1
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/06/23 11:03	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	06/07/23 3:42	keh1
Potassium, dissolved	M200.7 ICP	1	2.93			mg/L	0.2	1	06/07/23 3:42	keh1
Selenium, dissolved	M200.8 ICP-MS	10	<0.001	U	*	mg/L	0.001	0.0025	06/19/23 17:23	gjl/scp
Sodium, dissolved	M200.7 ICP	2	1050			mg/L	0.4	2	06/07/23 21:52	keh1
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	06/07/23 3:42	keh1
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 3:42	keh1

GCC Rio Grande
Project ID: 183230
Sample ID: MW-13

ACZ Sample ID: ***L80783-02***
Date Sampled: *05/30/23 12:57*
Date Received: *05/31/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	1380			mg/L	2	20	06/10/23 0:00	jck
Carbonate as CaCO3		1	74.9			mg/L	2	20	06/10/23 0:00	jck
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	06/10/23 0:00	jck
Total Alkalinity		1	1450			mg/L	2	20	06/10/23 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-2.1			%			06/26/23 0:00	calc
Sum of Anions			49			meq/L			06/26/23 0:00	calc
Sum of Cations			47			meq/L			06/26/23 0:00	calc
Chloride	SM4500Cl-E	25	654		*	mg/L	25	50	06/06/23 17:15	aps
Fluoride	SM4500F-C	1	5.79			mg/L	0.15	0.35	06/15/23 18:34	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		23.0			mg/L	0.2	5	06/26/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	06/26/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U		mg/L	0.02	0.1	06/01/23 0:26	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	06/01/23 0:26	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	2640		*	mg/L	40	80	06/05/23 12:40	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	63.7		*	mg/L	5	25	06/15/23 12:39	aps
TDS (calculated)	Calculation		2670			mg/L			06/26/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.99						06/26/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-8

ACZ Sample ID: ***L80783-03***
Date Sampled: *05/30/23 13:55*
Date Received: *05/31/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/07/23 3:45	keh1
Arsenic, dissolved	M200.8 ICP-MS	5	0.00146	B		mg/L	0.001	0.005	06/13/23 16:52	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 3:45	keh1
Boron, dissolved	M200.7 ICP	1	0.930			mg/L	0.03	0.1	06/07/23 3:45	keh1
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U		mg/L	0.00025	0.00125	06/13/23 16:52	gjl/scp
Calcium, dissolved	M200.7 ICP	1	60.1		*	mg/L	0.1	0.5	06/07/23 3:45	keh1
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 3:45	keh1
Cobalt, dissolved	M200.8 ICP-MS	5	0.000306	B		mg/L	0.00025	0.00125	06/13/23 16:52	gjl/scp
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 3:45	keh1
Iron, dissolved	M200.7 ICP	1	1.02			mg/L	0.06	0.15	06/07/23 3:45	keh1
Lead, dissolved	M200.8 ICP-MS	5	<0.0005	U		mg/L	0.0005	0.0025	06/13/23 16:52	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.418			mg/L	0.008	0.04	06/07/23 3:45	keh1
Magnesium, dissolved	M200.7 ICP	1	25.3			mg/L	0.2	1	06/07/23 3:45	keh1
Manganese, dissolved	M200.7 ICP	1	0.190		*	mg/L	0.01	0.05	06/07/23 3:45	keh1
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/06/23 14:49	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	06/07/23 3:45	keh1
Potassium, dissolved	M200.7 ICP	1	5.45			mg/L	0.2	1	06/07/23 3:45	keh1
Selenium, dissolved	M200.8 ICP-MS	5	0.00090	B		mg/L	0.0005	0.00125	06/13/23 16:52	gjl/scp
Sodium, dissolved	M200.7 ICP	2	1280			mg/L	0.4	2	06/07/23 21:55	keh1
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	06/07/23 3:45	keh1
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 3:45	keh1

GCC Rio Grande
Project ID: 183230
Sample ID: MW-8

ACZ Sample ID: ***L80783-03***
Date Sampled: *05/30/23 13:55*
Date Received: *05/31/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	1400			mg/L	2	20	06/10/23 0:00	jck
Carbonate as CaCO3		1	<2	U		mg/L	2	20	06/10/23 0:00	jck
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	06/10/23 0:00	jck
Total Alkalinity		1	1400			mg/L	2	20	06/10/23 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-3.1			%			06/26/23 0:00	calc
Sum of Anions			66			meq/L			06/26/23 0:00	calc
Sum of Cations			62			meq/L			06/26/23 0:00	calc
Chloride	SM4500Cl-E	5	288		*	mg/L	5	10	06/06/23 17:15	aps
Fluoride	SM4500F-C	1	0.89			mg/L	0.15	0.35	06/15/23 18:40	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		254			mg/L	0.2	5	06/26/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		0.989			mg/L	0.02	0.1	06/26/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	0.989			mg/L	0.02	0.1	06/01/23 0:27	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	06/01/23 0:27	pjb
Residue, Filterable (TDS) @180C	SM2540C	50	4000		*	mg/L	1000	2000	06/05/23 12:43	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	50	1430		*	mg/L	50	250	06/15/23 12:39	aps
TDS (calculated)	Calculation		3940			mg/L			06/26/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.02						06/26/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-7

ACZ Sample ID: ***L80783-04***
Date Sampled: *05/30/23 14:46*
Date Received: *05/31/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/06/23 20:04	wtc
Arsenic, dissolved	M200.8 ICP-MS	5	<0.001	U		mg/L	0.001	0.005	06/13/23 16:54	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/06/23 20:04	wtc
Boron, dissolved	M200.7 ICP	1	0.166			mg/L	0.03	0.1	06/06/23 20:04	wtc
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U		mg/L	0.00025	0.00125	06/13/23 16:54	gjl/scp
Calcium, dissolved	M200.7 ICP	1	466		*	mg/L	0.1	0.5	06/06/23 20:04	wtc
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/06/23 20:04	wtc
Cobalt, dissolved	M200.8 ICP-MS	5	0.00207			mg/L	0.00025	0.00125	06/13/23 16:54	gjl/scp
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/06/23 20:04	wtc
Iron, dissolved	M200.7 ICP	1	0.092	B		mg/L	0.06	0.15	06/06/23 20:04	wtc
Lead, dissolved	M200.8 ICP-MS	5	<0.0005	U		mg/L	0.0005	0.0025	06/13/23 16:54	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.453			mg/L	0.008	0.04	06/06/23 20:04	wtc
Magnesium, dissolved	M200.7 ICP	1	519		*	mg/L	0.2	1	06/06/23 20:04	wtc
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/06/23 20:04	wtc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/06/23 14:50	mlh
Nickel, dissolved	M200.7 ICP	1	0.0227	B		mg/L	0.008	0.04	06/06/23 20:04	wtc
Potassium, dissolved	M200.7 ICP	1	13.1			mg/L	0.2	1	06/06/23 20:04	wtc
Selenium, dissolved	M200.8 ICP-MS	5	0.0981			mg/L	0.0005	0.00125	06/13/23 16:54	gjl/scp
Sodium, dissolved	M200.7 ICP	1	360			mg/L	0.2	1	06/06/23 20:04	wtc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	06/06/23 20:04	wtc
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/06/23 20:04	wtc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-7

ACZ Sample ID: ***L80783-04***
Date Sampled: *05/30/23 14:46*
Date Received: *05/31/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	358			mg/L	2	20	06/10/23 0:00	jck
Carbonate as CaCO3		1	<2	U		mg/L	2	20	06/10/23 0:00	jck
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	06/10/23 0:00	jck
Total Alkalinity		1	358			mg/L	2	20	06/10/23 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.6			%			06/26/23 0:00	calc
Sum of Anions			81			meq/L			06/26/23 0:00	calc
Sum of Cations			82.0			meq/L			06/26/23 0:00	calc
Chloride	SM4500Cl-E	1	47.2		*	mg/L	1	2	06/06/23 17:16	aps
Fluoride	SM4500F-C	1	0.41		*	mg/L	0.15	0.35	06/15/23 18:51	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		3300			mg/L	0.2	5	06/26/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		8.66			mg/L	0.1	0.5	06/26/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	5	8.66			mg/L	0.1	0.5	06/01/23 0:35	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	06/01/23 0:28	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	5560	H	*	mg/L	40	80	06/13/23 15:05	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	120	3470		*	mg/L	120	600	06/15/23 12:41	aps
TDS (calculated)	Calculation		5090			mg/L			06/26/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.09						06/26/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-6

ACZ Sample ID: ***L80783-05***
Date Sampled: *05/30/23 15:15*
Date Received: *05/31/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/06/23 20:14	wtc
Arsenic, dissolved	M200.8 ICP-MS	5	<0.001	U		mg/L	0.001	0.005	06/13/23 16:57	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/06/23 20:14	wtc
Boron, dissolved	M200.7 ICP	1	0.239			mg/L	0.03	0.1	06/06/23 20:14	wtc
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U		mg/L	0.00025	0.00125	06/13/23 16:57	gjl/scp
Calcium, dissolved	M200.7 ICP	1	398		*	mg/L	0.1	0.5	06/06/23 20:14	wtc
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/06/23 20:14	wtc
Cobalt, dissolved	M200.8 ICP-MS	5	0.0541			mg/L	0.00025	0.00125	06/13/23 16:57	gjl/scp
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/06/23 20:14	wtc
Iron, dissolved	M200.7 ICP	1	1.12			mg/L	0.06	0.15	06/06/23 20:14	wtc
Lead, dissolved	M200.8 ICP-MS	5	<0.0005	U		mg/L	0.0005	0.0025	06/13/23 16:57	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.462			mg/L	0.008	0.04	06/06/23 20:14	wtc
Magnesium, dissolved	M200.7 ICP	1	421		*	mg/L	0.2	1	06/06/23 20:14	wtc
Manganese, dissolved	M200.7 ICP	1	0.656			mg/L	0.01	0.05	06/06/23 20:14	wtc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/06/23 14:51	mlh
Nickel, dissolved	M200.7 ICP	1	0.0895			mg/L	0.008	0.04	06/06/23 20:14	wtc
Potassium, dissolved	M200.7 ICP	1	10.5			mg/L	0.2	1	06/06/23 20:14	wtc
Selenium, dissolved	M200.8 ICP-MS	5	0.00323			mg/L	0.0005	0.00125	06/13/23 16:57	gjl/scp
Sodium, dissolved	M200.7 ICP	1	566			mg/L	0.2	1	06/06/23 20:14	wtc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	06/06/23 20:14	wtc
Zinc, dissolved	M200.7 ICP	1	0.028	B		mg/L	0.02	0.05	06/06/23 20:14	wtc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-6

ACZ Sample ID: ***L80783-05***
Date Sampled: *05/30/23 15:15*
Date Received: *05/31/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	493			mg/L	2	20	06/10/23 0:00	jck
Carbonate as CaCO3		1	<2	U		mg/L	2	20	06/10/23 0:00	jck
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	06/10/23 0:00	jck
Total Alkalinity		1	493			mg/L	2	20	06/10/23 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			1.3			%			06/26/23 0:00	calc
Sum of Anions			78			meq/L			06/26/23 0:00	calc
Sum of Cations			80			meq/L			06/26/23 0:00	calc
Chloride	SM4500Cl-E	1	74.6		*	mg/L	1	2	06/06/23 17:16	aps
Fluoride	SM4500F-C	1	0.52		*	mg/L	0.15	0.35	06/15/23 19:06	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		2730			mg/L	0.2	5	06/26/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		0.321			mg/L	0.02	0.1	06/26/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	0.361			mg/L	0.02	0.1	06/01/23 0:29	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	0.040	B	*	mg/L	0.01	0.05	06/01/23 0:29	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	5380	H	*	mg/L	40	80	06/13/23 15:07	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	120	3150		*	mg/L	120	600	06/15/23 12:41	aps
TDS (calculated)	Calculation		4920			mg/L			06/26/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.09						06/26/23 0:00	calc

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1)	EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2)	EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3)	EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4)	EPA SW-846. Test Methods for Evaluating Solid Waste.
(5)	Standard Methods for the Examination of Water and Wastewater.

Comments

(1)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2)	Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3)	Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4)	An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5)	If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

GCC

ACZ Project ID: ***L80783***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567812													
WG567812PBW1	PBW	06/09/23 19:25				U	mg/L		-20	20			
WG567812LCSW3	LCSW	06/09/23 19:45	WC230601-3	820.0001		845.1	mg/L	103	90	110			
WG567812LCSW6	LCSW	06/09/23 23:50	WC230601-3	820.0001		870.9	mg/L	106	90	110			
WG567812PBW2	PBW	06/10/23 0:00				3.8	mg/L		-20	20			
L80785-01DUP	DUP	06/10/23 4:00			670	683.1	mg/L				2	20	
WG567812LCSW9	LCSW	06/10/23 4:21	WC230601-3	820.0001		872.9	mg/L	106	90	110			
WG567812PBW3	PBW	06/10/23 4:31				4.1	mg/L		-20	20			
WG567812LCSW12	LCSW	06/10/23 8:27	WC230601-3	820.0001		881.7	mg/L	108	90	110			
WG567812PBW4	PBW	06/10/23 8:37				4.7	mg/L		-20	20			
WG567812LCSW15	LCSW	06/10/23 12:20	WC230601-3	820.0001		878.8	mg/L	107	90	110			
WG567812PBW5	PBW	06/10/23 12:31				5.1	mg/L		-20	20			
WG567812LCSW18	LCSW	06/10/23 14:34	WC230601-3	820.0001		878.1	mg/L	107	90	110			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	2		1.961	mg/L	98	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.15	0.15			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	.2525		.238	mg/L	94	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	202.2525		207.7	mg/L	103	1	200			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	1.01		1.032	mg/L	102	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	1.01	U	1.114	mg/L	110	85	115			
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	1.01	U	1.122	mg/L	111	85	115	1	20	
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	1		.972	mg/L	97	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.15	0.15			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	1		.965	mg/L	97	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.15	0.15			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	1		.963	mg/L	96	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.15	0.15			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	2		1.974	mg/L	99	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.15	0.15			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	.2525		.254	mg/L	101	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	202.2525		208.2	mg/L	103	1	200			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	1.01		1.05	mg/L	104	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	1		.961	mg/L	96	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.15	0.15			
L80771-01AS	AS	06/07/23 3:08	II230530-2	1.01	.128	1.231	mg/L	109	85	115			
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	1.01	.128	1.224	mg/L	109	85	115	1	20	
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	1		.983	mg/L	98	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.15	0.15			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	1		.961	mg/L	96	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.15	0.15			

GCC

ACZ Project ID: ***L80783***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567869													
WG567869ICV	ICV	06/13/23 16:36	MS230410-7	.05		.04775	mg/L	96	90	110			
WG567869ICB	ICB	06/13/23 16:38				U	mg/L		-0.00044	0.00044			
WG567869LFB	LFB	06/13/23 16:40	MS230605-2	.0501		.04806	mg/L	96	85	115			
L80783-02AS	AS	06/13/23 16:47	MS230605-2	.1002	.00044	.09215	mg/L	92	70	130			
L80783-02ASD	ASD	06/13/23 16:50	MS230605-2	.1002	.00044	.09151	mg/L	91	70	130	1	20	
WG567869CCV1	CCV	06/13/23 17:04	MS230606-3	.1002		.09867	mg/L	98	90	110			
WG567869CCB1	CCB	06/13/23 17:06				U	mg/L		-0.0006	0.0006			
WG567869CCV2	CCV	06/13/23 17:27	MS230606-3	.1002		.1007	mg/L	100	90	110			
WG567869CCB2	CCB	06/13/23 17:30				U	mg/L		-0.0006	0.0006			
WG567869CCV3	CCV	06/13/23 17:48	MS230606-3	.1002		.10208	mg/L	102	90	110			
WG567869CCB3	CCB	06/13/23 17:51				U	mg/L		-0.0006	0.0006			

Beryllium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	2		1.945	mg/L	97	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.03	0.03			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	.05005		.052	mg/L	104	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	.1001		.099	mg/L	99	80	120			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	.5005		.493	mg/L	99	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	.5005	U	.475	mg/L	95	85	115			
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	.5005	U	.478	mg/L	96	85	115	1	20	
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	1		.971	mg/L	97	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.03	0.03			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	1		.957	mg/L	96	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.03	0.03			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	1		.964	mg/L	96	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.03	0.03			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	2		1.953	mg/L	98	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.03	0.03			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	.05005		.054	mg/L	108	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	.1001		.102	mg/L	102	80	120			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	.5005		.49	mg/L	98	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	1		.955	mg/L	96	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.03	0.03			
L80771-01AS	AS	06/07/23 3:08	II230530-2	.5005	U	.483	mg/L	97	85	115			
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	.5005	U	.486	mg/L	97	85	115	1	20	
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	1		.971	mg/L	97	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.03	0.03			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	1		.951	mg/L	95	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L80783***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	2		1.985	mg/L	99	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.09	0.09			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	.1001		.101	mg/L	101	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	.1001		.097	mg/L	97	80	120			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	.5005		.483	mg/L	97	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	.5005	.166	.648	mg/L	96	85	115			
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	.5005	.166	.655	mg/L	98	85	115	1	20	
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	1		.996	mg/L	100	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.09	0.09			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	1		.99	mg/L	99	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.09	0.09			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	1		.998	mg/L	100	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.09	0.09			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	2		1.992	mg/L	100	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.09	0.09			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	.1001		.099	mg/L	99	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	.1001		.096	mg/L	96	80	120			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	.5005		.486	mg/L	97	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	1		.976	mg/L	98	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.09	0.09			
L80771-01AS	AS	06/07/23 3:08	II230530-2	.5005	U	.523	mg/L	104	85	115			
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	.5005	U	.52	mg/L	104	85	115	1	20	
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	1		.994	mg/L	99	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.09	0.09			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	1		.976	mg/L	98	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.09	0.09			

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567869													
WG567869ICV	ICV	06/13/23 16:36	MS230410-7	.05		.052625	mg/L	105	90	110			
WG567869ICB	ICB	06/13/23 16:38				U	mg/L		-0.00011	0.00011			
WG567869LFB	LFB	06/13/23 16:40	MS230605-2	.05005		.052489	mg/L	105	85	115			
L80783-02AS	AS	06/13/23 16:47	MS230605-2	.1001	.000123	.102533	mg/L	102	70	130			
L80783-02ASD	ASD	06/13/23 16:50	MS230605-2	.1001	.000123	.104324	mg/L	104	70	130	2	20	
WG567869CCV1	CCV	06/13/23 17:04	MS230606-3	.1001		.105019	mg/L	105	90	110			
WG567869CCB1	CCB	06/13/23 17:06				U	mg/L		-0.00015	0.00015			
WG567869CCV2	CCV	06/13/23 17:27	MS230606-3	.1001		.107336	mg/L	107	90	110			
WG567869CCB2	CCB	06/13/23 17:30				U	mg/L		-0.00015	0.00015			
WG567869CCV3	CCV	06/13/23 17:48	MS230606-3	.1001		.107485	mg/L	107	90	110			
WG567869CCB3	CCB	06/13/23 17:51				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: ***L80783***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	100		99.41	mg/L	99	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.3	0.3			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	.4999		.44	mg/L	88	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	200.4599		199.9	mg/L	100	1	200			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	67.98753		68.95	mg/L	101	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	67.98753	466	510.9	mg/L	66	85	115			M3
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	67.98753	466	508.7	mg/L	63	85	115	0	20	M3
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	50		49.2	mg/L	98	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.3	0.3			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	50		48.78	mg/L	98	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.3	0.3			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	50		48.99	mg/L	98	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.3	0.3			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	100		98.43	mg/L	98	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.3	0.3			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	.4999		.47	mg/L	94	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	200.4599		199.3	mg/L	99	1	200			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	67.98753		68.8	mg/L	101	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	50		47.98	mg/L	96	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.3	0.3			
L80771-01AS	AS	06/07/23 3:08	II230530-2	67.98753	502	542.2	mg/L	59	85	115			M3
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	67.98753	502	548.1	mg/L	68	85	115	1	20	M3
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	50		48.79	mg/L	98	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.3	0.3			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	50		47.56	mg/L	95	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.3	0.3			

GCC

ACZ Project ID: ***L80783***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Chloride SM4500Cl-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567520													
WG567520ICV	ICV	06/06/23 15:37	WI230501-8	55		55.28	mg/L	101	90	110			
WG567520ICB	ICB	06/06/23 15:38				U	mg/L						
WG567520LFB1	LFB	06/06/23 15:38	WI230202-6	30		29.04	mg/L	97	90	110			
WG567520CCV1	CCV	06/06/23 15:44	WI221021-5	49.95		51.03	mg/L	102	90	110			
WG567520CCB1	CCB	06/06/23 15:44				U	mg/L						
WG567520CCV2	CCV	06/06/23 15:50	WI221021-5	49.95		51.58	mg/L	103	90	110			
WG567520CCB2	CCB	06/06/23 15:50				U	mg/L						
WG567520CCV11	CCV	06/06/23 17:08	WI221021-5	49.95		50.47	mg/L	101	90	110			
WG567520CCB11	CCB	06/06/23 17:08				U	mg/L						
WG567520LFB2	LFB	06/06/23 17:11	WI230202-6	30		29.08	mg/L	97	90	110			
L80778-01AS	AS	06/06/23 17:13	WI230202-6	30	69.3	92.52	mg/L	77	90	110			M2
WG567520CCV3	CCV	06/06/23 17:14	WI221021-5	49.95		51.29	mg/L	103	90	110			
WG567520CCB3	CCB	06/06/23 17:14				U	mg/L						
L80783-01DUP	DUP	06/06/23 17:14			1730	1617.23	mg/L				7	20	
WG567520CCV12	CCV	06/06/23 17:18	WI221021-5	49.95		50.96	mg/L	102	90	110			
WG567520CCB12	CCB	06/06/23 17:19				U	mg/L						
WG567520CCV13	CCV	06/07/23 9:51	WI221021-5	49.95		49.14	mg/L	98	90	110			
WG567520CCB13	CCB	06/07/23 9:52				U	mg/L						
WG567520CCV14	CCV	06/07/23 9:53	WI221021-5	49.95		48.91	mg/L	98	90	110			
WG567520CCB14	CCB	06/07/23 9:54				U	mg/L						

GCC

ACZ Project ID: ***L80783***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Chromium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	2		1.954	mg/L	98	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.06	0.06			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	.05005		.052	mg/L	104	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	.1001		.099	mg/L	99	80	120			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	.5005		.49	mg/L	98	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	.5005	U	.483	mg/L	97	85	115			
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	.5005	U	.481	mg/L	96	85	115	0	20	
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	1		.976	mg/L	98	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.06	0.06			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	1		.966	mg/L	97	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.06	0.06			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	1		.973	mg/L	97	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.06	0.06			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	2		1.96	mg/L	98	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.06	0.06			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	.05005		.053	mg/L	106	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	.1001		.103	mg/L	103	80	120			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	.5005		.489	mg/L	98	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	1		.967	mg/L	97	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.06	0.06			
L80771-01AS	AS	06/07/23 3:08	II230530-2	.5005	U	.487	mg/L	97	85	115			
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	.5005	U	.491	mg/L	98	85	115	1	20	
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	1		.981	mg/L	98	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.06	0.06			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	1		.956	mg/L	96	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.06	0.06			

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567869													
WG567869ICV	ICV	06/13/23 16:36	MS230410-7	.05		.050751	mg/L	102	90	110			
WG567869ICB	ICB	06/13/23 16:38				U	mg/L		-0.00011	0.00011			
WG567869LFB	LFB	06/13/23 16:40	MS230605-2	.05005		.050585	mg/L	101	85	115			
L80783-02AS	AS	06/13/23 16:47	MS230605-2	.1001	.00022	.096229	mg/L	96	70	130			
L80783-02ASD	ASD	06/13/23 16:50	MS230605-2	.1001	.00022	.093546	mg/L	93	70	130	3	20	
WG567869CCV1	CCV	06/13/23 17:04	MS230606-3	.1001		.10339	mg/L	103	90	110			
WG567869CCB1	CCB	06/13/23 17:06				U	mg/L		-0.00015	0.00015			
WG567869CCV2	CCV	06/13/23 17:27	MS230606-3	.1001		.104408	mg/L	104	90	110			
WG567869CCB2	CCB	06/13/23 17:30				U	mg/L		-0.00015	0.00015			
WG567869CCV3	CCV	06/13/23 17:48	MS230606-3	.1001		.106058	mg/L	106	90	110			
WG567869CCB3	CCB	06/13/23 17:51				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: ***L80783***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Copper, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	2		1.98	mg/L	99	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.03	0.03			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	.05005		.05	mg/L	100	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	.1001		.098	mg/L	98	80	120			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	.5005		.489	mg/L	98	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	.5005	U	.516	mg/L	103	85	115			
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	.5005	U	.517	mg/L	103	85	115	0	20	
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	1		.988	mg/L	99	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.03	0.03			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	1		.982	mg/L	98	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.03	0.03			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	1		.978	mg/L	98	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.03	0.03			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	2		1.977	mg/L	99	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.03	0.03			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	.05005		.052	mg/L	104	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	.1001		.102	mg/L	102	80	120			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	.5005		.487	mg/L	97	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	1		.959	mg/L	96	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.03	0.03			
L80771-01AS	AS	06/07/23 3:08	II230530-2	.5005	U	.512	mg/L	102	85	115			
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	.5005	U	.516	mg/L	103	85	115	1	20	
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	1		.982	mg/L	98	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.03	0.03			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	1		.96	mg/L	96	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L80783***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Fluoride SM4500F-C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG568253													
WG568253ICV	ICV	06/15/23 15:55	WC230614-1	2.002		1.9	mg/L	95	90	110			
WG568253ICB	ICB	06/15/23 16:03				U	mg/L		-0.3	0.3			
WG568253PQV	PQV	06/15/23 16:08	WC230522-7	.3514		.34	mg/L	97	70	130			
WG568253LFB1	LFB	06/15/23 16:13	WC221227-7	5.02		4.75	mg/L	95	90	110			
WG568253CCV1	CCV	06/15/23 17:05	WC230614-1	2.002		1.826	mg/L	91	90	110			
WG568253CCB1	CCB	06/15/23 17:11				U	mg/L		-0.3	0.3			
L80718-04AS	AS	06/15/23 17:36	WC221227-7	5.02	U	4.66	mg/L	93	90	110			
L80718-04ASD	ASD	06/15/23 17:41	WC221227-7	5.02	U	4.7	mg/L	94	90	110	1	20	
WG568253CCV2	CCV	06/15/23 18:07	WC230614-1	2.002		1.818	mg/L	91	90	110			
WG568253CCB2	CCB	06/15/23 18:14				U	mg/L		-0.3	0.3			
WG568253LFB2	LFB	06/15/23 18:45	WC221227-7	5.02		4.72	mg/L	94	90	110			
L80783-04AS	AS	06/15/23 18:56	WC221227-7	5.02	.41	4.36	mg/L	79	90	110			M2
L80783-04ASD	ASD	06/15/23 19:01	WC221227-7	5.02	.41	4.49	mg/L	81	90	110	3	20	M2
WG568253CCV3	CCV	06/15/23 19:12	WC230614-1	2.002		1.861	mg/L	93	90	110			
WG568253CCB3	CCB	06/15/23 19:20				U	mg/L		-0.3	0.3			
WG568253CCV4	CCV	06/15/23 20:15	WC230614-1	2.002		1.969	mg/L	98	90	110			
WG568253CCB4	CCB	06/15/23 20:22				U	mg/L		-0.3	0.3			
WG568253CCV5	CCV	06/15/23 21:24	WC230614-1	2.002		1.923	mg/L	96	90	110			
WG568253CCB5	CCB	06/15/23 21:31				U	mg/L		-0.3	0.3			

GCC

ACZ Project ID: ***L80783***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Iron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	2		1.899	mg/L	95	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.18	0.18			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	.1506		.151	mg/L	100	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	200.9506		188.5	mg/L	94	1	200			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	1.004		.983	mg/L	98	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	1.004	.092	1.043	mg/L	95	85	115			
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	1.004	.092	1.044	mg/L	95	85	115	0	20	
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	1		.957	mg/L	96	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.18	0.18			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	1		.932	mg/L	93	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.18	0.18			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	1		.943	mg/L	94	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.18	0.18			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	2		1.908	mg/L	95	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.18	0.18			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	.1506		.152	mg/L	101	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	200.9506		191.5	mg/L	95	1	200			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	1.004		.974	mg/L	97	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	1		.942	mg/L	94	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.18	0.18			
L80771-01AS	AS	06/07/23 3:08	II230530-2	1.004	U	.976	mg/L	97	85	115			
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	1.004	U	.968	mg/L	96	85	115	1	20	
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	1		.952	mg/L	95	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.18	0.18			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	1		.935	mg/L	94	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.18	0.18			

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567869													
WG567869ICV	ICV	06/13/23 16:36	MS230410-7	.05		.05154	mg/L	103	90	110			
WG567869ICB	ICB	06/13/23 16:38				U	mg/L		-0.00022	0.00022			
WG567869LFB	LFB	06/13/23 16:40	MS230605-2	.05005		.04981	mg/L	100	85	115			
L80783-02AS	AS	06/13/23 16:47	MS230605-2	.1001	.00043	.10832	mg/L	108	70	130			
L80783-02ASD	ASD	06/13/23 16:50	MS230605-2	.1001	.00043	.10439	mg/L	104	70	130	4	20	
WG567869CCV1	CCV	06/13/23 17:04	MS230606-3	.25025		.25752	mg/L	103	90	110			
WG567869CCB1	CCB	06/13/23 17:06				U	mg/L		-0.0003	0.0003			
WG567869CCV2	CCV	06/13/23 17:27	MS230606-3	.25025		.25444	mg/L	102	90	110			
WG567869CCB2	CCB	06/13/23 17:30				U	mg/L		-0.0003	0.0003			
WG567869CCV3	CCV	06/13/23 17:48	MS230606-3	.25025		.2522	mg/L	101	90	110			
WG567869CCB3	CCB	06/13/23 17:51				U	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: ***L80783***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	2		2.0005	mg/L	100	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.024	0.024			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	.04012		.0381	mg/L	95	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	.1003		.108	mg/L	108	80	120			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	1.003		.9951	mg/L	99	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	1.003	.453	1.588	mg/L	113	85	115			
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	1.003	.453	1.588	mg/L	113	85	115	0	20	
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	1		.9897	mg/L	99	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.024	0.024			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	1		.9788	mg/L	98	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.024	0.024			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	1		.9816	mg/L	98	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.024	0.024			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	2		2.0055	mg/L	100	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.024	0.024			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	.04012		.0414	mg/L	103	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	.1003		.1113	mg/L	111	80	120			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	1.003		1	mg/L	100	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	1		.9677	mg/L	97	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.024	0.024			
L80771-01AS	AS	06/07/23 3:08	II230530-2	1.003	.084	1.171	mg/L	108	85	115			
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	1.003	.084	1.149	mg/L	106	85	115	2	20	
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	1		.9825	mg/L	98	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.024	0.024			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	1		.9698	mg/L	97	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.024	0.024			

GCC

ACZ Project ID: ***L80783***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	100		99.43	mg/L	99	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.6	0.6			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	1.0023		.93	mg/L	93	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	201.4623		205.7	mg/L	102	1	200			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	49.99752		50.58	mg/L	101	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	49.99752	519	548.5	mg/L	59	85	115			M3
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	49.99752	519	551.4	mg/L	65	85	115	1	20	M3
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	50		49.07	mg/L	98	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.6	0.6			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	50		48.16	mg/L	96	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.6	0.6			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	50		48.81	mg/L	98	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.6	0.6			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	100		98.29	mg/L	98	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.6	0.6			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	1.0023		1.01	mg/L	101	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	201.4623		205.6	mg/L	102	1	200			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	49.99752		50.31	mg/L	101	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	50		48	mg/L	96	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.6	0.6			
L80771-01AS	AS	06/07/23 3:08	II230530-2	49.99752	77.1	124.9	mg/L	96	85	115			
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	49.99752	77.1	123.9	mg/L	94	85	115	1	20	
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	50		48.47	mg/L	97	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.6	0.6			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	50		47.42	mg/L	95	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L80783***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Manganese, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	2		1.931	mg/L	97	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.03	0.03			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	.0498		.048	mg/L	96	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	49.9998		47.26	mg/L	95	1	200			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	.4995		.496	mg/L	99	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	.4995	U	.5	mg/L	100	85	115			
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	.4995	U	.502	mg/L	101	85	115	0	20	
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	1		.967	mg/L	97	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.03	0.03			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	1		.953	mg/L	95	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.03	0.03			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	1		.961	mg/L	96	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.03	0.03			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	2		1.935	mg/L	97	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.03	0.03			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	.0498		.047	mg/L	94	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	49.9998		47.9	mg/L	96	1	200			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	.4995		.489	mg/L	98	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	1		.953	mg/L	95	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.03	0.03			
L80771-01AS	AS	06/07/23 3:08	II230530-2	.4995	2.55	2.913	mg/L	73	85	115			M3
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	.4995	2.55	2.896	mg/L	69	85	115	1	20	M3
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	1		.966	mg/L	97	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.03	0.03			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	1		.945	mg/L	95	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L80783***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury, dissolved M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567378													
WG567378ICV	ICV	06/06/23 9:02	HG230530-3	.005		.00496	mg/L	99	95	105			
WG567378ICB	ICB	06/06/23 9:03				U	mg/L		-0.0002	0.0002			
WG567380													
WG567380CCV1	CCV	06/06/23 10:33	HG230530-3	.005		.00489	mg/L	98	90	110			
WG567380CCB1	CCB	06/06/23 10:34				U	mg/L		-0.0002	0.0002			
WG567380PQV	PQV	06/06/23 10:35	HG230530-5	.001001		.00092	mg/L	92	70	130			
WG567380LRB	LRB	06/06/23 10:36				U	mg/L		-0.00044	0.00044			
WG567380LFB	LFB	06/06/23 10:36	HG230530-6	.002002		.00186	mg/L	93	85	115			
WG567380CCV2	CCV	06/06/23 10:44	HG230530-3	.005		.00503	mg/L	101	90	110			
WG567380CCB2	CCB	06/06/23 10:45				U	mg/L		-0.0002	0.0002			
WG567380CCV3	CCV	06/06/23 10:55	HG230530-3	.005		.00514	mg/L	103	90	110			
WG567380CCB3	CCB	06/06/23 10:56				U	mg/L		-0.0002	0.0002			
L80725-07LFM	LFM	06/06/23 10:59	HG230530-6	.002002	U	.00188	mg/L	94	85	115			
L80725-07LFMD	LFMD	06/06/23 11:00	HG230530-6	.002002	U	.00191	mg/L	95	85	115	2	20	
WG567380CCV4	CCV	06/06/23 11:04	HG230530-3	.005		.00503	mg/L	101	90	110			
WG567380CCB4	CCB	06/06/23 11:05				U	mg/L		-0.0002	0.0002			
WG567498													
WG567498CCV1	CCV	06/06/23 14:34	HG230530-3	.005		.00487	mg/L	97	90	110			
WG567498CCB1	CCB	06/06/23 14:35				U	mg/L		-0.0002	0.0002			
WG567498PQV	PQV	06/06/23 14:36	HG230530-5	.001001		.00097	mg/L	97	70	130			
WG567498LRB	LRB	06/06/23 14:37				U	mg/L		-0.00044	0.00044			
WG567498LFB	LFB	06/06/23 14:38	HG230530-6	.002002		.00199	mg/L	99	85	115			
L80642-01LFM	LFM	06/06/23 14:39	HG230530-6	.002002	U	.00198	mg/L	99	85	115			
L80642-01LFMD	LFMD	06/06/23 14:40	HG230530-6	.002002	U	.00203	mg/L	101	85	115	2	20	
WG567498CCV2	CCV	06/06/23 14:45	HG230530-3	.005		.00499	mg/L	100	90	110			
WG567498CCB2	CCB	06/06/23 14:46				U	mg/L		-0.0002	0.0002			
WG567498CCV3	CCV	06/06/23 14:56	HG230530-3	.005		.0049	mg/L	98	90	110			
WG567498CCB3	CCB	06/06/23 14:57				U	mg/L		-0.0002	0.0002			
WG567498CCV4	CCV	06/06/23 15:05	HG230530-3	.005		.005	mg/L	100	90	110			
WG567498CCB4	CCB	06/06/23 15:06				U	mg/L		-0.0002	0.0002			

GCC

ACZ Project ID: ***L80783***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nickel, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	2.002		2.0088	mg/L	100	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.024	0.024			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	.04		.0442	mg/L	111	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	.1		.0996	mg/L	100	80	120			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	.5		.5091	mg/L	102	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	.5	.0227	.5122	mg/L	98	85	115			
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	.5	.0227	.5134	mg/L	98	85	115	0	20	
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	1.001		1.027	mg/L	103	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.024	0.024			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	1.001		1.012	mg/L	101	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.024	0.024			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	1.001		1.023	mg/L	102	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.024	0.024			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	2.002		1.9735	mg/L	99	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.024	0.024			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	.04		.0445	mg/L	111	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	.1		.097	mg/L	97	80	120			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	.5		.4955	mg/L	99	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	1.001		.9899	mg/L	99	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.024	0.024			
L80771-01AS	AS	06/07/23 3:08	II230530-2	.5	U	.494	mg/L	99	85	115			
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	.5	U	.496	mg/L	99	85	115	0	20	
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	1.001		1.002	mg/L	100	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.024	0.024			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	1.001		.9769	mg/L	98	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.024	0.024			

Nitrate/Nitrite as N M353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567174													
WG567174ICV	ICV	05/31/23 23:49	WI230301-5	2.416		2.308	mg/L	96	90	110			
WG567174ICB	ICB	05/31/23 23:50				U	mg/L		-0.02	0.02			
WG567174LFB	LFB	05/31/23 23:54	WI230228-3	2		2.052	mg/L	103	90	110			
WG567174CCV1	CCV	06/01/23 0:04	WI230531-7	2		1.984	mg/L	99	90	110			
WG567174CCB1	CCB	06/01/23 0:07				U	mg/L		-0.02	0.02			
L80780-04AS	AS	06/01/23 0:16	WI230228-3	2	.028	2.025	mg/L	100	90	110			
L80780-05DUP	DUP	06/01/23 0:19			.217	.216	mg/L				0	20	
WG567174CCV2	CCV	06/01/23 0:21	WI230531-7	2		1.983	mg/L	99	90	110			
WG567174CCB2	CCB	06/01/23 0:24				U	mg/L		-0.02	0.02			
WG567174CCV3	CCV	06/01/23 0:38	WI230531-7	2		1.936	mg/L	97	90	110			
WG567174CCB3	CCB	06/01/23 0:41				U	mg/L		-0.02	0.02			

GCC

ACZ Project ID: ***L80783***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nitrite as N M353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567174													
WG567174ICV	ICV	05/31/23 23:49	WI230301-5	.608		.597	mg/L	98	90	110			
WG567174ICB	ICB	05/31/23 23:50				U	mg/L		-0.01	0.01			
WG567174LFB	LFB	05/31/23 23:54	WI230228-3	1		1.017	mg/L	102	90	110			
WG567174CCV1	CCV	06/01/23 0:04	WI230531-7	1		.983	mg/L	98	90	110			
WG567174CCB1	CCB	06/01/23 0:07				U	mg/L		-0.01	0.01			
L80780-04AS	AS	06/01/23 0:16	WI230228-3	1	U	1.006	mg/L	101	90	110			
L80780-05DUP	DUP	06/01/23 0:19			U	U	mg/L				0	20	RA
WG567174CCV2	CCV	06/01/23 0:21	WI230531-7	1		.99	mg/L	99	90	110			
WG567174CCB2	CCB	06/01/23 0:24				U	mg/L		-0.01	0.01			
WG567174CCV3	CCV	06/01/23 0:38	WI230531-7	1		.974	mg/L	97	90	110			
WG567174CCB3	CCB	06/01/23 0:41				U	mg/L		-0.01	0.01			

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	20		19.65	mg/L	98	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.6	0.6			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	1.005		.98	mg/L	98	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	1.005		.94	mg/L	94	80	120			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	99.95693		99.13	mg/L	99	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	99.95693	13.1	119.9	mg/L	107	85	115			
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	99.95693	13.1	119.9	mg/L	107	85	115	0	20	
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	10		9.74	mg/L	97	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.6	0.6			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	10		9.72	mg/L	97	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.6	0.6			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	10		9.77	mg/L	98	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.6	0.6			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	20		19.5	mg/L	98	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.6	0.6			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	1.005		1.1	mg/L	109	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	1.005		1.07	mg/L	106	80	120			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	99.95693		98.81	mg/L	99	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	10		9.54	mg/L	95	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.6	0.6			
L80771-01AS	AS	06/07/23 3:08	II230530-2	99.95693	14.2	118.4	mg/L	104	85	115			
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	99.95693	14.2	118.2	mg/L	104	85	115	0	20	
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	10		9.77	mg/L	98	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.6	0.6			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	10		9.67	mg/L	97	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L80783***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567419													
WG567419PBW	PBW	06/05/23 12:30				U	mg/L		-20	20			
WG567419LCSW	LCSW	06/05/23 12:32	PCN625110	1000		992	mg/L	99	80	120			
L80798-06DUP	DUP	06/05/23 13:06			1700	1714	mg/L				1	10	
WG568035													
WG568035PBW	PBW	06/13/23 15:00				U	mg/L		-20	20			
WG568035LCSW	LCSW	06/13/23 15:02	PCN623499	1000		988	mg/L	99	80	120			
L81025-05DUP	DUP	06/13/23 15:31			540	538	mg/L				0	10	

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567869													
WG567869ICV	ICV	06/13/23 16:36	MS230410-7	.05		.04881	mg/L	98	90	110			
WG567869ICB	ICB	06/13/23 16:38				.00012	mg/L		-0.00022	0.00022			
WG567869LFB	LFB	06/13/23 16:40	MS230605-2	.05005		.04876	mg/L	97	85	115			
L80783-02AS	AS	06/13/23 16:47	MS230605-2	.1001		.08748	mg/L	87	70	130			
L80783-02ASD	ASD	06/13/23 16:50	MS230605-2	.1001		.08619	mg/L	86	70	130	1	20	
WG567869CCV1	CCV	06/13/23 17:04	MS230606-3	.1001		.09939	mg/L	99	90	110			
WG567869CCB1	CCB	06/13/23 17:06				.00013	mg/L		-0.0003	0.0003			
WG567869CCV2	CCV	06/13/23 17:27	MS230606-3	.1001		.10062	mg/L	101	90	110			
WG567869CCB2	CCB	06/13/23 17:30				U	mg/L		-0.0003	0.0003			
WG567869CCV3	CCV	06/13/23 17:48	MS230606-3	.1001		.0994	mg/L	99	90	110			
WG568484													
WG568484ICV	ICV	06/19/23 17:14	MS230410-7	.05		.04811	mg/L	96	90	110			
WG568484ICB	ICB	06/19/23 17:16				U	mg/L		-0.00022	0.00022			
WG568484LFB	LFB	06/19/23 17:18	MS230619-2	.05005		.04955	mg/L	99	85	115			
L80869-02AS	AS	06/19/23 17:30	MS230619-2	.05005	U	.05258	mg/L	105	70	130			
L80869-02ASD	ASD	06/19/23 17:32	MS230619-2	.05005	U	.05189	mg/L	104	70	130	1	20	
WG568484CCV1	CCV	06/19/23 17:41	MS230616-2	.1001		.0997	mg/L	100	90	110			
WG568484CCB1	CCB	06/19/23 17:44				.00011	mg/L		-0.0003	0.0003			
WG568484CCV2	CCV	06/19/23 18:09	MS230616-2	.1001		.09718	mg/L	97	90	110			
WG568484CCB2	CCB	06/19/23 18:12				.00011	mg/L		-0.0003	0.0003			
WG568484CCV3	CCV	06/19/23 18:26	MS230616-2	.1001		.09922	mg/L	99	90	110			
WG568484CCB3	CCB	06/19/23 18:28				.00011	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: ***L80783***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	100		102.25	mg/L	102	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.6	0.6			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	1.000141		.92	mg/L	92	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	1.000141		.98	mg/L	98	80	120			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	100.0094		101.8	mg/L	102	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	100.0094	360	454.6	mg/L	95	85	115			
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	100.0094	360	449.4	mg/L	89	85	115	1	20	
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	50		50.76	mg/L	102	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.6	0.6			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	50		50.27	mg/L	101	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.6	0.6			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	50		50.65	mg/L	101	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.6	0.6			
WG567619													
WG567619ICV	ICV	06/07/23 21:26	II230516-3	100		102.18	mg/L	102	95	105			
WG567619ICB	ICB	06/07/23 21:32				U	mg/L		-0.6	0.6			
WG567619PQV	PQV	06/07/23 21:36	II230516-2	1.000141		1.01	mg/L	101	70	130			
WG567619SIC	SIC	06/07/23 21:39	II230601-2	1.000141		1	mg/L	100	80	120			
WG567619LFB	LFB	06/07/23 21:45	II230530-2	100.0094		99.24	mg/L	99	85	115			
L80791-04AS	AS	06/07/23 22:05	II230530-2	10000.94	16500	27240	mg/L	107	85	115			
L80791-04ASD	ASD	06/07/23 22:08	II230530-2	10000.94	16500	26660	mg/L	102	85	115	2	20	
WG567619CCV1	CCV	06/07/23 22:18	II230525-1	50		50.01	mg/L	100	90	110			
WG567619CCB1	CCB	06/07/23 22:21				U	mg/L		-0.6	0.6			
WG567619CCV2	CCV	06/07/23 22:58	II230525-1	50		50.3	mg/L	101	90	110			
WG567619CCB2	CCB	06/07/23 23:01				U	mg/L		-0.6	0.6			
WG567619CCV3	CCV	06/07/23 23:22	II230525-1	50		50.46	mg/L	101	90	110			
WG567619CCB3	CCB	06/07/23 23:25				U	mg/L		-0.6	0.6			

Sulfate D516-02/-07/-11 - TURBIDIMETRIC

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG568213													
WG568213ICB	ICB	06/15/23 11:39				U	mg/L		-3	3			
WG568213ICV	ICV	06/15/23 11:39	WI230614-2	20		20.3	mg/L	102	90	110			
WG568213CCV1	CCV	06/15/23 11:49	WI230614-1	25		24.4	mg/L	98	90	110			
WG568213CCB1	CCB	06/15/23 11:49				U	mg/L		-3	3			
WG568213LFB	LFB	06/15/23 11:49	WI230119-9	10		9.7	mg/L	97	90	110			
WG568213CCV2	CCV	06/15/23 11:51	WI230614-1	25		24.7	mg/L	99	90	110			
WG568213CCB2	CCB	06/15/23 11:51				U	mg/L		-3	3			
WG568213CCV3	CCV	06/15/23 12:35	WI230614-1	25		24.2	mg/L	97	90	110			
WG568213CCB3	CCB	06/15/23 12:35				U	mg/L		-3	3			
WG568213CCV4	CCV	06/15/23 12:37	WI230614-1	25		23.7	mg/L	95	90	110			
WG568213CCB4	CCB	06/15/23 12:37				U	mg/L		-3	3			
L80783-02AS	AS	06/15/23 12:39	SO4TURB5X	10	63.7	70.5	mg/L	68	90	110			M2
L80783-03DUP	DUP	06/15/23 12:39			1430	1318.4	mg/L				8	20	
WG568213CCV5	CCV	06/15/23 12:41	WI230614-1	25		24.4	mg/L	98	90	110			
WG568213CCB5	CCB	06/15/23 12:41				U	mg/L		-3	3			

GCC

ACZ Project ID: ***L80783***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Vanadium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	2		1.965	mg/L	98	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.015	0.015			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	.025025		.024	mg/L	96	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	.1001		.081	mg/L	81	80	120			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	.5005		.4925	mg/L	98	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	.5005	U	.4929	mg/L	98	85	115			
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	.5005	U	.493	mg/L	99	85	115	0	20	
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	1		.979	mg/L	98	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.03	0.03			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	1		.969	mg/L	97	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.03	0.03			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	1		.972	mg/L	97	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.03	0.03			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	2		1.96	mg/L	98	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.015	0.015			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	.025025		.028	mg/L	112	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	.1001		.081	mg/L	81	80	120			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	.5005		.4961	mg/L	99	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	1		.955	mg/L	96	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.03	0.03			
L80771-01AS	AS	06/07/23 3:08	II230530-2	.5005	U	.5001	mg/L	100	85	115			
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	.5005	U	.499	mg/L	100	85	115	0	20	
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	1		.97	mg/L	97	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.03	0.03			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	1		.95	mg/L	95	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L80783***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Zinc, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	2		1.954	mg/L	98	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.06	0.06			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	.05005		.051	mg/L	102	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	.1001		.113	mg/L	113	80	120			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	.50045		.512	mg/L	102	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	.50045	U	.526	mg/L	105	85	115			
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	.50045	U	.524	mg/L	105	85	115	0	20	
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	1		.971	mg/L	97	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.06	0.06			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	1		.959	mg/L	96	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.06	0.06			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	1		.969	mg/L	97	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.06	0.06			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	2		1.909	mg/L	95	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.06	0.06			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	.05005		.049	mg/L	98	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	.1001		.093	mg/L	93	80	120			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	.50045		.506	mg/L	101	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	1		.946	mg/L	95	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.06	0.06			
L80771-01AS	AS	06/07/23 3:08	II230530-2	.50045	U	.5	mg/L	100	85	115			
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	.50045	U	.496	mg/L	99	85	115	1	20	
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	1		.955	mg/L	96	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.06	0.06			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	1		.93	mg/L	93	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.06	0.06			

GCC Rio Grande ACZ Project ID: ***L80783***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L80783-01	WG567499	Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567520	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567499	Manganese, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567174	Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG567419	Residue, Filterable (TDS) @180C	SM2540C	Z5	Oven temperature observed out of range. Sample and Quality Control attained a consistent weight and all Quality controls were within limits. Reanalyze at client request
	WG568484	Selenium, dissolved	M200.8 ICP-MS	DB	Sample required dilution due to low bias result.
	WG568213	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
L80783-02	WG567499	Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567520	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567499	Manganese, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567174	Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG567419	Residue, Filterable (TDS) @180C	SM2540C	Z5	Oven temperature observed out of range. Sample and Quality Control attained a consistent weight and all Quality controls were within limits. Reanalyze at client request
	WG568484	Selenium, dissolved	M200.8 ICP-MS	DB	Sample required dilution due to low bias result.
	WG568213	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
L80783-03	WG567499	Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567520	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567499	Manganese, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567174	Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG567419	Residue, Filterable (TDS) @180C	SM2540C	Z5	Oven temperature observed out of range. Sample and Quality Control attained a consistent weight and all Quality controls were within limits. Reanalyze at client request
	WG568213	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.

GCC Rio Grande ACZ Project ID: ***L80783***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L80783-04	WG567506	Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567520	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG568253	Fluoride	SM4500F-C	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567506	Magnesium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567174	Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG568035	Residue, Filterable (TDS) @180C	SM2540C	H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
			SM2540C	N1	See Case Narrative.
	WG568213	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
L80783-05	WG567506	Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567520	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG568253	Fluoride	SM4500F-C	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567506	Magnesium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567174	Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG568035	Residue, Filterable (TDS) @180C	SM2540C	H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
			SM2540C	N1	See Case Narrative.
	WG568213	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.

Certification Qualifiers

GCC Rio Grande ACZ Project ID: ***L80783***

No certification qualifiers associated with this analysis

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

GCC Rio Grande
183230

ACZ Project ID: L80783
Date Received: 05/31/2023 11:41
Received By:
Date Printed: 6/1/2023

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]	X		
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?			X
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
NA40378	5.9	<=6.0	15	Yes

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

GCC Rio Grande
183230

ACZ Project ID: L80783
Date Received: 05/31/2023 11:41
Received By:
Date Printed: 6/1/2023

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ LABORATORIES | Accredited Environmental Testing

2773 Downhill Drive
Steamboat Springs, CO 80487
(970) 879-6590

L80783

CHAIN of CUSTODY

Report to:

Name: Amy Veek
Company: GCC Rio Grande Inc
E-mail: aveek@gcc.com

Address: 3372 Lime Road
Pueblo CO 81004
Telephone: 719-647-6861

Copy of Report to:

Name: Landon Beck
Company: Resource Hydrogeologic

E-mail: lbeck@resourcehydrogeologic.com
Telephone: (970) 459-4865

Invoice to:

Name: Amy Veek
Company: GCC Rio Grande Inc
E-mail: aveek@gcc.com

Address: 3372 Lime Road
Pueblo CO 81004
Telephone: 719-647-6861

Copy of Invoice to:

Name:
Company:
E-mail:

Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes No ✓

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: David Bemis **Sampler's Site Information** **State** CO **Zip code** 81004 **Time Zone** MDT

***Sampler's Signature:** [signature]

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: GW-COMPLIANCE
PO#: 183230
Reporting state for compliance testing:
Check box if samples include NRC licensed material?

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	GW-COmpliance							
MW-14	5/30/2023 10:54	GW	3	✓							
MW-13	5/30/2023 12:57	GW	3	✓							
MW-8	5/30/2023 13:55	GW	3	✓							
MW-7	5/30/2023 14:46	GW	3	✓							
MW-6	5/30/2023 15:15	GW	3	✓							

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
Landon Beck	16:45	Landon Beck	5/30/23 1605
			5/31/23 1141

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.



ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

June 28, 2023

Report to:
Amy Veek
GCC Rio Grande
3372 Lime Road
Pueblo, CO 81004

cc: Landon Beck

Bill to:
Amy Veek
GCC Rio Grande
3372 Lime Road
Pueblo, CO 81004

Project ID: 183230
ACZ Project ID: L80818

Amy Veek:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on June 01, 2023. This project has been assigned to ACZ's project number, L80818. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L80818. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after June 27, 2024. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

GCC Rio Grande

June 28, 2023

Project ID: 183230
ACZ Project ID: L80818

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 5 groundwater samples from GCC Rio Grande on June 1, 2023. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L80818. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

All analyses were performed within EPA recommended holding times except for parameters flagged with an "H2" requiring re-analysis after the hold time had expired.

Sample Analysis

These samples were analyzed for inorganic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports.

GCC Rio Grande
Project ID: 183230
Sample ID: MW-12

ACZ Sample ID: ***L80818-01***
Date Sampled: *05/31/23 09:02*
Date Received: *06/01/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/08/23 16:07	keh1
Arsenic, dissolved	M200.8 ICP-MS	2	0.00203			mg/L	0.0004	0.002	06/14/23 15:35	kja
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 3:03	keh1
Boron, dissolved	M200.7 ICP	1	0.890			mg/L	0.03	0.1	06/07/23 3:03	keh1
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U		mg/L	0.0001	0.0005	06/14/23 15:35	kja
Calcium, dissolved	M200.7 ICP	1	21.0			mg/L	0.1	0.5	06/07/23 3:03	keh1
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 3:03	keh1
Cobalt, dissolved	M200.8 ICP-MS	2	0.000372	B		mg/L	0.0001	0.0005	06/14/23 15:35	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U	*	mg/L	0.01	0.05	06/08/23 16:07	keh1
Iron, dissolved	M200.7 ICP	1	0.299			mg/L	0.06	0.15	06/07/23 3:03	keh1
Lead, dissolved	M200.8 ICP-MS	2	0.00028	B		mg/L	0.0002	0.001	06/14/23 15:35	kja
Lithium, dissolved	M200.7 ICP	1	0.212			mg/L	0.008	0.04	06/07/23 3:03	keh1
Magnesium, dissolved	M200.7 ICP	1	8.70			mg/L	0.2	1	06/07/23 3:03	keh1
Manganese, dissolved	M200.7 ICP	1	0.102		*	mg/L	0.01	0.05	06/07/23 3:03	keh1
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/08/23 11:55	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	06/07/23 3:03	keh1
Potassium, dissolved	M200.7 ICP	1	3.94			mg/L	0.2	1	06/07/23 3:03	keh1
Selenium, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.0005	06/16/23 16:12	kja
Sodium, dissolved	M200.7 ICP	1	958			mg/L	0.2	1	06/07/23 3:03	keh1
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	06/07/23 3:03	keh1
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 3:03	keh1

GCC Rio Grande
Project ID: 183230
Sample ID: MW-12

ACZ Sample ID: ***L80818-01***
Date Sampled: *05/31/23 09:02*
Date Received: *06/01/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	629		*	mg/L	2	20	06/13/23 0:00	emk
Carbonate as CaCO3		1	8.5	B	*	mg/L	2	20	06/13/23 0:00	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	06/13/23 0:00	emk
Total Alkalinity		1	638		*	mg/L	2	20	06/13/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-2.2			%			06/28/23 0:00	calc
Sum of Anions			46			meq/L			06/28/23 0:00	calc
Sum of Cations			44.0			meq/L			06/28/23 0:00	calc
Chloride	SM4500Cl-E	25	1070		*	mg/L	25	50	06/06/23 15:13	aps
Fluoride	SM4500F-C	1	1.81		*	mg/L	0.15	0.35	06/20/23 17:06	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		88			mg/L	0.2	5	06/28/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	06/28/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	06/02/23 2:15	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	06/02/23 2:15	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	2530		*	mg/L	20	40	06/06/23 12:44	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	159		*	mg/L	5	25	06/20/23 10:38	aps
TDS (calculated)	Calculation		2610			mg/L			06/28/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.97						06/28/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-11

ACZ Sample ID: ***L80818-02***
Date Sampled: *05/31/23 09:41*
Date Received: *06/01/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/08/23 16:11	keh1
Arsenic, dissolved	M200.8 ICP-MS	1	0.00025	B		mg/L	0.0002	0.001	06/14/23 15:37	kja
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 3:06	keh1
Boron, dissolved	M200.7 ICP	1	0.484			mg/L	0.03	0.1	06/07/23 3:06	keh1
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U		mg/L	0.00005	0.00025	06/14/23 15:37	kja
Calcium, dissolved	M200.7 ICP	1	46.4			mg/L	0.1	0.5	06/07/23 3:06	keh1
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 3:06	keh1
Cobalt, dissolved	M200.8 ICP-MS	1	0.000077	B		mg/L	0.00005	0.00025	06/14/23 15:37	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U	*	mg/L	0.01	0.05	06/08/23 16:11	keh1
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	06/07/23 3:06	keh1
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/14/23 15:37	kja
Lithium, dissolved	M200.7 ICP	1	0.170			mg/L	0.008	0.04	06/07/23 3:06	keh1
Magnesium, dissolved	M200.7 ICP	1	29.2			mg/L	0.2	1	06/07/23 3:06	keh1
Manganese, dissolved	M200.7 ICP	1	0.020	B	*	mg/L	0.01	0.05	06/07/23 3:06	keh1
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	06/08/23 11:56	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	06/07/23 3:06	keh1
Potassium, dissolved	M200.7 ICP	1	3.73			mg/L	0.2	1	06/07/23 3:06	keh1
Selenium, dissolved	M200.8 ICP-MS	2	0.0386		*	mg/L	0.0002	0.0005	06/20/23 18:11	kja
Sodium, dissolved	M200.7 ICP	1	563			mg/L	0.2	1	06/07/23 3:06	keh1
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	06/07/23 3:06	keh1
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 3:06	keh1

GCC Rio Grande
Project ID: 183230
Sample ID: MW-11

ACZ Sample ID: ***L80818-02***
Date Sampled: *05/31/23 09:41*
Date Received: *06/01/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	898		*	mg/L	2	20	06/13/23 0:00	emk
Carbonate as CaCO3		1	<2	U	*	mg/L	2	20	06/13/23 0:00	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	06/13/23 0:00	emk
Total Alkalinity		1	898		*	mg/L	2	20	06/13/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-1.6			%			06/28/23 0:00	calc
Sum of Anions			31			meq/L			06/28/23 0:00	calc
Sum of Cations			30			meq/L			06/28/23 0:00	calc
Chloride	SM4500Cl-E	5	138		*	mg/L	5	10	06/06/23 15:14	aps
Fluoride	SM4500F-C	1	0.87		*	mg/L	0.15	0.35	06/20/23 17:09	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		236			mg/L	0.2	5	06/28/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	06/28/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	06/02/23 2:16	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	06/02/23 2:16	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	1700		*	mg/L	20	40	06/06/23 12:47	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	25	424		*	mg/L	25	125	06/20/23 11:03	aps
TDS (calculated)	Calculation		1750			mg/L			06/28/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.97						06/28/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-2B

ACZ Sample ID: ***L80818-03***
Date Sampled: *05/31/23 10:41*
Date Received: *06/01/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/07/23 13:19	keh1
Arsenic, dissolved	M200.8 ICP-MS	1	0.00022	B		mg/L	0.0002	0.001	06/14/23 15:39	kja
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 13:19	keh1
Boron, dissolved	M200.7 ICP	1	0.476			mg/L	0.03	0.1	06/07/23 13:19	keh1
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U		mg/L	0.00005	0.00025	06/14/23 15:39	kja
Calcium, dissolved	M200.7 ICP	1	46.4			mg/L	0.1	0.5	06/07/23 13:19	keh1
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 13:19	keh1
Cobalt, dissolved	M200.8 ICP-MS	1	0.000070	B		mg/L	0.00005	0.00025	06/14/23 15:39	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 13:19	keh1
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	06/07/23 13:19	keh1
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/14/23 15:39	kja
Lithium, dissolved	M200.7 ICP	1	0.173			mg/L	0.008	0.04	06/07/23 13:19	keh1
Magnesium, dissolved	M200.7 ICP	1	29.1			mg/L	0.2	1	06/07/23 13:19	keh1
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 13:19	keh1
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	06/08/23 11:57	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	06/07/23 13:19	keh1
Potassium, dissolved	M200.7 ICP	1	3.33			mg/L	0.2	1	06/07/23 13:19	keh1
Selenium, dissolved	M200.8 ICP-MS	2	0.00188			mg/L	0.0002	0.0005	06/21/23 17:36	kja
Sodium, dissolved	M200.7 ICP	1	549			mg/L	0.2	1	06/07/23 13:19	keh1
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	06/07/23 13:19	keh1
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 13:19	keh1

GCC Rio Grande
Project ID: 183230
Sample ID: MW-2B

ACZ Sample ID: ***L80818-03***
Date Sampled: *05/31/23 10:41*
Date Received: *06/01/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	898		*	mg/L	2	20	06/13/23 0:00	emk
Carbonate as CaCO3		1	3.3	B	*	mg/L	2	20	06/13/23 0:00	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	06/13/23 0:00	emk
Total Alkalinity		1	902		*	mg/L	2	20	06/13/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-3.3			%			06/28/23 0:00	calc
Sum of Anions			31			meq/L			06/28/23 0:00	calc
Sum of Cations			29			meq/L			06/28/23 0:00	calc
Chloride	SM4500Cl-E	5	142		*	mg/L	5	10	06/06/23 15:14	aps
Fluoride	SM4500F-C	1	0.86		*	mg/L	0.15	0.35	06/20/23 17:13	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		236			mg/L	0.2	5	06/28/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	06/28/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	06/02/23 2:22	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	06/02/23 2:22	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	1700		*	mg/L	20	40	06/06/23 12:49	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	25	423		*	mg/L	25	125	06/20/23 11:03	aps
TDS (calculated)	Calculation		1740			mg/L			06/28/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.98						06/28/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-9

ACZ Sample ID: ***L80818-04***
Date Sampled: *05/31/23 10:48*
Date Received: *06/01/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.052	B		mg/L	0.05	0.25	06/07/23 13:23	keh1
Arsenic, dissolved	M200.8 ICP-MS	5	<0.001	U		mg/L	0.001	0.005	06/14/23 15:41	kja
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 13:23	keh1
Boron, dissolved	M200.7 ICP	1	1.39			mg/L	0.03	0.1	06/07/23 13:23	keh1
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U		mg/L	0.00025	0.00125	06/14/23 15:41	kja
Calcium, dissolved	M200.7 ICP	1	415			mg/L	0.1	0.5	06/07/23 13:23	keh1
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 13:23	keh1
Cobalt, dissolved	M200.8 ICP-MS	5	0.00252			mg/L	0.00025	0.00125	06/14/23 15:41	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 13:23	keh1
Iron, dissolved	M200.7 ICP	1	1.39			mg/L	0.06	0.15	06/07/23 13:23	keh1
Lead, dissolved	M200.8 ICP-MS	5	<0.0005	U		mg/L	0.0005	0.0025	06/14/23 15:41	kja
Lithium, dissolved	M200.7 ICP	1	0.407			mg/L	0.008	0.04	06/07/23 13:23	keh1
Magnesium, dissolved	M200.7 ICP	1	161			mg/L	0.2	1	06/07/23 13:23	keh1
Manganese, dissolved	M200.7 ICP	1	0.454			mg/L	0.01	0.05	06/07/23 13:23	keh1
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	06/08/23 11:58	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	06/07/23 13:23	keh1
Potassium, dissolved	M200.7 ICP	1	8.87			mg/L	0.2	1	06/07/23 13:23	keh1
Selenium, dissolved	M200.8 ICP-MS	5	<0.0005	U		mg/L	0.0005	0.00125	06/21/23 17:37	kja
Sodium, dissolved	M200.7 ICP	1	820			mg/L	0.2	1	06/07/23 13:23	keh1
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	06/07/23 13:23	keh1
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 13:23	keh1

GCC Rio Grande
Project ID: 183230
Sample ID: MW-9

ACZ Sample ID: ***L80818-04***
Date Sampled: *05/31/23 10:48*
Date Received: *06/01/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	407		*	mg/L	2	20	06/13/23 0:00	emk
Carbonate as CaCO3		1	<2	U	*	mg/L	2	20	06/13/23 0:00	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	06/13/23 0:00	emk
Total Alkalinity		1	407		*	mg/L	2	20	06/13/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-2.8			%			06/28/23 0:00	calc
Sum of Anions			74			meq/L			06/28/23 0:00	calc
Sum of Cations			70			meq/L			06/28/23 0:00	calc
Chloride	SM4500Cl-E	1	49.4		*	mg/L	1	2	06/06/23 14:19	aps
Fluoride	SM4500F-C	1	0.35		*	mg/L	0.15	0.35	06/20/23 17:17	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		1700			mg/L	0.2	5	06/28/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	06/28/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	06/02/23 2:23	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	06/02/23 2:23	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	4740	H	*	mg/L	40	80	06/19/23 12:22	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	120	3050		*	mg/L	120	600	06/20/23 11:03	aps
TDS (calculated)	Calculation		4750			mg/L			06/28/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.00						06/28/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-10

ACZ Sample ID: ***L80818-05***
Date Sampled: *05/31/23 11:24*
Date Received: *06/01/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/07/23 13:26	keh1
Arsenic, dissolved	M200.8 ICP-MS	2	0.00138	B		mg/L	0.0004	0.002	06/14/23 15:43	kja
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 13:26	keh1
Boron, dissolved	M200.7 ICP	1	1.35			mg/L	0.03	0.1	06/07/23 13:26	keh1
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U		mg/L	0.0001	0.0005	06/14/23 15:43	kja
Calcium, dissolved	M200.7 ICP	1	37.5			mg/L	0.1	0.5	06/07/23 13:26	keh1
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 13:26	keh1
Cobalt, dissolved	M200.8 ICP-MS	2	<0.0001	U		mg/L	0.0001	0.0005	06/14/23 15:43	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 13:26	keh1
Iron, dissolved	M200.7 ICP	1	0.406			mg/L	0.06	0.15	06/07/23 13:26	keh1
Lead, dissolved	M200.8 ICP-MS	2	<0.0002	U		mg/L	0.0002	0.001	06/14/23 15:43	kja
Lithium, dissolved	M200.7 ICP	1	0.299			mg/L	0.008	0.04	06/07/23 13:26	keh1
Magnesium, dissolved	M200.7 ICP	1	11.8			mg/L	0.2	1	06/07/23 13:26	keh1
Manganese, dissolved	M200.7 ICP	1	0.021	B		mg/L	0.01	0.05	06/07/23 13:26	keh1
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	06/08/23 11:59	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	06/07/23 13:26	keh1
Potassium, dissolved	M200.7 ICP	1	5.57			mg/L	0.2	1	06/07/23 13:26	keh1
Selenium, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.0005	06/21/23 17:39	kja
Sodium, dissolved	M200.7 ICP	2	1230			mg/L	0.4	2	06/09/23 10:27	keh1
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	06/07/23 13:26	keh1
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 13:26	keh1

GCC Rio Grande
Project ID: 183230
Sample ID: MW-10

ACZ Sample ID: ***L80818-05***
Date Sampled: *05/31/23 11:24*
Date Received: *06/01/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	713		*	mg/L	2	20	06/13/23 0:00	emk
Carbonate as CaCO3		1	15.4	B	*	mg/L	2	20	06/13/23 0:00	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	06/13/23 0:00	emk
Total Alkalinity		1	729		*	mg/L	2	20	06/13/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-2.6			%			06/28/23 0:00	calc
Sum of Anions			60			meq/L			06/28/23 0:00	calc
Sum of Cations			57			meq/L			06/28/23 0:00	calc
Chloride	SM4500Cl-E	5	399		*	mg/L	5	10	06/06/23 15:15	aps
Fluoride	SM4500F-C	1	1.18		*	mg/L	0.15	0.35	06/16/23 13:22	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		142			mg/L	0.2	5	06/28/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	06/28/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	06/02/23 2:24	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	06/02/23 2:24	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	3740		*	mg/L	40	80	06/06/23 12:57	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	50	1640		*	mg/L	50	250	06/20/23 10:49	aps
TDS (calculated)	Calculation		3770			mg/L			06/28/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.99						06/28/23 0:00	calc

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1)	EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2)	EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3)	EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4)	EPA SW-846. Test Methods for Evaluating Solid Waste.
(5)	Standard Methods for the Examination of Water and Wastewater.

Comments

(1)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2)	Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3)	Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4)	An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5)	If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

GCC

ACZ Project ID: ***L80818***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG568055													
WG568055PBW1	PBW	06/13/23 17:29				3.8	mg/L		-20	20			
WG568055LCSW3	LCSW	06/13/23 17:49	WC230612-1	820.0001		852.9	mg/L	104	90	110			
WG568055PQV2	PQV	06/13/23 18:00	WC220630-7	20		24.1	mg/L	121	50	150			
L80818-05DUP	DUP	06/13/23 22:00			729	730.3	mg/L				0	20	
WG568055LCSW6	LCSW	06/13/23 22:20	WC230612-1	820.0001		845.6	mg/L	103	90	110			
WG568055PBW2	PBW	06/13/23 22:30				3.8	mg/L		-20	20			
WG568055LCSW9	LCSW	06/14/23 1:53	WC230612-1	820.0001		855.9	mg/L	104	90	110			
WG568055PBW3	PBW	06/14/23 2:03				3.9	mg/L		-20	20			
WG568055LCSW12	LCSW	06/14/23 6:31	WC230612-1	820.0001		849.7	mg/L	104	90	110			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	2		1.948	mg/L	97	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.15	0.15			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	.2525		.278	mg/L	110	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	202.2525		201.6	mg/L	100	1	200			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	1.01		1.075	mg/L	106	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	1.01	U	1.102	mg/L	109	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	1.01	U	1.132	mg/L	112	85	115	3	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	1		.997	mg/L	100	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.15	0.15			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	1		.997	mg/L	100	90	110			
WG567519CCB2	CCB	06/07/23 14:24				U	mg/L		-0.15	0.15			
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	1		1.007	mg/L	101	90	110			
WG567519CCB3	CCB	06/07/23 14:47				U	mg/L		-0.15	0.15			
WG567622													
WG567622ICV	ICV	06/08/23 14:32	II230516-3	2		1.935	mg/L	97	95	105			
WG567622ICB	ICB	06/08/23 14:38				U	mg/L		-0.15	0.15			
WG567622PQV	PQV	06/08/23 14:41	II230516-2	.2525		.24	mg/L	95	70	130			
WG567622SIC	SIC	06/08/23 14:44	II230601-2	202.2525		199	mg/L	98	1	200			
WG567622LFB	LFB	06/08/23 14:51	II230530-2	1.01		1.015	mg/L	100	85	115			
WG567622CCV1	CCV	06/08/23 15:23	II230525-1	1		.924	mg/L	92	90	110			
WG567622CCB1	CCB	06/08/23 15:26				U	mg/L		-0.15	0.15			
L80802-15AS	AS	06/08/23 15:39	II230530-2	1.01	U	1.01	mg/L	100	85	115			
L80802-15ASD	ASD	06/08/23 15:42	II230530-2	1.01	U	.989	mg/L	98	85	115	2	20	
WG567622CCV2	CCV	06/08/23 16:01	II230525-1	1		.946	mg/L	95	90	110			
WG567622CCB2	CCB	06/08/23 16:04				U	mg/L		-0.15	0.15			
WG567622CCV3	CCV	06/08/23 16:20	II230525-1	1		.947	mg/L	95	90	110			
WG567622CCB3	CCB	06/08/23 16:23				U	mg/L		-0.15	0.15			

GCC

ACZ Project ID: ***L80818***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG568134													
WG568134ICV	ICV	06/14/23 15:26	MS230410-7	.05		.05248	mg/L	105	90	110			
WG568134ICB	ICB	06/14/23 15:28				U	mg/L		-0.00044	0.00044			
WG568134LFB	LFB	06/14/23 15:30	MS230605-2	.0501		.05065	mg/L	101	85	115			
WG568134CCV1	CCV	06/14/23 15:44	MS230606-3	.1002		.10806	mg/L	108	90	110			
WG568134CCB1	CCB	06/14/23 15:46				U	mg/L		-0.0006	0.0006			
L80820-01AS	AS	06/14/23 15:50	MS230605-2	.0501	.00034	.06179	mg/L	123	70	130			
L80820-01ASD	ASD	06/14/23 15:52	MS230605-2	.0501	.00034	.0616	mg/L	122	70	130	0	20	
WG568134CCV2	CCV	06/14/23 16:06	MS230606-3	.1002		.10668	mg/L	106	90	110			
WG568134CCB2	CCB	06/14/23 16:08				U	mg/L		-0.0006	0.0006			
WG568134CCV3	CCV	06/14/23 16:23	MS230606-3	.1002		.10723	mg/L	107	90	110			
WG568134CCB3	CCB	06/14/23 16:25				U	mg/L		-0.0006	0.0006			

Beryllium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567513													
WG567513ICV	ICV	06/07/23 1:17	II230516-3	2		1.985	mg/L	99	95	105			
WG567513ICB	ICB	06/07/23 1:23				U	mg/L		-0.03	0.03			
WG567513PQV	PQV	06/07/23 1:26	II230516-2	.05005		.053	mg/L	106	70	130			
WG567513SIC	SIC	06/07/23 1:30	II230601-2	.1001		.103	mg/L	103	80	120			
WG567513LFB	LFB	06/07/23 1:36	II230530-2	.5005		.507	mg/L	101	85	115			
WG567513CCV1	CCV	06/07/23 2:08	II230525-1	1		.978	mg/L	98	90	110			
WG567513CCB1	CCB	06/07/23 2:11				U	mg/L		-0.03	0.03			
L80802-15AS	AS	06/07/23 2:27	II230530-2	.5005	U	.511	mg/L	102	85	115			
L80802-15ASD	ASD	06/07/23 2:30	II230530-2	.5005	U	.509	mg/L	102	85	115	0	20	
WG567513CCV2	CCV	06/07/23 2:47	II230525-1	1		.985	mg/L	99	90	110			
WG567513CCB2	CCB	06/07/23 2:50				U	mg/L		-0.03	0.03			
WG567513CCV3	CCV	06/07/23 3:09	II230525-1	1		.96	mg/L	96	90	110			
WG567513CCB3	CCB	06/07/23 3:12				U	mg/L		-0.03	0.03			
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	2		1.961	mg/L	98	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.03	0.03			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	.05005		.056	mg/L	112	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	.1001		.105	mg/L	105	80	120			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	.5005		.517	mg/L	103	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	.5005	U	.521	mg/L	104	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	.5005	U	.513	mg/L	102	85	115	2	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	1		.989	mg/L	99	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.03	0.03			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	1		1.001	mg/L	100	90	110			
WG567519CCB2	CCB	06/07/23 14:24				U	mg/L		-0.03	0.03			
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	1		.986	mg/L	99	90	110			
WG567519CCB3	CCB	06/07/23 14:47				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L80818***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567513													
WG567513ICV	ICV	06/07/23 1:17	II230516-3	2		2.035	mg/L	102	95	105			
WG567513ICB	ICB	06/07/23 1:23				U	mg/L		-0.09	0.09			
WG567513PQV	PQV	06/07/23 1:26	II230516-2	.1001		.105	mg/L	105	70	130			
WG567513SIC	SIC	06/07/23 1:30	II230601-2	.1001		.104	mg/L	104	80	120			
WG567513LFB	LFB	06/07/23 1:36	II230530-2	.5005		.509	mg/L	102	85	115			
WG567513CCV1	CCV	06/07/23 2:08	II230525-1	1		1.022	mg/L	102	90	110			
WG567513CCB1	CCB	06/07/23 2:11				U	mg/L		-0.09	0.09			
L80802-15AS	AS	06/07/23 2:27	II230530-2	.5005	U	.549	mg/L	110	85	115			
L80802-15ASD	ASD	06/07/23 2:30	II230530-2	.5005	U	.541	mg/L	108	85	115	1	20	
WG567513CCV2	CCV	06/07/23 2:47	II230525-1	1		1.012	mg/L	101	90	110			
WG567513CCB2	CCB	06/07/23 2:50				U	mg/L		-0.09	0.09			
WG567513CCV3	CCV	06/07/23 3:09	II230525-1	1		1.011	mg/L	101	90	110			
WG567513CCB3	CCB	06/07/23 3:12				U	mg/L		-0.09	0.09			
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	2		2.03	mg/L	102	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.09	0.09			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	.1001		.107	mg/L	107	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	.1001		.098	mg/L	98	80	120			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	.5005		.506	mg/L	101	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	.5005	U	.542	mg/L	108	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	.5005	U	.532	mg/L	106	85	115	2	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	1		1.022	mg/L	102	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.09	0.09			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	1		1.016	mg/L	102	90	110			
WG567519CCB2	CCB	06/07/23 14:24				U	mg/L		-0.09	0.09			
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	1		1.024	mg/L	102	90	110			
WG567519CCB3	CCB	06/07/23 14:47				U	mg/L		-0.09	0.09			

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG568134													
WG568134ICV	ICV	06/14/23 15:26	MS230410-7	.05		.051863	mg/L	104	90	110			
WG568134ICB	ICB	06/14/23 15:28				U	mg/L		-0.00011	0.00011			
WG568134LFB	LFB	06/14/23 15:30	MS230605-2	.05005		.05256	mg/L	105	85	115			
WG568134CCV1	CCV	06/14/23 15:44	MS230606-3	.1001		.100178	mg/L	100	90	110			
WG568134CCB1	CCB	06/14/23 15:46				U	mg/L		-0.00015	0.00015			
L80820-01AS	AS	06/14/23 15:50	MS230605-2	.05005	.00578	.057012	mg/L	102	70	130			
L80820-01ASD	ASD	06/14/23 15:52	MS230605-2	.05005	.00578	.056403	mg/L	101	70	130	1	20	
WG568134CCV2	CCV	06/14/23 16:06	MS230606-3	.1001		.099793	mg/L	100	90	110			
WG568134CCB2	CCB	06/14/23 16:08				U	mg/L		-0.00015	0.00015			
WG568134CCV3	CCV	06/14/23 16:23	MS230606-3	.1001		.09992	mg/L	100	90	110			
WG568134CCB3	CCB	06/14/23 16:25				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: ***L80818***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567513													
WG567513ICV	ICV	06/07/23 1:17	II230516-3	100		98.69	mg/L	99	95	105			
WG567513ICB	ICB	06/07/23 1:23				U	mg/L		-0.3	0.3			
WG567513PQV	PQV	06/07/23 1:26	II230516-2	.4999		.56	mg/L	112	70	130			
WG567513SIC	SIC	06/07/23 1:30	II230601-2	200.4599		197.9	mg/L	99	1	200			
WG567513LFB	LFB	06/07/23 1:36	II230530-2	67.98753		68.47	mg/L	101	85	115			
WG567513CCV1	CCV	06/07/23 2:08	II230525-1	50		48.27	mg/L	97	90	110			
WG567513CCB1	CCB	06/07/23 2:11				U	mg/L		-0.3	0.3			
L80802-15AS	AS	06/07/23 2:27	II230530-2	67.98753	63.3	130.2	mg/L	98	85	115			
L80802-15ASD	ASD	06/07/23 2:30	II230530-2	67.98753	63.3	128.7	mg/L	96	85	115	1	20	
WG567513CCV2	CCV	06/07/23 2:47	II230525-1	50		49.01	mg/L	98	90	110			
WG567513CCB2	CCB	06/07/23 2:50				U	mg/L		-0.3	0.3			
WG567513CCV3	CCV	06/07/23 3:09	II230525-1	50		48.22	mg/L	96	90	110			
WG567513CCB3	CCB	06/07/23 3:12				U	mg/L		-0.3	0.3			
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	100		99.05	mg/L	99	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.3	0.3			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	.4999		.5	mg/L	100	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	200.4599		199.3	mg/L	99	1	200			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	67.98753		70.02	mg/L	103	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	67.98753	140	202.8	mg/L	92	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	67.98753	140	204.6	mg/L	95	85	115	1	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	50		49.5	mg/L	99	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.3	0.3			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	50		49.29	mg/L	99	90	110			
WG567519CCB2	CCB	06/07/23 14:24				U	mg/L		-0.3	0.3			
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	50		49.3	mg/L	99	90	110			
WG567519CCB3	CCB	06/07/23 14:47				U	mg/L		-0.3	0.3			

GCC

ACZ Project ID: ***L80818***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Chloride SM4500Cl-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567509													
WG567509ICV	ICV	06/06/23 14:05	WI230501-8	55		53.34	mg/L	97	90	110			
WG567509ICB	ICB	06/06/23 14:05				U	mg/L						
WG567509LFB1	LFB	06/06/23 14:06	WI230202-6	30		29.19	mg/L	97	90	110			
WG567509CCV1	CCV	06/06/23 14:11	WI221021-5	49.95		48.44	mg/L	97	90	110			
WG567509CCB1	CCB	06/06/23 14:11				U	mg/L						
L80813-02DUP	DUP	06/06/23 14:15			9.77	10.37	mg/L				6	20	RA
WG567509CCV2	CCV	06/06/23 14:17	WI221021-5	49.95		52.27	mg/L	105	90	110			
WG567509CCB2	CCB	06/06/23 14:18				U	mg/L						
WG567509LFB2	LFB	06/06/23 14:21	WI230202-6	30		28.7	mg/L	96	90	110			
WG567509CCV3	CCV	06/06/23 14:23	WI221021-5	49.95		49.44	mg/L	99	90	110			
WG567509CCB3	CCB	06/06/23 14:24				U	mg/L						
WG567509CCV4	CCV	06/06/23 14:28	WI221021-5	49.95		51.51	mg/L	103	90	110			
WG567509CCB4	CCB	06/06/23 14:28				U	mg/L						
WG567509CCV9	CCV	06/06/23 15:10	WI221021-5	49.95		50.76	mg/L	102	90	110			
WG567509CCB9	CCB	06/06/23 15:11				U	mg/L						
L80813-01AS	AS	06/06/23 15:12	25XCL	30	940	951.15	mg/L	37	90	110			M3
WG567509CCV10	CCV	06/06/23 15:15	WI221021-5	49.95		50.63	mg/L	101	90	110			
WG567509CCB10	CCB	06/06/23 15:16				U	mg/L						

GCC

ACZ Project ID: ***L80818***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Chromium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567513													
WG567513ICV	ICV	06/07/23 1:17	II230516-3	2		1.973	mg/L	99	95	105			
WG567513ICB	ICB	06/07/23 1:23				U	mg/L		-0.06	0.06			
WG567513PQV	PQV	06/07/23 1:26	II230516-2	.05005		.059	mg/L	118	70	130			
WG567513SIC	SIC	06/07/23 1:30	II230601-2	.1001		.102	mg/L	102	80	120			
WG567513LFB	LFB	06/07/23 1:36	II230530-2	.5005		.506	mg/L	101	85	115			
WG567513CCV1	CCV	06/07/23 2:08	II230525-1	1		.996	mg/L	100	90	110			
WG567513CCB1	CCB	06/07/23 2:11				U	mg/L		-0.06	0.06			
L80802-15AS	AS	06/07/23 2:27	II230530-2	.5005	U	.512	mg/L	102	85	115			
L80802-15ASD	ASD	06/07/23 2:30	II230530-2	.5005	U	.506	mg/L	101	85	115	1	20	
WG567513CCV2	CCV	06/07/23 2:47	II230525-1	1		.993	mg/L	99	90	110			
WG567513CCB2	CCB	06/07/23 2:50				U	mg/L		-0.06	0.06			
WG567513CCV3	CCV	06/07/23 3:09	II230525-1	1		.97	mg/L	97	90	110			
WG567513CCB3	CCB	06/07/23 3:12				U	mg/L		-0.06	0.06			
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	2		1.967	mg/L	98	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.06	0.06			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	.05005		.047	mg/L	94	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	.1001		.094	mg/L	94	80	120			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	.5005		.504	mg/L	101	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	.5005	U	.507	mg/L	101	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	.5005	U	.499	mg/L	100	85	115	2	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	1		.993	mg/L	99	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.06	0.06			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	1		.995	mg/L	100	90	110			
WG567519CCB2	CCB	06/07/23 14:24				U	mg/L		-0.06	0.06			
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	1		.993	mg/L	99	90	110			
WG567519CCB3	CCB	06/07/23 14:47				U	mg/L		-0.06	0.06			

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG568134													
WG568134ICV	ICV	06/14/23 15:26	MS230410-7	.05		.050014	mg/L	100	90	110			
WG568134ICB	ICB	06/14/23 15:28				U	mg/L		-0.00011	0.00011			
WG568134LFB	LFB	06/14/23 15:30	MS230605-2	.05005		.051792	mg/L	103	85	115			
WG568134CCV1	CCV	06/14/23 15:44	MS230606-3	.1001		.098705	mg/L	99	90	110			
WG568134CCB1	CCB	06/14/23 15:46				U	mg/L		-0.00015	0.00015			
L80820-01AS	AS	06/14/23 15:50	MS230605-2	.05005	.000229	.049021	mg/L	97	70	130			
L80820-01ASD	ASD	06/14/23 15:52	MS230605-2	.05005	.000229	.048602	mg/L	97	70	130	1	20	
WG568134CCV2	CCV	06/14/23 16:06	MS230606-3	.1001		.100258	mg/L	100	90	110			
WG568134CCB2	CCB	06/14/23 16:08				U	mg/L		-0.00015	0.00015			
WG568134CCV3	CCV	06/14/23 16:23	MS230606-3	.1001		.099354	mg/L	99	90	110			
WG568134CCB3	CCB	06/14/23 16:25				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: ***L80818***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Copper, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	2		1.93	mg/L	97	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.03	0.03			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	.05005		.054	mg/L	108	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	.1001		.111	mg/L	111	80	120			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	.5005		.5	mg/L	100	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	.5005	.012	.503	mg/L	98	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	.5005	.012	.5	mg/L	98	85	115	1	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	1		.978	mg/L	98	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.03	0.03			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	1		.965	mg/L	97	90	110			
WG567519CCB2	CCB	06/07/23 14:24				U	mg/L		-0.03	0.03			
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	1		.97	mg/L	97	90	110			
WG567519CCB3	CCB	06/07/23 14:47				U	mg/L		-0.03	0.03			
WG567622													
WG567622ICV	ICV	06/08/23 14:32	II230516-3	2		1.935	mg/L	97	95	105			
WG567622ICB	ICB	06/08/23 14:38				U	mg/L		-0.03	0.03			
WG567622PQV	PQV	06/08/23 14:41	II230516-2	.05005		.054	mg/L	108	70	130			
WG567622SIC	SIC	06/08/23 14:44	II230601-2	.1001		.1	mg/L	100	80	120			
WG567622LFB	LFB	06/08/23 14:51	II230530-2	.5005		.484	mg/L	97	85	115			
WG567622CCV1	CCV	06/08/23 15:23	II230525-1	1		.969	mg/L	97	90	110			
WG567622CCB1	CCB	06/08/23 15:26				U	mg/L		-0.03	0.03			
L80802-15AS	AS	06/08/23 15:39	II230530-2	.5005	U	.406	mg/L	81	85	115			M2
L80802-15ASD	ASD	06/08/23 15:42	II230530-2	.5005	U	.406	mg/L	81	85	115	0	20	M2
WG567622CCV2	CCV	06/08/23 16:01	II230525-1	1		.957	mg/L	96	90	110			
WG567622CCB2	CCB	06/08/23 16:04				U	mg/L		-0.03	0.03			
WG567622CCV3	CCV	06/08/23 16:20	II230525-1	1		.966	mg/L	97	90	110			
WG567622CCB3	CCB	06/08/23 16:23				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L80818***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Fluoride SM4500F-C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG568335													
WG568335ICV	ICV	06/16/23 10:01	WC230614-1	2.002		1.9	mg/L	95	90	110			
WG568335ICB	ICB	06/16/23 10:07				U	mg/L		-0.3	0.3			
WG568335PQV	PQV	06/16/23 10:13	WC230522-7	.3514		.28	mg/L	80	70	130			
WG568335LFB1	LFB	06/16/23 10:18	WC221227-7	5.02		5.07	mg/L	101	90	110			
WG568335CCB1	CCB	06/16/23 11:35				U	mg/L		-0.3	0.3			
WG568335CCV2	CCV	06/16/23 12:36	WC230614-1	2.002		2.094	mg/L	105	90	110			
WG568335CCB2	CCB	06/16/23 12:43				U	mg/L		-0.3	0.3			
WG568335LFB2	LFB	06/16/23 13:17	WC221227-7	5.02		4.91	mg/L	98	90	110			
L80818-05AS	AS	06/16/23 13:27	WC221227-7	5.02	1.18	6.12	mg/L	98	90	110			
L80818-05ASD	ASD	06/16/23 13:32	WC221227-7	5.02	1.18	5.89	mg/L	94	90	110	4	20	
WG568335CCV3	CCV	06/16/23 13:44	WC230614-1	2.002		2.075	mg/L	104	90	110			
WG568335CCB3	CCB	06/16/23 13:50				U	mg/L		-0.3	0.3			
WG568335CCV4	CCV	06/16/23 14:53	WC230614-1	2.002		2.113	mg/L	106	90	110			
WG568335CCB4	CCB	06/16/23 14:59				U	mg/L		-0.3	0.3			
WG568335CCV5	CCV	06/16/23 15:59	WC230614-1	2.002		2.016	mg/L	101	90	110			
WG568335CCB5	CCB	06/16/23 16:06				U	mg/L		-0.3	0.3			
WG568443													
WG568443ICV	ICV	06/20/23 10:40	WC230614-1	2.002		2.01	mg/L	100	90	110			
WG568443ICB	ICB	06/20/23 10:47				U	mg/L		-0.3	0.3			
WG568572													
WG568572ICV	ICV	06/20/23 16:06	WC230614-1	2.002		2.09	mg/L	104	90	110			
WG568572ICB	ICB	06/20/23 16:14				U	mg/L		-0.3	0.3			
WG568572PQV	PQV	06/20/23 16:17	WC230522-7	.3514		.28	mg/L	80	70	130			
WG568572LFB1	LFB	06/20/23 16:21	WC221227-7	5.02		5.12	mg/L	102	90	110			
L80802-07AS	AS	06/20/23 16:27	WC221227-7	5.02	.21	5.41	mg/L	104	90	110			
L80802-07ASD	ASD	06/20/23 16:31	WC221227-7	5.02	.21	5.41	mg/L	104	90	110	0	20	
WG568572CCV1	CCV	06/20/23 16:54	WC230614-1	2.002		2.081	mg/L	104	90	110			
WG568572CCB1	CCB	06/20/23 17:02				U	mg/L		-0.3	0.3			
L80818-04AS	AS	06/20/23 17:20	WC221227-7	5.02	.35	5.33	mg/L	99	90	110			
L80818-04ASD	ASD	06/20/23 17:24	WC221227-7	5.02	.35	5.31	mg/L	99	90	110	0	20	
WG568572CCV2	CCV	06/20/23 17:45	WC230614-1	2.002		2.131	mg/L	106	90	110			
WG568572CCB2	CCB	06/20/23 17:52				U	mg/L		-0.3	0.3			
WG568572LFB2	LFB	06/20/23 18:17	WC221227-7	5.02		5.09	mg/L	101	90	110			
WG568572CCV3	CCV	06/20/23 18:35	WC230614-1	2.002		2.081	mg/L	104	90	110			
WG568572CCB3	CCB	06/20/23 18:40				U	mg/L		-0.3	0.3			
WG568572CCV4	CCV	06/20/23 19:23	WC230614-1	2.002		2.131	mg/L	106	90	110			
WG568572CCB4	CCB	06/20/23 19:31				U	mg/L		-0.3	0.3			
WG568572CCV5	CCV	06/20/23 20:13	WC230614-1	2.002		2.071	mg/L	103	90	110			
WG568572CCB5	CCB	06/20/23 20:21				U	mg/L		-0.3	0.3			

GCC

ACZ Project ID: ***L80818***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Iron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567513													
WG567513ICV	ICV	06/07/23 1:17	II230516-3	2		1.927	mg/L	96	95	105			
WG567513ICB	ICB	06/07/23 1:23				U	mg/L		-0.18	0.18			
WG567513PQV	PQV	06/07/23 1:26	II230516-2	.1506		.159	mg/L	106	70	130			
WG567513SIC	SIC	06/07/23 1:30	II230601-2	200.9506		191.6	mg/L	95	1	200			
WG567513LFB	LFB	06/07/23 1:36	II230530-2	1.004		1.014	mg/L	101	85	115			
WG567513CCV1	CCV	06/07/23 2:08	II230525-1	1		.951	mg/L	95	90	110			
WG567513CCB1	CCB	06/07/23 2:11				U	mg/L		-0.18	0.18			
L80802-15AS	AS	06/07/23 2:27	II230530-2	1.004	U	.999	mg/L	100	85	115			
L80802-15ASD	ASD	06/07/23 2:30	II230530-2	1.004	U	.996	mg/L	99	85	115	0	20	
WG567513CCV2	CCV	06/07/23 2:47	II230525-1	1		.989	mg/L	99	90	110			
WG567513CCB2	CCB	06/07/23 2:50				U	mg/L		-0.18	0.18			
WG567513CCV3	CCV	06/07/23 3:09	II230525-1	1		.95	mg/L	95	90	110			
WG567513CCB3	CCB	06/07/23 3:12				U	mg/L		-0.18	0.18			
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	2		1.914	mg/L	96	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.18	0.18			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	.1506		.172	mg/L	114	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	200.9506		189.3	mg/L	94	1	200			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	1.004		1.013	mg/L	101	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	1.004	U	1.013	mg/L	101	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	1.004	U	1.002	mg/L	100	85	115	1	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	1		.959	mg/L	96	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.18	0.18			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	1		.969	mg/L	97	90	110			
WG567519CCB2	CCB	06/07/23 14:24				U	mg/L		-0.18	0.18			
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	1		.965	mg/L	97	90	110			
WG567519CCB3	CCB	06/07/23 14:47				U	mg/L		-0.18	0.18			

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG568134													
WG568134ICV	ICV	06/14/23 15:26	MS230410-7	.05		.0526	mg/L	105	90	110			
WG568134ICB	ICB	06/14/23 15:28				U	mg/L		-0.00022	0.00022			
WG568134LFB	LFB	06/14/23 15:30	MS230605-2	.05005		.05416	mg/L	108	85	115			
WG568134CCV1	CCV	06/14/23 15:44	MS230606-3	.25025		.24267	mg/L	97	90	110			
WG568134CCB1	CCB	06/14/23 15:46				.00011	mg/L		-0.0003	0.0003			
L80820-01AS	AS	06/14/23 15:50	MS230605-2	.05005	.00013	.05428	mg/L	108	70	130			
L80820-01ASD	ASD	06/14/23 15:52	MS230605-2	.05005	.00013	.05416	mg/L	108	70	130	0	20	
WG568134CCV2	CCV	06/14/23 16:06	MS230606-3	.25025		.25103	mg/L	100	90	110			
WG568134CCB2	CCB	06/14/23 16:08				U	mg/L		-0.0003	0.0003			
WG568134CCV3	CCV	06/14/23 16:23	MS230606-3	.25025		.25395	mg/L	101	90	110			
WG568134CCB3	CCB	06/14/23 16:25				.00011	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: ***L80818***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567513													
WG567513ICV	ICV	06/07/23 1:17	II230516-3	2		1.9508	mg/L	98	95	105			
WG567513ICB	ICB	06/07/23 1:23				U	mg/L		-0.024	0.024			
WG567513PQV	PQV	06/07/23 1:26	II230516-2	.04012		.0427	mg/L	106	70	130			
WG567513SIC	SIC	06/07/23 1:30	II230601-2	.1003		.1042	mg/L	104	80	120			
WG567513LFB	LFB	06/07/23 1:36	II230530-2	1.003		.9701	mg/L	97	85	115			
WG567513CCV1	CCV	06/07/23 2:08	II230525-1	1		.961	mg/L	96	90	110			
WG567513CCB1	CCB	06/07/23 2:11				U	mg/L		-0.024	0.024			
L80802-15AS	AS	06/07/23 2:27	II230530-2	1.003	1	1.925	mg/L	92	85	115			
L80802-15ASD	ASD	06/07/23 2:30	II230530-2	1.003	1	1.916	mg/L	91	85	115	0	20	
WG567513CCV2	CCV	06/07/23 2:47	II230525-1	1		.955	mg/L	96	90	110			
WG567513CCB2	CCB	06/07/23 2:50				U	mg/L		-0.024	0.024			
WG567513CCV3	CCV	06/07/23 3:09	II230525-1	1		.932	mg/L	93	90	110			
WG567513CCB3	CCB	06/07/23 3:12				U	mg/L		-0.024	0.024			
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	2		1.9155	mg/L	96	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.024	0.024			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	.04012		.0461	mg/L	115	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	.1003		.1103	mg/L	110	80	120			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	1.003		.988	mg/L	99	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	1.003	.0138	1.018	mg/L	100	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	1.003	.0138	1.016	mg/L	100	85	115	0	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	1		.9671	mg/L	97	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.024	0.024			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	1		.9829	mg/L	98	90	110			
WG567519CCB2	CCB	06/07/23 14:24				U	mg/L		-0.024	0.024			
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	1		.9608	mg/L	96	90	110			
WG567519CCB3	CCB	06/07/23 14:47				U	mg/L		-0.024	0.024			

GCC

ACZ Project ID: ***L80818***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567513													
WG567513ICV	ICV	06/07/23 1:17	II230516-3	100		98.42	mg/L	98	95	105			
WG567513ICB	ICB	06/07/23 1:23				U	mg/L		-0.6	0.6			
WG567513PQV	PQV	06/07/23 1:26	II230516-2	1.0023		1.03	mg/L	103	70	130			
WG567513SIC	SIC	06/07/23 1:30	II230601-2	201.4623		201.5	mg/L	100	1	200			
WG567513LFB	LFB	06/07/23 1:36	II230530-2	49.99752		50.13	mg/L	100	85	115			
WG567513CCV1	CCV	06/07/23 2:08	II230525-1	50		48.1	mg/L	96	90	110			
WG567513CCB1	CCB	06/07/23 2:11				U	mg/L		-0.6	0.6			
L80802-15AS	AS	06/07/23 2:27	II230530-2	49.99752	15.6	65.7	mg/L	100	85	115			
L80802-15ASD	ASD	06/07/23 2:30	II230530-2	49.99752	15.6	64.74	mg/L	98	85	115	1	20	
WG567513CCV2	CCV	06/07/23 2:47	II230525-1	50		50.65	mg/L	101	90	110			
WG567513CCB2	CCB	06/07/23 2:50				.58	mg/L		-0.6	0.6			
WG567513CCV3	CCV	06/07/23 3:09	II230525-1	50		48.24	mg/L	96	90	110			
WG567513CCB3	CCB	06/07/23 3:12				U	mg/L		-0.6	0.6			
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	100		99.64	mg/L	100	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.6	0.6			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	1.0023		.97	mg/L	97	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	201.4623		203.3	mg/L	101	1	200			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	49.99752		51.55	mg/L	103	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	49.99752	2.31	53.32	mg/L	102	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	49.99752	2.31	54.17	mg/L	104	85	115	2	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	50		49.39	mg/L	99	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.6	0.6			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	50		49.23	mg/L	98	90	110			
WG567519CCB2	CCB	06/07/23 14:24				U	mg/L		-0.6	0.6			
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	50		49.41	mg/L	99	90	110			
WG567519CCB3	CCB	06/07/23 14:47				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L80818***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Manganese, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567513													
WG567513ICV	ICV	06/07/23 1:17	II230516-3	2		1.953	mg/L	98	95	105			
WG567513ICB	ICB	06/07/23 1:23				U	mg/L		-0.03	0.03			
WG567513PQV	PQV	06/07/23 1:26	II230516-2	.0498		.05	mg/L	100	70	130			
WG567513SIC	SIC	06/07/23 1:30	II230601-2	49.9998		49.24	mg/L	98	1	200			
WG567513LFB	LFB	06/07/23 1:36	II230530-2	.4995		.507	mg/L	102	85	115			
WG567513CCV1	CCV	06/07/23 2:08	II230525-1	1		.97	mg/L	97	90	110			
WG567513CCB1	CCB	06/07/23 2:11				U	mg/L		-0.03	0.03			
L80802-15AS	AS	06/07/23 2:27	II230530-2	.4995	3.34	3.672	mg/L	66	85	115			M3
L80802-15ASD	ASD	06/07/23 2:30	II230530-2	.4995	3.34	3.672	mg/L	66	85	115	0	20	M3
WG567513CCV2	CCV	06/07/23 2:47	II230525-1	1		1.063	mg/L	106	90	110			
WG567513CCB2	CCB	06/07/23 2:50				.028	mg/L		-0.03	0.03			
WG567513CCV3	CCV	06/07/23 3:09	II230525-1	1		.965	mg/L	97	90	110			
WG567513CCB3	CCB	06/07/23 3:12				U	mg/L		-0.03	0.03			
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	2		1.922	mg/L	96	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.03	0.03			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	.0498		.052	mg/L	104	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	49.9998		49.06	mg/L	98	1	200			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	.4995		.512	mg/L	103	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	.4995	U	.519	mg/L	104	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	.4995	U	.508	mg/L	102	85	115	2	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	1		.974	mg/L	97	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.03	0.03			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	1		.995	mg/L	100	90	110			
WG567519CCB2	CCB	06/07/23 14:24				U	mg/L		-0.03	0.03			
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	1		.968	mg/L	97	90	110			
WG567519CCB3	CCB	06/07/23 14:47				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L80818***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury, dissolved M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567662													
WG567662ICV	ICV	06/08/23 11:05	HG230530-3	.005		.00524	mg/L	105	95	105			
WG567662ICB	ICB	06/08/23 11:06				U	mg/L		-0.0002	0.0002			
WG567663													
WG567663CCV1	CCV	06/08/23 11:38	HG230530-3	.005		.00508	mg/L	102	90	110			
WG567663CCB1	CCB	06/08/23 11:39				U	mg/L		-0.0002	0.0002			
WG567663PQV	PQV	06/08/23 11:40	HG230530-5	.001001		.00092	mg/L	92	70	130			
WG567663LRB	LRB	06/08/23 11:41				U	mg/L		-0.00044	0.00044			
WG567663LFB	LFB	06/08/23 11:42	HG230530-6	.002002		.00196	mg/L	98	85	115			
L80687-01LFM	LFM	06/08/23 11:49	HG230530-6	.002002	U	.00197	mg/L	98	85	115			
WG567663CCV2	CCV	06/08/23 11:50	HG230530-3	.005		.00517	mg/L	103	90	110			
WG567663CCB2	CCB	06/08/23 11:51				U	mg/L		-0.0002	0.0002			
L80687-01LFMD	LFMD	06/08/23 11:52	HG230530-6	.002002	U	.0019	mg/L	95	85	115	4	20	
L80818-05LFM	LFM	06/08/23 12:00	HG230530-6	.002002	U	.00165	mg/L	82	85	115			M2
WG567663CCV3	CCV	06/08/23 12:01	HG230530-3	.005		.00507	mg/L	101	90	110			
WG567663CCB3	CCB	06/08/23 12:02				U	mg/L		-0.0002	0.0002			
L80818-05LFMD	LFMD	06/08/23 12:03	HG230530-6	.002002	U	.00168	mg/L	84	85	115	2	20	M2
WG567663CCV4	CCV	06/08/23 12:09	HG230530-3	.005		.00511	mg/L	102	90	110			
WG567663CCB4	CCB	06/08/23 12:10				U	mg/L		-0.0002	0.0002			

GCC

ACZ Project ID: ***L80818***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nickel, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567513													
WG567513ICV	ICV	06/07/23 1:17	II230516-3	2.002		1.9525	mg/L	98	95	105			
WG567513ICB	ICB	06/07/23 1:23				U	mg/L		-0.024	0.024			
WG567513PQV	PQV	06/07/23 1:26	II230516-2	.04		.0428	mg/L	107	70	130			
WG567513SIC	SIC	06/07/23 1:30	II230601-2	.1		.0998	mg/L	100	80	120			
WG567513LFB	LFB	06/07/23 1:36	II230530-2	.5		.4982	mg/L	100	85	115			
WG567513CCV1	CCV	06/07/23 2:08	II230525-1	1.001		.996	mg/L	100	90	110			
WG567513CCB1	CCB	06/07/23 2:11				U	mg/L		-0.024	0.024			
L80802-15AS	AS	06/07/23 2:27	II230530-2	.5	U	.5084	mg/L	102	85	115			
L80802-15ASD	ASD	06/07/23 2:30	II230530-2	.5	U	.4974	mg/L	99	85	115	2	20	
WG567513CCV2	CCV	06/07/23 2:47	II230525-1	1.001		.993	mg/L	99	90	110			
WG567513CCB2	CCB	06/07/23 2:50				U	mg/L		-0.024	0.024			
WG567513CCV3	CCV	06/07/23 3:09	II230525-1	1.001		.9744	mg/L	97	90	110			
WG567513CCB3	CCB	06/07/23 3:12				U	mg/L		-0.024	0.024			
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	2.002		1.964	mg/L	98	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.024	0.024			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	.04		.0504	mg/L	126	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	.1		.1018	mg/L	102	80	120			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	.5		.5161	mg/L	103	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	.5	U	.5158	mg/L	103	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	.5	U	.5093	mg/L	102	85	115	1	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	1.001		1.016	mg/L	101	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.024	0.024			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	1.001		.9998	mg/L	100	90	110			
WG567519CCB2	CCB	06/07/23 14:24				U	mg/L		-0.024	0.024			
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	1.001		1.006	mg/L	100	90	110			
WG567519CCB3	CCB	06/07/23 14:47				U	mg/L		-0.024	0.024			

Nitrate/Nitrite as N M353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567274													
WG567274CCV1	CCV	06/02/23 2:00	WI230531-7	2		1.998	mg/L	100	90	110			
WG567274CCB1	CCB	06/02/23 2:03				U	mg/L		-0.02	0.02			
L80755-01AS	AS	06/02/23 2:07	WI230228-3	2	U	2.009	mg/L	100	90	110			
L80755-02DUP	DUP	06/02/23 2:10			.209	.206	mg/L				1	20	
WG567274CCV2	CCV	06/02/23 2:17	WI230531-7	2		2.003	mg/L	100	90	110			
WG567274CCB2	CCB	06/02/23 2:20				U	mg/L		-0.02	0.02			
WG567274LFB	LFB	06/02/23 2:25	WI230228-3	2		2.066	mg/L	103	90	110			
WG567274CCV3	CCV	06/02/23 2:30	WI230531-7	2		2.005	mg/L	100	90	110			
WG567274CCB3	CCB	06/02/23 2:33				U	mg/L		-0.02	0.02			

GCC

ACZ Project ID: ***L80818***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nitrite as N M353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567274													
WG567274CCV1	CCV	06/02/23 2:00	WI230531-7	1		.984	mg/L	98	90	110			
WG567274CCB1	CCB	06/02/23 2:03				U	mg/L		-0.01	0.01			
L80755-01AS	AS	06/02/23 2:07	WI230228-3	1	U	.998	mg/L	100	90	110			
L80755-02DUP	DUP	06/02/23 2:10			U	U	mg/L				0	20	RA
WG567274CCV2	CCV	06/02/23 2:17	WI230531-7	1		.992	mg/L	99	90	110			
WG567274CCB2	CCB	06/02/23 2:20				U	mg/L		-0.01	0.01			
WG567274LFB	LFB	06/02/23 2:25	WI230228-3	1		1.006	mg/L	101	90	110			
WG567274CCV3	CCV	06/02/23 2:30	WI230531-7	1		.979	mg/L	98	90	110			
WG567274CCB3	CCB	06/02/23 2:33				U	mg/L		-0.01	0.01			

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567513													
WG567513ICV	ICV	06/07/23 1:17	II230516-3	20		19.53	mg/L	98	95	105			
WG567513ICB	ICB	06/07/23 1:23				U	mg/L		-0.6	0.6			
WG567513PQV	PQV	06/07/23 1:26	II230516-2	1.005		1.08	mg/L	107	70	130			
WG567513SIC	SIC	06/07/23 1:30	II230601-2	1.005		.97	mg/L	97	80	120			
WG567513LFB	LFB	06/07/23 1:36	II230530-2	99.95693		99.06	mg/L	99	85	115			
WG567513CCV1	CCV	06/07/23 2:08	II230525-1	10		9.63	mg/L	96	90	110			
WG567513CCB1	CCB	06/07/23 2:11				U	mg/L		-0.6	0.6			
L80802-15AS	AS	06/07/23 2:27	II230530-2	99.95693	5.56	105.8	mg/L	100	85	115			
L80802-15ASD	ASD	06/07/23 2:30	II230530-2	99.95693	5.56	103.9	mg/L	98	85	115	2	20	
WG567513CCV2	CCV	06/07/23 2:47	II230525-1	10		9.77	mg/L	98	90	110			
WG567513CCB2	CCB	06/07/23 2:50				U	mg/L		-0.6	0.6			
WG567513CCV3	CCV	06/07/23 3:09	II230525-1	10		9.66	mg/L	97	90	110			
WG567513CCB3	CCB	06/07/23 3:12				U	mg/L		-0.6	0.6			
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	20		19.37	mg/L	97	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.6	0.6			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	1.005		1.07	mg/L	106	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	1.005		1.02	mg/L	101	80	120			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	99.95693		101.4	mg/L	101	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	99.95693	.44	103	mg/L	103	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	99.95693	.44	104.6	mg/L	104	85	115	2	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	10		9.81	mg/L	98	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.6	0.6			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	10		10.5	mg/L	105	90	110			
WG567519CCB2	CCB	06/07/23 14:24				.53	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L80818***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567516													
WG567516PBW	PBW	06/06/23 12:00				U	mg/L		-20	20			
WG567516LCSW	LCSW	06/06/23 12:02	PCN625111	1000		986	mg/L	99	80	120			
L80814-02DUP	DUP	06/06/23 12:31			29300	29100	mg/L				1	10	
L80818-04DUP	DUP	06/06/23 12:54			4760	4760	mg/L				0	10	
WG568464													
WG568464PBW	PBW	06/19/23 11:30				U	mg/L		-20	20			N1
WG568464LCSW	LCSW	06/19/23 11:32	PCN625112	1000		1002	mg/L	100	80	120			
L81060-01DUP	DUP	06/19/23 12:30			128	130	mg/L				2	10	RA

GCC

ACZ Project ID: ***L80818***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG568383													
WG568383ICV	ICV	06/16/23 15:40	MS230410-7	.05		.05129	mg/L	103	90	110			
WG568383ICB	ICB	06/16/23 15:42				U	mg/L		-0.00022	0.00022			
WG568383LFB	LFB	06/16/23 15:44	MS230605-2	.05005		.05055	mg/L	101	85	115			
L80755-02AS	AS	06/16/23 15:54	MS230605-2	.05005	U	.0486	mg/L	97	70	130			
L80755-02ASD	ASD	06/16/23 15:56	MS230605-2	.05005	U	.04928	mg/L	98	70	130	1	20	
WG568383CCV1	CCV	06/16/23 15:58	MS230606-3	.1001		.09453	mg/L	94	90	110			
WG568383CCB1	CCB	06/16/23 16:00				U	mg/L		-0.0003	0.0003			
WG568383CCV2	CCV	06/16/23 16:20	MS230606-3	.1001		.09203	mg/L	92	90	110			E6
WG568383CCB2	CCB	06/16/23 16:21				.0061	mg/L		-0.0003	0.0003			BE E6
WG568383CCV3	CCV	06/16/23 16:40	MS230606-3	.1001		.09464	mg/L	95	90	110			
WG568513													
WG568513ICV	ICV	06/20/23 17:35	MS230410-7	.05		.05079	mg/L	102	90	110			
WG568513ICB	ICB	06/20/23 17:36				U	mg/L		-0.00022	0.00022			
WG568513LFB	LFB	06/20/23 17:38	MS230605-2	.05005		.04952	mg/L	99	85	115			
WG568513CCV1	CCV	06/20/23 17:56	MS230606-3	.1001		.0999	mg/L	100	90	110			
WG568513CCB1	CCB	06/20/23 17:58				U	mg/L		-0.0003	0.0003			
WG568513CCV2	CCV	06/20/23 18:18	MS230606-3	.1001		.10334	mg/L	103	90	110			
WG568513CCB2	CCB	06/20/23 18:20				.0013	mg/L		-0.0003	0.0003			BB
L80887-01AS	AS	06/20/23 18:27	MS230605-2	.05005	.00165	.05507	mg/L	107	70	130			
L80887-01ASD	ASD	06/20/23 18:29	MS230605-2	.05005	.00165	.05551	mg/L	108	70	130	1	20	
WG568513CCV3	CCV	06/20/23 18:31	MS230606-3	.1001		.10119	mg/L	101	90	110			
WG568513CCB3	CCB	06/20/23 18:33				U	mg/L		-0.0003	0.0003			
WG568716													
WG568716ICV	ICV	06/21/23 17:08	MS230620-3	.05		.04928	mg/L	99	90	110			
WG568716ICB	ICB	06/21/23 17:10				U	mg/L		-0.00022	0.00022			
WG568716LFB	LFB	06/21/23 17:12	MS230605-2	.05005		.04804	mg/L	96	85	115			
L78333-21AS	AS	06/21/23 17:27	MS230605-2	.05005	U	.05411	mg/L	108	70	130			
L78333-21ASD	ASD	06/21/23 17:28	MS230605-2	.05005	U	.05633	mg/L	113	70	130	4	20	
WG568716CCV1	CCV	06/21/23 17:30	MS230616-2	.1001		.10172	mg/L	102	90	110			
WG568716CCB1	CCB	06/21/23 17:32				U	mg/L		-0.0003	0.0003			
WG568716CCV2	CCV	06/21/23 17:52	MS230616-2	.1001		.10056	mg/L	100	90	110			
WG568716CCB2	CCB	06/21/23 17:54				U	mg/L		-0.0003	0.0003			
L81022-02AS	AS	06/21/23 17:59	MS230605-2	.05005	U	.05497	mg/L	110	70	130			
L81022-02ASD	ASD	06/21/23 18:01	MS230605-2	.05005	U	.05385	mg/L	108	70	130	2	20	
WG568716CCV3	CCV	06/21/23 18:05	MS230616-2	.1001		.10243	mg/L	102	90	110			
WG568716CCB3	CCB	06/21/23 18:07				U	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: ***L80818***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567513													
WG567513ICV	ICV	06/07/23 1:17	II230516-3	100		101	mg/L	101	95	105			
WG567513ICB	ICB	06/07/23 1:23				U	mg/L		-0.6	0.6			
WG567513PQV	PQV	06/07/23 1:26	II230516-2	1.000141		1.02	mg/L	102	70	130			
WG567513SIC	SIC	06/07/23 1:30	II230601-2	1.000141		.98	mg/L	98	80	120			
WG567513LFB	LFB	06/07/23 1:36	II230530-2	100.0094		101.3	mg/L	101	85	115			
WG567513CCV1	CCV	06/07/23 2:08	II230525-1	50		49.76	mg/L	100	90	110			
WG567513CCB1	CCB	06/07/23 2:11				U	mg/L		-0.6	0.6			
L80802-15AS	AS	06/07/23 2:27	II230530-2	100.0094	13.2	115.9	mg/L	103	85	115			
L80802-15ASD	ASD	06/07/23 2:30	II230530-2	100.0094	13.2	113.5	mg/L	100	85	115	2	20	
WG567513CCV2	CCV	06/07/23 2:47	II230525-1	50		50.23	mg/L	100	90	110			
WG567513CCB2	CCB	06/07/23 2:50				.25	mg/L		-0.6	0.6			
WG567513CCV3	CCV	06/07/23 3:09	II230525-1	50		50.34	mg/L	101	90	110			
WG567513CCB3	CCB	06/07/23 3:12				.51	mg/L		-0.6	0.6			
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	100		100.88	mg/L	101	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.6	0.6			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	1.000141		1.07	mg/L	107	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	1.000141		1.03	mg/L	103	80	120			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	100.0094		103	mg/L	103	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	100.0094	3.53	107.4	mg/L	104	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	100.0094	3.53	109.7	mg/L	106	85	115	2	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	50		50.53	mg/L	101	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.6	0.6			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	50		51.65	mg/L	103	90	110			
WG567519CCB2	CCB	06/07/23 14:24				.91	mg/L		-0.6	0.6			BB
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	50		54.64	mg/L	109	90	110			
WG567519CCB3	CCB	06/07/23 14:47				2.42	mg/L		-0.6	0.6			BB
WG567685													
WG567685ICV	ICV	06/09/23 9:20	II230516-3	100		101.55	mg/L	102	95	105			
WG567685ICB	ICB	06/09/23 9:26				U	mg/L		-0.6	0.6			
WG567685PQV	PQV	06/09/23 9:30	II230516-2	1.000141		1.05	mg/L	105	70	130			
WG567685SIC	SIC	06/09/23 9:33	II230601-2	1.000141		1.04	mg/L	104	80	120			
WG567685LFB	LFB	06/09/23 9:39	II230530-2	100.0094		99.7	mg/L	100	85	115			
WG567685CCV1	CCV	06/09/23 10:11	II230525-1	50		49.91	mg/L	100	90	110			
WG567685CCB1	CCB	06/09/23 10:14				U	mg/L		-0.6	0.6			
L80820-03AS	AS	06/09/23 10:34	II230530-2	100.0094	2.71	102.1	mg/L	99	85	115			
L80820-03ASD	ASD	06/09/23 10:37	II230530-2	100.0094	2.71	102.2	mg/L	99	85	115	0	20	
WG567685CCV2	CCV	06/09/23 10:50	II230525-1	50		50.41	mg/L	101	90	110			
WG567685CCB2	CCB	06/09/23 10:53				.37	mg/L		-0.6	0.6			
WG567685CCV3	CCV	06/09/23 11:13	II230525-1	50		50.73	mg/L	101	90	110			
WG567685CCB3	CCB	06/09/23 11:16				.42	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L80818***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sulfate D516-02/-07/-11 - TURBIDIMETRIC

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG568399													
WG568399ICB	ICB	06/20/23 9:51				U	mg/L		-3	3			
WG568399ICV	ICV	06/20/23 9:51	WI230619-7	20		20.6	mg/L	103	90	110			
WG568399CCV1	CCV	06/20/23 10:03	WI230619-6	25		25	mg/L	100	90	110			
WG568399CCB1	CCB	06/20/23 10:03				U	mg/L		-3	3			
WG568399LFB	LFB	06/20/23 10:03	WI230119-9	10		10.7	mg/L	107	90	110			
L71601-68AS	AS	06/20/23 10:03	WI230119-9	10	U	10.9	mg/L	109	90	110			
L71602-68DUP	DUP	06/20/23 10:03			3.6	3.5	mg/L				3	20	RA
WG568399CCV2	CCV	06/20/23 10:06	WI230619-6	25		24.9	mg/L	100	90	110			
WG568399CCB2	CCB	06/20/23 10:06				U	mg/L		-3	3			
WG568399CCV3	CCV	06/20/23 10:07	WI230619-6	25		24.1	mg/L	96	90	110			
WG568399CCB3	CCB	06/20/23 10:07				U	mg/L		-3	3			
WG568399CCV4	CCV	06/20/23 10:09	WI230619-6	25		24.6	mg/L	98	90	110			
WG568399CCB4	CCB	06/20/23 10:09				U	mg/L		-3	3			
WG568399CCV5	CCV	06/20/23 10:38	WI230619-6	25		24.9	mg/L	100	90	110			
WG568399CCB5	CCB	06/20/23 10:38				U	mg/L		-3	3			
WG568399CCV6	CCV	06/20/23 10:40	WI230619-6	25		25.1	mg/L	100	90	110			
WG568399CCB6	CCB	06/20/23 10:40				U	mg/L		-3	3			
WG568399CCV7	CCV	06/20/23 10:43	WI230619-6	25		25	mg/L	100	90	110			
WG568399CCB7	CCB	06/20/23 10:43				U	mg/L		-3	3			
WG568399CCV8	CCV	06/20/23 10:49	WI230619-6	25		25.1	mg/L	100	90	110			
WG568399CCB8	CCB	06/20/23 10:49				U	mg/L		-3	3			
WG568399CCV9	CCV	06/20/23 11:03	WI230619-6	25		24.8	mg/L	99	90	110			
WG568399CCB9	CCB	06/20/23 11:03				U	mg/L		-3	3			
WG568399CCV10	CCV	06/20/23 11:05	WI230619-6	25		24.9	mg/L	100	90	110			
WG568399CCB10	CCB	06/20/23 11:05				U	mg/L		-3	3			

GCC

ACZ Project ID: ***L80818***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Vanadium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567513													
WG567513ICV	ICV	06/07/23 1:17	II230516-3	2		1.995	mg/L	100	95	105			
WG567513ICB	ICB	06/07/23 1:23				U	mg/L		-0.015	0.015			
WG567513PQV	PQV	06/07/23 1:26	II230516-2	.025025		.022	mg/L	88	70	130			
WG567513SIC	SIC	06/07/23 1:30	II230601-2	.1001		.098	mg/L	98	80	120			
WG567513LFB	LFB	06/07/23 1:36	II230530-2	.5005		.5029	mg/L	100	85	115			
WG567513CCV1	CCV	06/07/23 2:08	II230525-1	1		.977	mg/L	98	90	110			
WG567513CCB1	CCB	06/07/23 2:11				U	mg/L		-0.03	0.03			
L80802-15AS	AS	06/07/23 2:27	II230530-2	.5005	U	.5087	mg/L	102	85	115			
L80802-15ASD	ASD	06/07/23 2:30	II230530-2	.5005	U	.495	mg/L	99	85	115	3	20	
WG567513CCV2	CCV	06/07/23 2:47	II230525-1	1		.982	mg/L	98	90	110			
WG567513CCB2	CCB	06/07/23 2:50				U	mg/L		-0.03	0.03			
WG567513CCV3	CCV	06/07/23 3:09	II230525-1	1		.977	mg/L	98	90	110			
WG567513CCB3	CCB	06/07/23 3:12				U	mg/L		-0.03	0.03			
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	2		1.985	mg/L	99	95	105			
WG567519ICB	ICB	06/07/23 12:57				.0065	mg/L		-0.015	0.015			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	.025025		.027	mg/L	108	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	.1001		.105	mg/L	105	80	120			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	.5005		.5132	mg/L	103	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	.5005	U	.5135	mg/L	103	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	.5005	U	.527	mg/L	105	85	115	3	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	1		.994	mg/L	99	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.03	0.03			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	1		.991	mg/L	99	90	110			
WG567519CCB2	CCB	06/07/23 14:24				U	mg/L		-0.03	0.03			
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	1		.992	mg/L	99	90	110			
WG567519CCB3	CCB	06/07/23 14:47				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L80818***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Zinc, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567513													
WG567513ICV	ICV	06/07/23 1:17	II230516-3	2		1.957	mg/L	98	95	105			
WG567513ICB	ICB	06/07/23 1:23				U	mg/L		-0.06	0.06			
WG567513PQV	PQV	06/07/23 1:26	II230516-2	.05005		.062	mg/L	124	70	130			
WG567513SIC	SIC	06/07/23 1:30	II230601-2	.1001		.1	mg/L	100	80	120			
WG567513LFB	LFB	06/07/23 1:36	II230530-2	.50045		.524	mg/L	105	85	115			
WG567513CCV1	CCV	06/07/23 2:08	II230525-1	1		.981	mg/L	98	90	110			
WG567513CCB1	CCB	06/07/23 2:11				U	mg/L		-0.06	0.06			
L80802-15AS	AS	06/07/23 2:27	II230530-2	.50045	U	.531	mg/L	106	85	115			
L80802-15ASD	ASD	06/07/23 2:30	II230530-2	.50045	U	.522	mg/L	104	85	115	2	20	
WG567513CCV2	CCV	06/07/23 2:47	II230525-1	1		1.013	mg/L	101	90	110			
WG567513CCB2	CCB	06/07/23 2:50				U	mg/L		-0.06	0.06			
WG567513CCV3	CCV	06/07/23 3:09	II230525-1	1		.968	mg/L	97	90	110			
WG567513CCB3	CCB	06/07/23 3:12				U	mg/L		-0.06	0.06			
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	2		1.95	mg/L	98	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.06	0.06			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	.05005		.057	mg/L	114	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	.1001		.095	mg/L	95	80	120			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	.50045		.53	mg/L	106	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	.50045	.279	.774	mg/L	99	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	.50045	.279	.788	mg/L	102	85	115	2	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	1		.979	mg/L	98	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.06	0.06			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	1		.98	mg/L	98	90	110			
WG567519CCB2	CCB	06/07/23 14:24				U	mg/L		-0.06	0.06			
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	1		.983	mg/L	98	90	110			
WG567519CCB3	CCB	06/07/23 14:47				U	mg/L		-0.06	0.06			

ACZ Laboratories, Inc.
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Inorganic Extended Qualifier Report

GCC Rio Grande ACZ Project ID: ***L80818***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L80818-01	WG568055	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG567509	Chloride	SM4500Cl-E	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500Cl-E	Q6	Sample was received above recommended temperature.
			SM4500Cl-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG567622	Copper, dissolved	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG568572	Fluoride	SM4500F-C	Q6	Sample was received above recommended temperature.
	WG568055	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG567513	Manganese, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567274	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
		Nitrite as N	M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG567516	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RO	The duplicate originally assigned to this sample was not used for precision assessment because residue density did not meet method limits. Another duplicate in the batch was used to assess precision. Method required duplicate frequency was not met.
	WG568383	Selenium, dissolved	M200.8 ICP-MS	BE	Target analyte in continuing calibration blank (CCB) at or above the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			M200.8 ICP-MS	IA	Internal standard recovery exceeded the acceptance limits. Concentration of associated target analyte(s) in the sample is < MDL.
	WG568399	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG568055	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

GCC Rio Grande ACZ Project ID: ***L80818***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L80818-02	WG568055	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG567509	Chloride	SM4500Cl-E	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500Cl-E	Q6	Sample was received above recommended temperature.
			SM4500Cl-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG567622	Copper, dissolved	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG568572	Fluoride	SM4500F-C	Q6	Sample was received above recommended temperature.
	WG568055	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG567513	Manganese, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567663	Mercury, dissolved	M245.1 CVAA	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567274	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
		Nitrite as N	M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG567516	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RO	The duplicate originally assigned to this sample was not used for precision assessment because residue density did not meet method limits. Another duplicate in the batch was used to assess precision. Method required duplicate frequency was not met.
	WG568513	Selenium, dissolved	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
			M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG568399	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG568055	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

GCC Rio Grande ACZ Project ID: ***L80818***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L80818-03	WG568055	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG567509	Chloride	SM4500Cl-E	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500Cl-E	Q6	Sample was received above recommended temperature.
			SM4500Cl-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG568572	Fluoride	SM4500F-C	Q6	Sample was received above recommended temperature.
	WG568055	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG567663	Mercury, dissolved	M245.1 CVAA	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567274	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
		Nitrite as N	M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG567516	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RO	The duplicate originally assigned to this sample was not used for precision assessment because residue density did not meet method limits. Another duplicate in the batch was used to assess precision. Method required duplicate frequency was not met.
	WG568399	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG568055	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

GCC Rio Grande ACZ Project ID: ***L80818***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L80818-04	WG568055	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG567509	Chloride	SM4500Cl-E	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500Cl-E	Q6	Sample was received above recommended temperature.
			SM4500Cl-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG568572	Fluoride	SM4500F-C	Q6	Sample was received above recommended temperature.
	WG568055	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG567663	Mercury, dissolved	M245.1 CVAA	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567274	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
		Nitrite as N	M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG568464	Residue, Filterable (TDS) @180C	SM2540C	H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG568399	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG568055	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

GCC Rio Grande ACZ Project ID: ***L80818***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L80818-05	WG568055	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG567509	Chloride	SM4500Cl-E	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500Cl-E	Q6	Sample was received above recommended temperature.
			SM4500Cl-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG568335	Fluoride	SM4500F-C	Q6	Sample was received above recommended temperature.
	WG568055	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG567663	Mercury, dissolved	M245.1 CVAA	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567274	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
		Nitrite as N	M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG567516	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RO	The duplicate originally assigned to this sample was not used for precision assessment because residue density did not meet method limits. Another duplicate in the batch was used to assess precision. Method required duplicate frequency was not met.
	WG568716	Selenium, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
			M200.8 ICP-MS	DB	Sample required dilution due to low bias result.
			M200.8 ICP-MS	EA	Concentration estimated. Analytical result was less than the negative MDL due to matrix interferences.
	WG568399	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG568055	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Certification Qualifiers

GCC Rio Grande ACZ Project ID: ***L80818***

No certification qualifiers associated with this analysis

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

GCC Rio Grande
183230

ACZ Project ID: L80818
Date Received: 06/01/2023 13:03
Received By:
Date Printed: 6/2/2023

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]	X		
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?			X
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
4086	9.2	<=6.0	15	Yes

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s) but was thawed by receipt at ACZ.

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

GCC Rio Grande
183230

ACZ Project ID: L80818
Date Received: 06/01/2023 13:03
Received By:
Date Printed: 6/2/2023

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L80818

CHAIN of CUSTODY

Report to:

Name: Amy Veek
Company: GCC Rio Grande Inc
E-mail: aveek@gcc.com
Address: 3372 Lime Road, Pueblo CO 81004
Telephone: 719-647-6861

Copy of Report to:

Name: Landon Beck
Company: Resource Hydrogeologic
E-mail: lbeck@resourcehydrogeologic.com
Telephone: (970) 459-4865

Invoice to:

Name: Amy Veek
Company: GCC Rio Grande Inc
E-mail: aveek@gcc.com
Address: 3372 Lime Road, Pueblo CO 81004
Telephone: 719-647-6861

Copy of Invoice to:

Name:
Company:
E-mail:
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes No ✓

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: David Bemis **Sampler's Site Information** **State** CO **Zip code** 81004 **Time Zone** MDT

***Sampler's Signature:** [signature]

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: GW-COMPLIANCE
PO#: 183230
Reporting state for compliance testing:
Check box if samples include NRC licensed material?

ANALYSES REQUESTED (attach list or use quote number)

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	GW-COmpliance							
MW-12	5/31/2023 09:02	GW	3	✓							
MW-11	5/31/2023 09:41	GW	3	✓							
MW-2B	5/31/2023 10:41	GW	3	✓							
MW-9	5/31/2023 10:48	GW	3	✓							
MW-10	5/31/2023 11:24	GW	3	✓							

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
[signature] Landon Beck	13:12	[signature] Landon Beck	5/31/23 1312
[signature]	1415	[signature]	6/1/23 1303

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

L80818 Chain of Custod

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

August 29, 2023

Report to:
Amy Veek
GCC Rio Grande
3372 Lime Road
Pueblo, CO 81004

cc: Landon Beck

Bill to:
Amy Veek
GCC Rio Grande
3372 Lime Road
Pueblo, CO 81004

Project ID: 183230
ACZ Project ID: L82345

Amy Veek:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on August 09, 2023. This project has been assigned to ACZ's project number, L82345. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L82345. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after August 28, 2024. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

GCC Rio Grande

August 29, 2023

Project ID: 183230
ACZ Project ID: L82345

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 8 groundwater samples from GCC Rio Grande on August 9, 2023. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L82345. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

All analyses were performed within EPA recommended holding times.

Sample Analysis

These samples were analyzed for inorganic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports.

GCC Rio Grande
Project ID: 183230
Sample ID: MW-14

ACZ Sample ID: ***L82345-01***
Date Sampled: *08/08/23 10:16*
Date Received: *08/09/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	08/15/23 22:07	aeh
Arsenic, dissolved	M200.8 ICP-MS	2	0.00436			mg/L	0.0004	0.002	08/17/23 14:05	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	0.012	B		mg/L	0.01	0.05	08/15/23 22:07	aeh
Boron, dissolved	M200.7 ICP	1	1.30			mg/L	0.03	0.1	08/15/23 22:07	aeh
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U	*	mg/L	0.0001	0.0005	08/17/23 14:05	gjl/scp
Calcium, dissolved	M200.7 ICP	1	19.0			mg/L	0.1	0.5	08/15/23 22:07	aeh
Chromium, dissolved	M200.7 ICP	5	<0.1	U		mg/L	0.1	0.25	08/17/23 11:17	wtc
Cobalt, dissolved	M200.8 ICP-MS	2	0.000359	B	*	mg/L	0.0001	0.0005	08/17/23 14:05	gjl/scp
Copper, dissolved	M200.7 ICP	1	0.010	B		mg/L	0.01	0.05	08/15/23 22:07	aeh
Iron, dissolved	M200.7 ICP	1	1.10			mg/L	0.06	0.15	08/15/23 22:07	aeh
Lead, dissolved	M200.8 ICP-MS	5	<0.0005	U		mg/L	0.0005	0.0025	08/24/23 18:12	kja
Lithium, dissolved	M200.7 ICP	1	0.516		*	mg/L	0.008	0.04	08/15/23 22:07	aeh
Magnesium, dissolved	M200.7 ICP	1	5.89			mg/L	0.2	1	08/15/23 22:07	aeh
Manganese, dissolved	M200.7 ICP	1	0.058			mg/L	0.01	0.05	08/15/23 22:07	aeh
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	08/15/23 12:18	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	08/15/23 22:07	aeh
Potassium, dissolved	M200.7 ICP	1	6.22			mg/L	0.5	1	08/15/23 22:07	aeh
Selenium, dissolved	M200.8 ICP-MS	5	<0.0005	U	*	mg/L	0.0005	0.00125	08/20/23 17:43	kja
Sodium, dissolved	M200.7 ICP	5	1750		*	mg/L	1	5	08/18/23 13:23	wtc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	08/15/23 22:07	aeh
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	08/15/23 22:07	aeh

GCC Rio Grande
Project ID: 183230
Sample ID: MW-14

ACZ Sample ID: ***L82345-01***
Date Sampled: *08/08/23 10:16*
Date Received: *08/09/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	1420			mg/L	2	20	08/11/23 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	08/11/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	08/11/23 0:00	emk
Total Alkalinity		1	1420			mg/L	2	20	08/11/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-4.2			%			08/29/23 0:00	calc
Sum of Anions			86			meq/L			08/29/23 0:00	calc
Sum of Cations			79			meq/L			08/29/23 0:00	calc
Chloride	SM4500Cl-E	25	1710		*	mg/L	25	50	08/11/23 15:01	aps
Fluoride	SM4500F-C	1	2.90			mg/L	0.15	0.35	08/25/23 13:11	svm
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		72			mg/L	0.2	5	08/29/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		0.026	B		mg/L	0.02	0.1	08/29/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	0.026	B	*	mg/L	0.02	0.1	08/10/23 0:13	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	08/10/23 0:13	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	4750			mg/L	40	80	08/15/23 12:04	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	50	436		*	mg/L	50	250	08/22/23 14:48	aps
TDS (calculated)	Calculation		4800			mg/L			08/29/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.99						08/29/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-13

ACZ Sample ID: ***L82345-02***
Date Sampled: *08/08/23 11:23*
Date Received: *08/09/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	08/15/23 22:16	aeh
Arsenic, dissolved	M200.8 ICP-MS	2	<0.0004	U	*	mg/L	0.0004	0.002	08/17/23 14:08	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	0.012	B		mg/L	0.01	0.05	08/15/23 22:16	aeh
Boron, dissolved	M200.7 ICP	1	1.06			mg/L	0.03	0.1	08/15/23 22:16	aeh
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U	*	mg/L	0.0001	0.0005	08/17/23 14:08	gjl/scp
Calcium, dissolved	M200.7 ICP	1	5.65			mg/L	0.1	0.5	08/15/23 22:16	aeh
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	08/17/23 11:20	wtc
Cobalt, dissolved	M200.8 ICP-MS	2	<0.0001	U	*	mg/L	0.0001	0.0005	08/17/23 14:08	gjl/scp
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	08/15/23 22:16	aeh
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	08/15/23 22:16	aeh
Lead, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	08/17/23 14:08	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.277		*	mg/L	0.008	0.04	08/15/23 22:16	aeh
Magnesium, dissolved	M200.7 ICP	1	1.82			mg/L	0.2	1	08/15/23 22:16	aeh
Manganese, dissolved	M200.7 ICP	1	0.014	B		mg/L	0.01	0.05	08/15/23 22:16	aeh
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	08/15/23 12:19	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	08/15/23 22:16	aeh
Potassium, dissolved	M200.7 ICP	1	3.77			mg/L	0.5	1	08/15/23 22:16	aeh
Selenium, dissolved	M200.8 ICP-MS	5	<0.0005	U	*	mg/L	0.0005	0.00125	08/20/23 17:48	kja
Sodium, dissolved	M200.7 ICP	1	945		*	mg/L	0.2	1	08/18/23 13:26	wtc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	08/15/23 22:16	aeh
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	08/15/23 22:16	aeh

GCC Rio Grande
Project ID: 183230
Sample ID: MW-13

ACZ Sample ID: ***L82345-02***
Date Sampled: *08/08/23 11:23*
Date Received: *08/09/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	1260			mg/L	2	20	08/11/23 0:00	emk
Carbonate as CaCO3		1	89.0			mg/L	2	20	08/11/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	08/11/23 0:00	emk
Total Alkalinity		1	1350			mg/L	2	20	08/11/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-6.7			%			08/29/23 0:00	calc
Sum of Anions			48			meq/L			08/29/23 0:00	calc
Sum of Cations			42			meq/L			08/29/23 0:00	calc
Chloride	SM4500Cl-E	25	673		*	mg/L	25	50	08/11/23 14:42	aps
Fluoride	SM4500F-C	1	6.57			mg/L	0.15	0.35	08/25/23 13:22	svm
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		22			mg/L	0.2	5	08/29/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		0.030	B		mg/L	0.02	0.1	08/29/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	0.030	B	*	mg/L	0.02	0.1	08/10/23 0:16	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	08/10/23 0:16	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	2590			mg/L	40	80	08/15/23 12:06	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	69.0		*	mg/L	5	25	08/22/23 14:31	aps
TDS (calculated)	Calculation		2530			mg/L			08/29/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.02						08/29/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-6

ACZ Sample ID: ***L82345-03***
Date Sampled: *08/08/23 12:42*
Date Received: *08/09/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.057	B		mg/L	0.05	0.25	08/15/23 22:19	aeh
Arsenic, dissolved	M200.8 ICP-MS	2	0.00076	B	*	mg/L	0.0004	0.002	08/17/23 14:10	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	0.012	B		mg/L	0.01	0.05	08/15/23 22:19	aeh
Boron, dissolved	M200.7 ICP	1	0.265			mg/L	0.03	0.1	08/15/23 22:19	aeh
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U	*	mg/L	0.0001	0.0005	08/17/23 14:10	gjl/scp
Calcium, dissolved	M200.7 ICP	1	402			mg/L	0.1	0.5	08/15/23 22:19	aeh
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	08/18/23 13:29	wtc
Cobalt, dissolved	M200.8 ICP-MS	2	0.0429			mg/L	0.0001	0.0005	08/17/23 14:10	gjl/scp
Copper, dissolved	M200.7 ICP	1	0.011	B		mg/L	0.01	0.05	08/15/23 22:19	aeh
Iron, dissolved	M200.7 ICP	1	1.34			mg/L	0.06	0.15	08/15/23 22:19	aeh
Lead, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	08/17/23 14:10	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.492		*	mg/L	0.008	0.04	08/15/23 22:19	aeh
Magnesium, dissolved	M200.7 ICP	1	422			mg/L	0.2	1	08/15/23 22:19	aeh
Manganese, dissolved	M200.7 ICP	1	0.505			mg/L	0.01	0.05	08/15/23 22:19	aeh
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	08/15/23 12:20	mlh
Nickel, dissolved	M200.7 ICP	1	0.0784			mg/L	0.008	0.04	08/15/23 22:19	aeh
Potassium, dissolved	M200.7 ICP	1	11.5			mg/L	0.5	1	08/15/23 22:19	aeh
Selenium, dissolved	M200.8 ICP-MS	2	0.00527			mg/L	0.0002	0.0005	08/17/23 14:10	gjl/scp
Sodium, dissolved	M200.7 ICP	1	532		*	mg/L	0.2	1	08/18/23 13:29	wtc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	08/15/23 22:19	aeh
Zinc, dissolved	M200.7 ICP	1	0.039	B		mg/L	0.02	0.05	08/15/23 22:19	aeh

GCC Rio Grande
Project ID: 183230
Sample ID: MW-6

ACZ Sample ID: ***L82345-03***
Date Sampled: *08/08/23 12:42*
Date Received: *08/09/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	456			mg/L	2	20	08/11/23 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	08/11/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	08/11/23 0:00	emk
Total Alkalinity		1	456			mg/L	2	20	08/11/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-0.6			%			08/29/23 0:00	calc
Sum of Anions			80			meq/L			08/29/23 0:00	calc
Sum of Cations			79			meq/L			08/29/23 0:00	calc
Chloride	SM4500Cl-E	1	73.5		*	mg/L	1	2	08/11/23 15:01	aps
Fluoride	SM4500F-C	1	0.43			mg/L	0.15	0.35	08/25/23 13:26	svm
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		2740			mg/L	0.2	5	08/29/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		0.287			mg/L	0.02	0.1	08/29/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	0.287		*	mg/L	0.02	0.1	08/10/23 0:18	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	08/10/23 0:18	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	5440			mg/L	40	80	08/15/23 12:09	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	120	3260		*	mg/L	120	600	08/22/23 14:31	aps
TDS (calculated)	Calculation		4980			mg/L			08/29/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.09						08/29/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-7

ACZ Sample ID: ***L82345-04***
Date Sampled: *08/08/23 13:21*
Date Received: *08/09/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.057	B		mg/L	0.05	0.25	08/15/23 22:29	aeh
Arsenic, dissolved	M200.8 ICP-MS	2	<0.0004	U	*	mg/L	0.0004	0.002	08/17/23 14:12	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	0.012	B		mg/L	0.01	0.05	08/15/23 22:29	aeh
Boron, dissolved	M200.7 ICP	1	0.326			mg/L	0.03	0.1	08/15/23 22:29	aeh
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U	*	mg/L	0.0001	0.0005	08/17/23 14:12	gjl/scp
Calcium, dissolved	M200.7 ICP	1	385			mg/L	0.1	0.5	08/15/23 22:29	aeh
Chromium, dissolved	M200.7 ICP	2	<0.04	U		mg/L	0.04	0.1	08/17/23 11:26	wtc
Cobalt, dissolved	M200.8 ICP-MS	2	0.00245			mg/L	0.0001	0.0005	08/17/23 14:12	gjl/scp
Copper, dissolved	M200.7 ICP	1	0.011	B		mg/L	0.01	0.05	08/15/23 22:29	aeh
Iron, dissolved	M200.7 ICP	1	0.169			mg/L	0.06	0.15	08/15/23 22:29	aeh
Lead, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	08/17/23 14:12	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.610		*	mg/L	0.008	0.04	08/15/23 22:29	aeh
Magnesium, dissolved	M200.7 ICP	1	436			mg/L	0.2	1	08/15/23 22:29	aeh
Manganese, dissolved	M200.7 ICP	1	0.077			mg/L	0.01	0.05	08/15/23 22:29	aeh
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	08/15/23 12:23	mlh
Nickel, dissolved	M200.7 ICP	1	0.0170	B		mg/L	0.008	0.04	08/15/23 22:29	aeh
Potassium, dissolved	M200.7 ICP	1	12.0			mg/L	0.5	1	08/15/23 22:29	aeh
Selenium, dissolved	M200.8 ICP-MS	2	0.00795			mg/L	0.0002	0.0005	08/17/23 14:12	gjl/scp
Sodium, dissolved	M200.7 ICP	5	638		*	mg/L	1	5	08/18/23 13:32	wtc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	08/15/23 22:29	aeh
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	08/15/23 22:29	aeh

GCC Rio Grande
Project ID: 183230
Sample ID: MW-7

ACZ Sample ID: ***L82345-04***
Date Sampled: *08/08/23 13:21*
Date Received: *08/09/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	484			mg/L	2	20	08/11/23 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	08/11/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	08/11/23 0:00	emk
Total Alkalinity		1	484			mg/L	2	20	08/11/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-1.8			%			08/29/23 0:00	calc
Sum of Anions			86			meq/L			08/29/23 0:00	calc
Sum of Cations			83			meq/L			08/29/23 0:00	calc
Chloride	SM4500Cl-E	1	90.2		*	mg/L	1	2	08/11/23 14:02	aps
Fluoride	SM4500F-C	1	0.41			mg/L	0.15	0.35	08/25/23 13:29	svm
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		2760			mg/L	0.2	5	08/29/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		0.113			mg/L	0.02	0.1	08/29/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	0.113		*	mg/L	0.02	0.1	08/10/23 0:24	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	08/10/23 0:24	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	5690			mg/L	40	80	08/15/23 12:11	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	120	3500		*	mg/L	120	600	08/22/23 14:31	aps
TDS (calculated)	Calculation		5360			mg/L			08/29/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.06						08/29/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-8

ACZ Sample ID: ***L82345-05***
Date Sampled: *08/08/23 14:19*
Date Received: *08/09/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	08/15/23 22:32	aeh
Arsenic, dissolved	M200.8 ICP-MS	2	0.00099	B	*	mg/L	0.0004	0.002	08/17/23 14:15	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	0.012	B		mg/L	0.01	0.05	08/15/23 22:32	aeh
Boron, dissolved	M200.7 ICP	1	0.897			mg/L	0.03	0.1	08/15/23 22:32	aeh
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U	*	mg/L	0.0001	0.0005	08/17/23 14:15	gjl/scp
Calcium, dissolved	M200.7 ICP	1	63.7			mg/L	0.1	0.5	08/15/23 22:32	aeh
Chromium, dissolved	M200.7 ICP	2	<0.04	U		mg/L	0.04	0.1	08/17/23 11:29	wtc
Cobalt, dissolved	M200.8 ICP-MS	2	0.000240	B	*	mg/L	0.0001	0.0005	08/17/23 14:15	gjl/scp
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	08/15/23 22:32	aeh
Iron, dissolved	M200.7 ICP	1	0.889			mg/L	0.06	0.15	08/15/23 22:32	aeh
Lead, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	08/17/23 14:15	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.441		*	mg/L	0.008	0.04	08/15/23 22:32	aeh
Magnesium, dissolved	M200.7 ICP	1	26.2			mg/L	0.2	1	08/15/23 22:32	aeh
Manganese, dissolved	M200.7 ICP	1	0.224			mg/L	0.01	0.05	08/15/23 22:32	aeh
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	08/15/23 12:24	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	08/15/23 22:32	aeh
Potassium, dissolved	M200.7 ICP	1	6.16			mg/L	0.5	1	08/15/23 22:32	aeh
Selenium, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.0005	08/17/23 14:15	gjl/scp
Sodium, dissolved	M200.7 ICP	2	1140		*	mg/L	0.4	2	08/18/23 13:35	wtc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	08/15/23 22:32	aeh
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	08/15/23 22:32	aeh

GCC Rio Grande
Project ID: 183230
Sample ID: MW-8

ACZ Sample ID: ***L82345-05***
Date Sampled: *08/08/23 14:19*
Date Received: *08/09/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	1250			mg/L	2	20	08/11/23 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	08/11/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	08/11/23 0:00	emk
Total Alkalinity		1	1250			mg/L	2	20	08/11/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-5.1			%			08/29/23 0:00	calc
Sum of Anions			62			meq/L			08/29/23 0:00	calc
Sum of Cations			56			meq/L			08/29/23 0:00	calc
Chloride	SM4500Cl-E	5	275		*	mg/L	5	10	08/11/23 15:02	aps
Fluoride	SM4500F-C	1	0.95			mg/L	0.15	0.35	08/25/23 13:33	svm
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		267			mg/L	0.2	5	08/29/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	08/29/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	08/10/23 0:26	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	08/10/23 0:26	pjb
Residue, Filterable (TDS) @180C	SM2540C	50	3900			mg/L	1000	2000	08/15/23 12:14	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	50	1380		*	mg/L	50	250	08/22/23 14:31	aps
TDS (calculated)	Calculation		3660			mg/L			08/29/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.07						08/29/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-2B

ACZ Sample ID: ***L82345-06***
Date Sampled: *08/08/23 12:00*
Date Received: *08/09/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	08/15/23 22:35	aeh
Arsenic, dissolved	M200.8 ICP-MS	2	0.00096	B	*	mg/L	0.0004	0.002	08/17/23 14:21	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	0.012	B		mg/L	0.01	0.05	08/15/23 22:35	aeh
Boron, dissolved	M200.7 ICP	1	0.901			mg/L	0.03	0.1	08/15/23 22:35	aeh
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U	*	mg/L	0.0001	0.0005	08/17/23 14:21	gjl/scp
Calcium, dissolved	M200.7 ICP	1	66.1			mg/L	0.1	0.5	08/15/23 22:35	aeh
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	08/17/23 11:39	wtc
Cobalt, dissolved	M200.8 ICP-MS	2	0.000272	B	*	mg/L	0.0001	0.0005	08/17/23 14:21	gjl/scp
Copper, dissolved	M200.7 ICP	1	0.010	B		mg/L	0.01	0.05	08/15/23 22:35	aeh
Iron, dissolved	M200.7 ICP	1	0.870			mg/L	0.06	0.15	08/15/23 22:35	aeh
Lead, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	08/17/23 14:21	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.447		*	mg/L	0.008	0.04	08/15/23 22:35	aeh
Magnesium, dissolved	M200.7 ICP	1	26.6			mg/L	0.2	1	08/15/23 22:35	aeh
Manganese, dissolved	M200.7 ICP	1	0.239			mg/L	0.01	0.05	08/15/23 22:35	aeh
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	08/15/23 12:24	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	08/15/23 22:35	aeh
Potassium, dissolved	M200.7 ICP	1	6.33			mg/L	0.5	1	08/15/23 22:35	aeh
Selenium, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.0005	08/17/23 14:21	gjl/scp
Sodium, dissolved	M200.7 ICP	2	1160		*	mg/L	0.4	2	08/18/23 13:45	wtc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	08/15/23 22:35	aeh
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	08/15/23 22:35	aeh

GCC Rio Grande
Project ID: 183230
Sample ID: MW-2B

ACZ Sample ID: ***L82345-06***
Date Sampled: *08/08/23 12:00*
Date Received: *08/09/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	1250			mg/L	2	20	08/11/23 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	08/11/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	08/11/23 0:00	emk
Total Alkalinity		1	1250			mg/L	2	20	08/11/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-4.2			%			08/29/23 0:00	calc
Sum of Anions			62			meq/L			08/29/23 0:00	calc
Sum of Cations			57			meq/L			08/29/23 0:00	calc
Chloride	SM4500Cl-E	5	295		*	mg/L	5	10	08/11/23 15:03	aps
Fluoride	SM4500F-C	1	0.95			mg/L	0.15	0.35	08/25/23 13:36	svm
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		275			mg/L	0.2	5	08/29/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	08/29/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	08/10/23 0:27	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	08/10/23 0:27	pjb
Residue, Filterable (TDS) @180C	SM2540C	50	3800			mg/L	1000	2000	08/15/23 12:17	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	50	1350		*	mg/L	50	250	08/22/23 14:31	aps
TDS (calculated)	Calculation		3670			mg/L			08/29/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.04						08/29/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-11

ACZ Sample ID: ***L82345-07***
Date Sampled: *08/08/23 15:43*
Date Received: *08/09/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	08/15/23 22:38	aeh
Arsenic, dissolved	M200.8 ICP-MS	2	0.00180	B	*	mg/L	0.0004	0.002	08/17/23 14:24	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	0.012	B		mg/L	0.01	0.05	08/15/23 22:38	aeh
Boron, dissolved	M200.7 ICP	1	0.474			mg/L	0.03	0.1	08/15/23 22:38	aeh
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U	*	mg/L	0.0001	0.0005	08/17/23 14:24	gjl/scp
Calcium, dissolved	M200.7 ICP	1	67.5			mg/L	0.1	0.5	08/15/23 22:38	aeh
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	08/17/23 11:42	wtc
Cobalt, dissolved	M200.8 ICP-MS	2	0.000200	B	*	mg/L	0.0001	0.0005	08/17/23 14:24	gjl/scp
Copper, dissolved	M200.7 ICP	1	0.010	B		mg/L	0.01	0.05	08/15/23 22:38	aeh
Iron, dissolved	M200.7 ICP	1	0.062	B		mg/L	0.06	0.15	08/15/23 22:38	aeh
Lead, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	08/17/23 14:24	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.193		*	mg/L	0.008	0.04	08/15/23 22:38	aeh
Magnesium, dissolved	M200.7 ICP	1	36.4			mg/L	0.2	1	08/15/23 22:38	aeh
Manganese, dissolved	M200.7 ICP	1	0.113			mg/L	0.01	0.05	08/15/23 22:38	aeh
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	08/15/23 12:25	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	08/15/23 22:38	aeh
Potassium, dissolved	M200.7 ICP	1	4.07			mg/L	0.5	1	08/15/23 22:38	aeh
Selenium, dissolved	M200.8 ICP-MS	2	0.00072			mg/L	0.0002	0.0005	08/17/23 14:24	gjl/scp
Sodium, dissolved	M200.7 ICP	1	494		*	mg/L	0.2	1	08/18/23 13:48	wtc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	08/15/23 22:38	aeh
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	08/15/23 22:38	aeh

GCC Rio Grande
Project ID: 183230
Sample ID: MW-11

ACZ Sample ID: ***L82345-07***
Date Sampled: *08/08/23 15:43*
Date Received: *08/09/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	794			mg/L	2	20	08/11/23 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	08/11/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	08/11/23 0:00	emk
Total Alkalinity		1	794			mg/L	2	20	08/11/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-3.4			%			08/29/23 0:00	calc
Sum of Anions			30			meq/L			08/29/23 0:00	calc
Sum of Cations			28			meq/L			08/29/23 0:00	calc
Chloride	SM4500Cl-E	5	117		*	mg/L	5	10	08/11/23 14:29	aps
Fluoride	SM4500F-C	1	0.79			mg/L	0.15	0.35	08/25/23 13:39	svm
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		318			mg/L	0.2	5	08/29/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.2	U		mg/L	0.2	1	08/29/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	10	<0.2	U	*	mg/L	0.2	1	08/10/23 0:52	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	08/10/23 0:28	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	1740			mg/L	20	40	08/15/23 12:19	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	50	525		*	mg/L	50	250	08/22/23 14:33	aps
TDS (calculated)	Calculation		1730			mg/L			08/29/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.01						08/29/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-12

ACZ Sample ID: ***L82345-08***
Date Sampled: *08/08/23 16:37*
Date Received: *08/09/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	08/15/23 22:41	aeh
Arsenic, dissolved	M200.8 ICP-MS	2	0.00241			mg/L	0.0004	0.002	08/17/23 14:26	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	0.012	B		mg/L	0.01	0.05	08/15/23 22:41	aeh
Boron, dissolved	M200.7 ICP	1	0.929			mg/L	0.03	0.1	08/15/23 22:41	aeh
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U	*	mg/L	0.0001	0.0005	08/17/23 14:26	gjl/scp
Calcium, dissolved	M200.7 ICP	1	23.5			mg/L	0.1	0.5	08/15/23 22:41	aeh
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	08/17/23 11:51	wtc
Cobalt, dissolved	M200.8 ICP-MS	2	0.000615			mg/L	0.0001	0.0005	08/17/23 14:26	gjl/scp
Copper, dissolved	M200.7 ICP	1	0.013	B		mg/L	0.01	0.05	08/15/23 22:41	aeh
Iron, dissolved	M200.7 ICP	1	0.186			mg/L	0.06	0.15	08/15/23 22:41	aeh
Lead, dissolved	M200.8 ICP-MS	2	0.00021	B	*	mg/L	0.0002	0.001	08/17/23 14:26	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.268		*	mg/L	0.008	0.04	08/15/23 22:41	aeh
Magnesium, dissolved	M200.7 ICP	1	9.05			mg/L	0.2	1	08/15/23 22:41	aeh
Manganese, dissolved	M200.7 ICP	1	0.107			mg/L	0.01	0.05	08/15/23 22:41	aeh
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	08/15/23 12:26	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	08/15/23 22:41	aeh
Potassium, dissolved	M200.7 ICP	1	4.79			mg/L	0.5	1	08/15/23 22:41	aeh
Selenium, dissolved	M200.8 ICP-MS	5	<0.0005	U	*	mg/L	0.0005	0.00125	08/20/23 17:50	kja
Sodium, dissolved	M200.7 ICP	1	879		*	mg/L	0.2	1	08/18/23 13:57	wtc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	08/15/23 22:41	aeh
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	08/15/23 22:41	aeh

GCC Rio Grande
Project ID: 183230
Sample ID: MW-12

ACZ Sample ID: ***L82345-08***
Date Sampled: *08/08/23 16:37*
Date Received: *08/09/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	615			mg/L	2	20	08/11/23 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	08/11/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	08/11/23 0:00	emk
Total Alkalinity		1	615			mg/L	2	20	08/11/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-4.7			%			08/29/23 0:00	calc
Sum of Anions			45.0			meq/L			08/29/23 0:00	calc
Sum of Cations			41			meq/L			08/29/23 0:00	calc
Chloride	SM4500Cl-E	25	1000		*	mg/L	25	50	08/11/23 14:42	aps
Fluoride	SM4500F-C	1	1.77			mg/L	0.15	0.35	08/25/23 13:43	svm
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		96			mg/L	0.2	5	08/29/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	08/29/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	08/10/23 0:29	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	08/10/23 0:29	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	2580			mg/L	20	40	08/15/23 12:22	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	25	220		*	mg/L	25	125	08/22/23 14:33	aps
TDS (calculated)	Calculation		2510			mg/L			08/29/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.03						08/29/23 0:00	calc

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4) EPA SW-846. Test Methods for Evaluating Solid Waste.
(5) Standard Methods for the Examination of Water and Wastewater.

Comments

(1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

GCC

ACZ Project ID: ***L82345***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572052													
WG572052PBW1	PBW	08/10/23 19:02				2.6	mg/L		-20	20			
WG572052LCSW2	LCSW	08/10/23 19:08	WC230729-1	820.0001		826.7	mg/L	101	90	110			
WG572052LCSW4	LCSW	08/10/23 20:51	WC230729-1	820.0001		819.3	mg/L	100	90	110			
WG572052PBW2	PBW	08/10/23 20:57				2.8	mg/L		-20	20			
WG572052LCSW6	LCSW	08/10/23 22:46	WC230729-1	820.0001		819.8	mg/L	100	90	110			
WG572052PBW3	PBW	08/10/23 22:52				3	mg/L		-20	20			
WG572052LCSW8	LCSW	08/11/23 0:24	WC230729-1	820.0001		826	mg/L	101	90	110			
WG572052PBW4	PBW	08/11/23 0:29				2.9	mg/L		-20	20			
L82345-02DUP	DUP	08/11/23 2:22			1350	1365.1	mg/L				1	20	
WG572052LCSW10	LCSW	08/11/23 2:31	WC230729-1	820.0001		848.7	mg/L	103	90	110			
WG572052PBW5	PBW	08/11/23 2:36				U	mg/L		-20	20			
L82347-01DUP	DUP	08/11/23 3:33			104	103.5	mg/L				0	20	
WG572052LCSW12	LCSW	08/11/23 4:32	WC230729-1	820.0001		833.3	mg/L	102	90	110			
WG572052PBW6	PBW	08/11/23 4:37				2.9	mg/L		-20	20			
WG572052LCSW14	LCSW	08/11/23 5:28	WC230729-1	820.0001		827.6	mg/L	101	90	110			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572306													
WG572306ICV	ICV	08/15/23 20:56	II230729-1	2		2.098	mg/L	105	95	105			
WG572306ICB	ICB	08/15/23 21:02				U	mg/L		-0.15	0.15			
WG572306PQV	PQV	08/15/23 21:05	II230720-2	.25025		.293	mg/L	117	70	130			
WG572306SIC	SIC	08/15/23 21:08	II230726-1	200.45025		207.8	mg/L	104	1	200			
WG572306LFB	LFB	08/15/23 21:15	II230804-2	1.001		1.105	mg/L	110	85	115			
WG572306CCV1	CCV	08/15/23 21:45	II230725-1	1		1.028	mg/L	103	90	110			
WG572306CCB1	CCB	08/15/23 21:48				U	mg/L		-0.15	0.15			
L82345-01AS	AS	08/15/23 22:10	II230804-2	1.001	U	1.094	mg/L	109	85	115			
L82345-01ASD	ASD	08/15/23 22:13	II230804-2	1.001	U	1.086	mg/L	108	85	115	1	20	
WG572306CCV2	CCV	08/15/23 22:23	II230725-1	1		1.055	mg/L	106	90	110			
WG572306CCB2	CCB	08/15/23 22:25				U	mg/L		-0.15	0.15			
WG572306CCV3	CCV	08/15/23 22:45	II230725-1	1		1.069	mg/L	107	90	110			
WG572306CCB3	CCB	08/15/23 22:48				U	mg/L		-0.15	0.15			

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572391													
WG572391ICV	ICV	08/17/23 13:49	MS230712-3	.05		.04892	mg/L	98	90	110			
WG572391ICB	ICB	08/17/23 13:51				U	mg/L		-0.00044	0.00044			
WG572391LFB	LFB	08/17/23 13:54	MS230810-2	.0501		.05142	mg/L	103	85	115			
L82339-03AS	AS	08/17/23 13:58	MS230810-2	.0501	.00292	.05314	mg/L	100	70	130			
L82339-03ASD	ASD	08/17/23 14:01	MS230810-2	.0501	.00292	.05238	mg/L	99	70	130	1	20	
WG572391CCV1	CCV	08/17/23 14:17	MS230809-2	.1002		.09641	mg/L	96	90	110			
WG572391CCB1	CCB	08/17/23 14:19				U	mg/L		-0.0006	0.0006			
WG572391CCV2	CCV	08/17/23 14:45	MS230809-2	.1002		.10236	mg/L	102	90	110			
WG572391CCB2	CCB	08/17/23 14:47				U	mg/L		-0.0006	0.0006			
WG572391CCV3	CCV	08/17/23 15:01	MS230809-2	.1002		.0963	mg/L	96	90	110			
WG572391CCB3	CCB	08/17/23 15:03				U	mg/L		-0.0006	0.0006			

GCC

ACZ Project ID: ***L82345***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Beryllium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572306													
WG572306ICV	ICV	08/15/23 20:56	II230729-1	2		1.98	mg/L	99	95	105			
WG572306ICB	ICB	08/15/23 21:02				.013	mg/L		-0.03	0.03			
WG572306PQV	PQV	08/15/23 21:05	II230720-2	.05005		.061	mg/L	122	70	130			
WG572306SIC	SIC	08/15/23 21:08	II230726-1	.1001		.108	mg/L	108	80	120			
WG572306LFB	LFB	08/15/23 21:15	II230804-2	.5005		.517	mg/L	103	85	115			
WG572306CCV1	CCV	08/15/23 21:45	II230725-1	1		.975	mg/L	98	90	110			
WG572306CCB1	CCB	08/15/23 21:48				.013	mg/L		-0.03	0.03			
L82345-01AS	AS	08/15/23 22:10	II230804-2	.5005	.012	.486	mg/L	95	85	115			
L82345-01ASD	ASD	08/15/23 22:13	II230804-2	.5005	.012	.491	mg/L	96	85	115	1	20	
WG572306CCV2	CCV	08/15/23 22:23	II230725-1	1		.992	mg/L	99	90	110			
WG572306CCB2	CCB	08/15/23 22:25				.013	mg/L		-0.03	0.03			
WG572306CCV3	CCV	08/15/23 22:45	II230725-1	1		1.011	mg/L	101	90	110			
WG572306CCB3	CCB	08/15/23 22:48				.013	mg/L		-0.03	0.03			

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572306													
WG572306ICV	ICV	08/15/23 20:56	II230729-1	2		2.081	mg/L	104	95	105			
WG572306ICB	ICB	08/15/23 21:02				U	mg/L		-0.09	0.09			
WG572306PQV	PQV	08/15/23 21:05	II230720-2	.1001		.12	mg/L	120	70	130			
WG572306SIC	SIC	08/15/23 21:08	II230726-1	.1001		.12	mg/L	120	80	120			
WG572306LFB	LFB	08/15/23 21:15	II230804-2	.5005		.533	mg/L	106	85	115			
WG572306CCV1	CCV	08/15/23 21:45	II230725-1	1		1.029	mg/L	103	90	110			
WG572306CCB1	CCB	08/15/23 21:48				U	mg/L		-0.09	0.09			
L82345-01AS	AS	08/15/23 22:10	II230804-2	.5005	1.3	1.744	mg/L	89	85	115			
L82345-01ASD	ASD	08/15/23 22:13	II230804-2	.5005	1.3	1.728	mg/L	86	85	115	1	20	
WG572306CCV2	CCV	08/15/23 22:23	II230725-1	1		1.051	mg/L	105	90	110			
WG572306CCB2	CCB	08/15/23 22:25				U	mg/L		-0.09	0.09			
WG572306CCV3	CCV	08/15/23 22:45	II230725-1	1		1.074	mg/L	107	90	110			
WG572306CCB3	CCB	08/15/23 22:48				U	mg/L		-0.09	0.09			

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572391													
WG572391ICV	ICV	08/17/23 13:49	MS230712-3	.05		.051372	mg/L	103	90	110			
WG572391ICB	ICB	08/17/23 13:51				U	mg/L		-0.00011	0.00011			
WG572391LFB	LFB	08/17/23 13:54	MS230810-2	.05005		.051486	mg/L	103	85	115			
L82339-03AS	AS	08/17/23 13:58	MS230810-2	.05005	U	.051063	mg/L	102	70	130			
L82339-03ASD	ASD	08/17/23 14:01	MS230810-2	.05005	U	.050654	mg/L	101	70	130	1	20	
WG572391CCV1	CCV	08/17/23 14:17	MS230809-2	.1001		.10409	mg/L	104	90	110			
WG572391CCB1	CCB	08/17/23 14:19				U	mg/L		-0.00015	0.00015			
WG572391CCV2	CCV	08/17/23 14:45	MS230809-2	.1001		.104022	mg/L	104	90	110			
WG572391CCB2	CCB	08/17/23 14:47				U	mg/L		-0.00015	0.00015			
WG572391CCV3	CCV	08/17/23 15:01	MS230809-2	.1001		.101109	mg/L	101	90	110			
WG572391CCB3	CCB	08/17/23 15:03				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: ***L82345***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572306													
WG572306ICV	ICV	08/15/23 20:56	II230729-1	100		98.78	mg/L	99	95	105			
WG572306ICB	ICB	08/15/23 21:02				.12	mg/L		-0.3	0.3			
WG572306PQV	PQV	08/15/23 21:05	II230720-2	.4999		.59	mg/L	118	70	130			
WG572306SIC	SIC	08/15/23 21:08	II230726-1	200.4599		195.8	mg/L	98	1	200			
WG572306LFB	LFB	08/15/23 21:15	II230804-2	67.98753		70.24	mg/L	103	85	115			
WG572306CCV1	CCV	08/15/23 21:45	II230725-1	50		48.42	mg/L	97	90	110			
WG572306CCB1	CCB	08/15/23 21:48				U	mg/L		-0.3	0.3			
L82345-01AS	AS	08/15/23 22:10	II230804-2	67.98753	19	86.33	mg/L	99	85	115			
L82345-01ASD	ASD	08/15/23 22:13	II230804-2	67.98753	19	86.04	mg/L	99	85	115	0	20	
WG572306CCV2	CCV	08/15/23 22:23	II230725-1	50		49.47	mg/L	99	90	110			
WG572306CCB2	CCB	08/15/23 22:25				U	mg/L		-0.3	0.3			
WG572306CCV3	CCV	08/15/23 22:45	II230725-1	50		50.46	mg/L	101	90	110			
WG572306CCB3	CCB	08/15/23 22:48				.11	mg/L		-0.3	0.3			

Chloride SM4500Cl-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572107													
WG572107ICV	ICV	08/11/23 13:47	WI230501-8	55		50.24	mg/L	91	90	110			
WG572107ICB	ICB	08/11/23 13:47				U	mg/L						
WG572107CCV1	CCV	08/11/23 13:53	WI221021-5	49.95		48.88	mg/L	98	90	110			
WG572107CCB1	CCB	08/11/23 13:53				U	mg/L						
L82337-01AS	AS	08/11/23 13:58	WI230629-2	30.03	16.7	32.62	mg/L	53	90	110			M2
WG572107CCV2	CCV	08/11/23 13:59	WI221021-5	49.95		47.31	mg/L	95	90	110			
WG572107CCB2	CCB	08/11/23 14:00				U	mg/L						
L82337-02DUP	DUP	08/11/23 14:00			80.1	78.63	mg/L				2	20	
WG572107CCV3	CCV	08/11/23 14:05	WI221021-5	49.95		50.08	mg/L	100	90	110			
WG572107CCB3	CCB	08/11/23 14:06				U	mg/L						
WG572107CCV4	CCV	08/11/23 14:10	WI221021-5	49.95		48.16	mg/L	96	90	110			
WG572107CCB4	CCB	08/11/23 14:10				U	mg/L						
WG572107CCV5	CCV	08/11/23 14:24	WI221021-5	49.95		47.77	mg/L	96	90	110			
WG572107CCB5	CCB	08/11/23 14:24				1.19	mg/L						BB
WG572107CCV6	CCV	08/11/23 14:29	WI221021-5	49.95		47.48	mg/L	95	90	110			
WG572107CCB6	CCB	08/11/23 14:30				U	mg/L						
WG572107CCV8	CCV	08/11/23 14:41	WI221021-5	49.95		48.11	mg/L	96	90	110			
WG572107CCB8	CCB	08/11/23 14:41				1.17	mg/L						BB
WG572107CCV9	CCV	08/11/23 14:43	WI221021-5	49.95		50.02	mg/L	100	90	110			
WG572107CCB9	CCB	08/11/23 14:43				1.43	mg/L						BB
WG572107CCV10	CCV	08/11/23 14:59	WI221021-5	49.95		47.6	mg/L	95	90	110			
WG572107CCB10	CCB	08/11/23 14:59				1.01	mg/L						BB
WG572107LFB1	LFB	08/11/23 15:00	WI230629-2	30.03		27.53	mg/L	92	90	110			
WG572107LFB2	LFB	08/11/23 15:02	WI230629-2	30.03		28.4	mg/L	95	90	110			
L82345-05AS	AS	08/11/23 15:03	5XCL	30	275	309.55	mg/L	115	90	110			M3
L82345-06DUP	DUP	08/11/23 15:04			295	279.72	mg/L				5	20	
WG572107CCV11	CCV	08/11/23 15:05	WI221021-5	49.95		47.12	mg/L	94	90	110			
WG572107CCB11	CCB	08/11/23 15:05				U	mg/L						

GCC

ACZ Project ID: ***L82345***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Chromium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572360													
WG572360ICV	ICV	08/17/23 10:06	II230729-1	2		1.998	mg/L	100	95	105			
WG572360ICB	ICB	08/17/23 10:12				U	mg/L		-0.06	0.06			
WG572360PQV	PQV	08/17/23 10:15	II230720-2	.05005		.057	mg/L	114	70	130			
WG572360SIC	SIC	08/17/23 10:18	II230726-1	.1001		.106	mg/L	106	80	120			
WG572360LFB	LFB	08/17/23 10:25	II230804-2	.5005		.512	mg/L	102	85	115			
WG572360CCV1	CCV	08/17/23 10:55	II230815-1	1		.997	mg/L	100	90	110			
WG572360CCB1	CCB	08/17/23 10:58				U	mg/L		-0.06	0.06			
WG572360CCV2	CCV	08/17/23 11:33	II230815-1	1		.997	mg/L	100	90	110			
WG572360CCB2	CCB	08/17/23 11:36				U	mg/L		-0.06	0.06			
L82345-07AS	AS	08/17/23 11:45	II230804-2	.5005	U	.498	mg/L	100	85	115			
L82345-07ASD	ASD	08/17/23 11:48	II230804-2	.5005	U	.495	mg/L	99	85	115	1	20	
WG572360CCV3	CCV	08/17/23 11:54	II230815-1	1		1.004	mg/L	100	90	110			
WG572360CCB3	CCB	08/17/23 11:57				U	mg/L		-0.06	0.06			
WG572536													
WG572536ICV	ICV	08/18/23 12:13	II230729-1	2		1.935	mg/L	97	95	105			
WG572536ICB	ICB	08/18/23 12:19				U	mg/L		-0.06	0.06			
WG572536PQV	PQV	08/18/23 12:22	II230720-2	.05005		.048	mg/L	96	70	130			
WG572536SIC	SIC	08/18/23 12:25	II230726-1	.1001		.096	mg/L	96	80	120			
WG572536LFB	LFB	08/18/23 12:31	II230804-2	.5005		.488	mg/L	98	85	115			
WG572536CCV1	CCV	08/18/23 13:01	II230815-1	1		.986	mg/L	99	90	110			
WG572536CCB1	CCB	08/18/23 13:04				U	mg/L		-0.06	0.06			
WG572536CCV2	CCV	08/18/23 13:39	II230815-1	1		.995	mg/L	100	90	110			
WG572536CCB2	CCB	08/18/23 13:41				U	mg/L		-0.06	0.06			
L82345-07AS	AS	08/18/23 13:51	II230804-2	.5005	U	.492	mg/L	98	85	115			
L82345-07ASD	ASD	08/18/23 13:54	II230804-2	.5005	U	.479	mg/L	96	85	115	3	20	
WG572536CCV3	CCV	08/18/23 14:00	II230815-1	1		1.003	mg/L	100	90	110			
WG572536CCB3	CCB	08/18/23 14:03				U	mg/L		-0.06	0.06			

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572391													
WG572391ICV	ICV	08/17/23 13:49	MS230712-3	.05		.0507	mg/L	101	90	110			
WG572391ICB	ICB	08/17/23 13:51				U	mg/L		-0.00011	0.00011			
WG572391LFB	LFB	08/17/23 13:54	MS230810-2	.05005		.051021	mg/L	102	85	115			
L82339-03AS	AS	08/17/23 13:58	MS230810-2	.05005	U	.049388	mg/L	99	70	130			
L82339-03ASD	ASD	08/17/23 14:01	MS230810-2	.05005	U	.049417	mg/L	99	70	130	0	20	
WG572391CCV1	CCV	08/17/23 14:17	MS230809-2	.1001		.106824	mg/L	107	90	110			
WG572391CCB1	CCB	08/17/23 14:19				U	mg/L		-0.00015	0.00015			
WG572391CCV2	CCV	08/17/23 14:45	MS230809-2	.1001		.102921	mg/L	103	90	110			
WG572391CCB2	CCB	08/17/23 14:47				U	mg/L		-0.00015	0.00015			
WG572391CCV3	CCV	08/17/23 15:01	MS230809-2	.1001		.09962	mg/L	100	90	110			
WG572391CCB3	CCB	08/17/23 15:03				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: ***L82345***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Copper, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572306													
WG572306ICV	ICV	08/15/23 20:56	II230729-1	2		2.011	mg/L	101	95	105			
WG572306ICB	ICB	08/15/23 21:02				U	mg/L		-0.03	0.03			
WG572306PQV	PQV	08/15/23 21:05	II230720-2	.05005		.06	mg/L	120	70	130			
WG572306SIC	SIC	08/15/23 21:08	II230726-1	.1001		.106	mg/L	106	80	120			
WG572306LFB	LFB	08/15/23 21:15	II230804-2	.5005		.511	mg/L	102	85	115			
WG572306CCV1	CCV	08/15/23 21:45	II230725-1	1		.984	mg/L	98	90	110			
WG572306CCB1	CCB	08/15/23 21:48				U	mg/L		-0.03	0.03			
L82345-01AS	AS	08/15/23 22:10	II230804-2	.5005	.01	.497	mg/L	97	85	115			
L82345-01ASD	ASD	08/15/23 22:13	II230804-2	.5005	.01	.505	mg/L	99	85	115	2	20	
WG572306CCV2	CCV	08/15/23 22:23	II230725-1	1		1.004	mg/L	100	90	110			
WG572306CCB2	CCB	08/15/23 22:25				.01	mg/L		-0.03	0.03			
WG572306CCV3	CCV	08/15/23 22:45	II230725-1	1		1.022	mg/L	102	90	110			
WG572306CCB3	CCB	08/15/23 22:48				U	mg/L		-0.03	0.03			

Fluoride SM4500F-C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572974													
WG572974ICV	ICV	08/25/23 11:27	WC230811-2	2.002		2.09	mg/L	104	90	110			
WG572974ICB	ICB	08/25/23 11:32				U	mg/L		-0.3	0.3			
WG572974PQV	PQV	08/25/23 11:35	WC230814-1	.35035		.31	mg/L	88	70	130			
WG572974LFB1	LFB	08/25/23 12:08	WC230825-1	5.005		5.19	mg/L	104	90	110			
WG572974CCV1	CCV	08/25/23 12:59	WC230811-2	2.002		2.03	mg/L	101	90	110			
WG572974CCB1	CCB	08/25/23 13:07				U	mg/L		-0.3	0.3			
L82345-01AS	AS	08/25/23 13:14	WC230825-1	5.005	2.9	8.12	mg/L	104	90	110			
L82345-01ASD	ASD	08/25/23 13:18	WC230825-1	5.005	2.9	8.09	mg/L	104	90	110	0	20	
WG572974CCV2	CCV	08/25/23 13:46	WC230811-2	2.002		2.12	mg/L	106	90	110			
WG572974CCB2	CCB	08/25/23 13:54				U	mg/L		-0.3	0.3			
L82347-04AS	AS	08/25/23 14:08	WC230825-1	5.005	1.28	6.3	mg/L	100	90	110			
L82347-04ASD	ASD	08/25/23 14:12	WC230825-1	5.005	1.28	6.24	mg/L	99	90	110	1	20	
WG572974LFB2	LFB	08/25/23 14:15	WC230825-1	5.005		5.36	mg/L	107	90	110			
WG572974CCV3	CCV	08/25/23 14:32	WC230811-2	2.002		2.1	mg/L	105	90	110			
WG572974CCB3	CCB	08/25/23 14:40				U	mg/L		-0.3	0.3			
WG572974CCV4	CCV	08/25/23 15:35	WC230811-2	2.002		2.1	mg/L	105	90	110			
WG572974CCB4	CCB	08/25/23 15:40				U	mg/L		-0.3	0.3			
WG572974CCV5	CCV	08/25/23 16:42	WC230811-2	2.002		2.427	mg/L	121	90	110			VC
WG572974CCB5	CCB	08/25/23 16:45				U	mg/L		-0.3	0.3			

GCC

ACZ Project ID: ***L82345***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Iron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572306													
WG572306ICV	ICV	08/15/23 20:56	II230729-1	2		2.004	mg/L	100	95	105			
WG572306ICB	ICB	08/15/23 21:02				U	mg/L		-0.18	0.18			
WG572306PQV	PQV	08/15/23 21:05	II230720-2	.1506		.17	mg/L	113	70	130			
WG572306SIC	SIC	08/15/23 21:08	II230726-1	200.9506		196.7	mg/L	98	1	200			
WG572306LFB	LFB	08/15/23 21:15	II230804-2	1.004		1.057	mg/L	105	85	115			
WG572306CCV1	CCV	08/15/23 21:45	II230725-1	1		1.002	mg/L	100	90	110			
WG572306CCB1	CCB	08/15/23 21:48				U	mg/L		-0.18	0.18			
L82345-01AS	AS	08/15/23 22:10	II230804-2	1.004	1.1	2.026	mg/L	92	85	115			
L82345-01ASD	ASD	08/15/23 22:13	II230804-2	1.004	1.1	2.046	mg/L	94	85	115	1	20	
WG572306CCV2	CCV	08/15/23 22:23	II230725-1	1		1.014	mg/L	101	90	110			
WG572306CCB2	CCB	08/15/23 22:25				U	mg/L		-0.18	0.18			
WG572306CCV3	CCV	08/15/23 22:45	II230725-1	1		1.043	mg/L	104	90	110			
WG572306CCB3	CCB	08/15/23 22:48				U	mg/L		-0.18	0.18			

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572391													
WG572391ICV	ICV	08/17/23 13:49	MS230712-3	.05		.05173	mg/L	103	90	110			
WG572391ICB	ICB	08/17/23 13:51				U	mg/L		-0.00022	0.00022			
WG572391LFB	LFB	08/17/23 13:54	MS230810-2	.05005		.05139	mg/L	103	85	115			
L82339-03AS	AS	08/17/23 13:58	MS230810-2	.05005	.00014	.0523	mg/L	104	70	130			
L82339-03ASD	ASD	08/17/23 14:01	MS230810-2	.05005	.00014	.05226	mg/L	104	70	130	0	20	
WG572391CCV1	CCV	08/17/23 14:17	MS230809-2	.25025		.25984	mg/L	104	90	110			
WG572391CCB1	CCB	08/17/23 14:19				U	mg/L		-0.0003	0.0003			
WG572391CCV2	CCV	08/17/23 14:45	MS230809-2	.25025		.25278	mg/L	101	90	110			
WG572391CCB2	CCB	08/17/23 14:47				U	mg/L		-0.0003	0.0003			
WG572391CCV3	CCV	08/17/23 15:01	MS230809-2	.25025		.25059	mg/L	100	90	110			
WG572391CCB3	CCB	08/17/23 15:03				U	mg/L		-0.0003	0.0003			
WG572926													
WG572926ICV	ICV	08/24/23 17:41	MS230712-3	.05		.0518	mg/L	104	90	110			
WG572926ICB	ICB	08/24/23 17:43				U	mg/L		-0.00022	0.00022			
WG572926LFB	LFB	08/24/23 17:45	MS230810-2	.05005		.05503	mg/L	110	85	115			
WG572926CCV1	CCV	08/24/23 17:59	MS230809-2	.25025		.24921	mg/L	100	90	110			
WG572926CCB1	CCB	08/24/23 18:01				U	mg/L		-0.0003	0.0003			
WG572926CCV2	CCV	08/24/23 18:22	MS230809-2	.25025		.25001	mg/L	100	90	110			
WG572926CCB2	CCB	08/24/23 18:23				U	mg/L		-0.0003	0.0003			
L82489-04AS	AS	08/24/23 18:31	MS230810-2	.05005	U	.05302	mg/L	106	70	130			
L82489-04ASD	ASD	08/24/23 18:33	MS230810-2	.05005	U	.05223	mg/L	104	70	130	2	20	
WG572926CCV3	CCV	08/24/23 18:38	MS230809-2	.25025		.25058	mg/L	100	90	110			
WG572926CCB3	CCB	08/24/23 18:40				U	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: ***L82345***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572306													
WG572306ICV	ICV	08/15/23 20:56	II230729-1	2		2.0395	mg/L	102	95	105			
WG572306ICB	ICB	08/15/23 21:02				.0133	mg/L		-0.024	0.024			
WG572306PQV	PQV	08/15/23 21:05	II230720-2	.04012		.0513	mg/L	128	70	130			
WG572306SIC	SIC	08/15/23 21:08	II230726-1	.1003		.1195	mg/L	119	80	120			
WG572306LFB	LFB	08/15/23 21:15	II230804-2	1.003		1.037	mg/L	103	85	115			
WG572306CCV1	CCV	08/15/23 21:45	II230725-1	1		.9732	mg/L	97	90	110			
WG572306CCB1	CCB	08/15/23 21:48				.0126	mg/L		-0.024	0.024			
L82345-01AS	AS	08/15/23 22:10	II230804-2	1.003	.516	1.785	mg/L	127	85	115			M1
L82345-01ASD	ASD	08/15/23 22:13	II230804-2	1.003	.516	1.779	mg/L	126	85	115	0	20	M1
WG572306CCV2	CCV	08/15/23 22:23	II230725-1	1		1.004	mg/L	100	90	110			
WG572306CCB2	CCB	08/15/23 22:25				.012	mg/L		-0.024	0.024			
WG572306CCV3	CCV	08/15/23 22:45	II230725-1	1		1.024	mg/L	102	90	110			
WG572306CCB3	CCB	08/15/23 22:48				.0123	mg/L		-0.024	0.024			

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572306													
WG572306ICV	ICV	08/15/23 20:56	II230729-1	100		98.26	mg/L	98	95	105			
WG572306ICB	ICB	08/15/23 21:02				U	mg/L		-0.6	0.6			
WG572306PQV	PQV	08/15/23 21:05	II230720-2	1.0023		1.13	mg/L	113	70	130			
WG572306SIC	SIC	08/15/23 21:08	II230726-1	202.2023		200.4	mg/L	99	1	200			
WG572306LFB	LFB	08/15/23 21:15	II230804-2	49.99752		50.88	mg/L	102	85	115			
WG572306CCV1	CCV	08/15/23 21:45	II230725-1	50		47.94	mg/L	96	90	110			
WG572306CCB1	CCB	08/15/23 21:48				U	mg/L		-0.6	0.6			
L82345-01AS	AS	08/15/23 22:10	II230804-2	49.99752	5.89	54.63	mg/L	97	85	115			
L82345-01ASD	ASD	08/15/23 22:13	II230804-2	49.99752	5.89	54.34	mg/L	97	85	115	1	20	
WG572306CCV2	CCV	08/15/23 22:23	II230725-1	50		48.82	mg/L	98	90	110			
WG572306CCB2	CCB	08/15/23 22:25				U	mg/L		-0.6	0.6			
WG572306CCV3	CCV	08/15/23 22:45	II230725-1	50		49.66	mg/L	99	90	110			
WG572306CCB3	CCB	08/15/23 22:48				U	mg/L		-0.6	0.6			

Manganese, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572306													
WG572306ICV	ICV	08/15/23 20:56	II230729-1	2		1.931	mg/L	97	95	105			
WG572306ICB	ICB	08/15/23 21:02				.012	mg/L		-0.03	0.03			
WG572306PQV	PQV	08/15/23 21:05	II230720-2	.04995		.06	mg/L	120	70	130			
WG572306SIC	SIC	08/15/23 21:08	II230726-1	49.99995		46.54	mg/L	93	1	200			
WG572306LFB	LFB	08/15/23 21:15	II230804-2	.4995		.513	mg/L	103	85	115			
WG572306CCV1	CCV	08/15/23 21:45	II230725-1	1		.957	mg/L	96	90	110			
WG572306CCB1	CCB	08/15/23 21:48				.011	mg/L		-0.03	0.03			
L82345-01AS	AS	08/15/23 22:10	II230804-2	.4995	.058	.533	mg/L	95	85	115			
L82345-01ASD	ASD	08/15/23 22:13	II230804-2	.4995	.058	.538	mg/L	96	85	115	1	20	
WG572306CCV2	CCV	08/15/23 22:23	II230725-1	1		.974	mg/L	97	90	110			
WG572306CCB2	CCB	08/15/23 22:25				.011	mg/L		-0.03	0.03			
WG572306CCV3	CCV	08/15/23 22:45	II230725-1	1		.994	mg/L	99	90	110			
WG572306CCB3	CCB	08/15/23 22:48				.011	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L82345***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury, dissolved M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572177													
WG572177ICV	ICV	08/15/23 10:40	HG230814-3	.005		.00512	mg/L	102	95	105			
WG572177ICB	ICB	08/15/23 10:41				U	mg/L		-0.0002	0.0002			
WG572179													
WG572179CCV1	CCV	08/15/23 11:58	HG230814-3	.005		.0052	mg/L	104	90	110			
WG572179CCB1	CCB	08/15/23 11:59				U	mg/L		-0.0002	0.0002			
WG572179PQV	PQV	08/15/23 12:00	HG230814-5	.001001		.00116	mg/L	116	70	130			
WG572179LRB	LRB	08/15/23 12:01				U	mg/L		-0.00044	0.00044			
WG572179LFB	LFB	08/15/23 12:02	HG230814-6	.002002		.0021	mg/L	105	85	115			
L82327-01LFM	LFM	08/15/23 12:04	HG230814-6	.002002	U	.00205	mg/L	102	85	115			
L82327-01LFMD	LFMD	08/15/23 12:05	HG230814-6	.002002	U	.00203	mg/L	101	85	115	1	20	
WG572179CCV2	CCV	08/15/23 12:09	HG230814-3	.005		.00509	mg/L	102	90	110			
WG572179CCB2	CCB	08/15/23 12:10				U	mg/L		-0.0002	0.0002			
L82337-01LFM	LFM	08/15/23 12:15	HG230814-6	.002002	U	.00198	mg/L	99	85	115			
L82337-01LFMD	LFMD	08/15/23 12:16	HG230814-6	.002002	U	.00205	mg/L	102	85	115	3	20	
WG572179CCV3	CCV	08/15/23 12:21	HG230814-3	.005		.00493	mg/L	99	90	110			
WG572179CCB3	CCB	08/15/23 12:22				U	mg/L		-0.0002	0.0002			
WG572179CCV4	CCV	08/15/23 12:27	HG230814-3	.005		.005	mg/L	100	90	110			
WG572179CCB4	CCB	08/15/23 12:28				U	mg/L		-0.0002	0.0002			

Nickel, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572306													
WG572306ICV	ICV	08/15/23 20:56	II230729-1	2.002		1.9962	mg/L	100	95	105			
WG572306ICB	ICB	08/15/23 21:02				U	mg/L		-0.024	0.024			
WG572306PQV	PQV	08/15/23 21:05	II230720-2	.04		.038	mg/L	95	70	130			
WG572306SIC	SIC	08/15/23 21:08	II230726-1	.1		.0959	mg/L	96	80	120			
WG572306LFB	LFB	08/15/23 21:15	II230804-2	.5		.5031	mg/L	101	85	115			
WG572306CCV1	CCV	08/15/23 21:45	II230725-1	1.001		.979	mg/L	98	90	110			
WG572306CCB1	CCB	08/15/23 21:48				U	mg/L		-0.024	0.024			
L82345-01AS	AS	08/15/23 22:10	II230804-2	.5	U	.4771	mg/L	95	85	115			
L82345-01ASD	ASD	08/15/23 22:13	II230804-2	.5	U	.4813	mg/L	96	85	115	1	20	
WG572306CCV2	CCV	08/15/23 22:23	II230725-1	1.001		1.002	mg/L	100	90	110			
WG572306CCB2	CCB	08/15/23 22:25				U	mg/L		-0.024	0.024			
WG572306CCV3	CCV	08/15/23 22:45	II230725-1	1.001		1.022	mg/L	102	90	110			
WG572306CCB3	CCB	08/15/23 22:48				U	mg/L		-0.024	0.024			

GCC

ACZ Project ID: ***L82345***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nitrate/Nitrite as N M353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG571995													
WG571995ICV	ICV	08/09/23 23:47	WI230701-1	2.416		2.299	mg/L	95	90	110			
WG571995ICB	ICB	08/09/23 23:49				U	mg/L		-0.02	0.02			
WG571995LFB	LFB	08/09/23 23:53	WI230228-3	2		1.985	mg/L	99	90	110			
WG571995CCV1	CCV	08/10/23 0:03	WI230809-7	2		2.019	mg/L	101	90	110			
WG571995CCB1	CCB	08/10/23 0:06				U	mg/L		-0.02	0.02			
L82345-01AS	AS	08/10/23 0:15	WI230228-3	2	.026	2.08	mg/L	103	90	110			
L82345-02DUP	DUP	08/10/23 0:17			.03	.029	mg/L				3	20	RA
WG571995CCV2	CCV	08/10/23 0:20	WI230809-7	2		2.071	mg/L	104	90	110			
WG571995CCB2	CCB	08/10/23 0:23				U	mg/L		-0.02	0.02			
WG571995CCV3	CCV	08/10/23 0:38	WI230809-7	2		2.09	mg/L	105	90	110			
WG571995CCB3	CCB	08/10/23 0:41				U	mg/L		-0.02	0.02			
WG571995CCV4	CCV	08/10/23 0:47	WI230809-7	2		2.14	mg/L	107	90	110			
WG571995CCB4	CCB	08/10/23 0:50				U	mg/L		-0.02	0.02			
WG571995CCV5	CCV	08/10/23 0:55	WI230809-7	2		2.143	mg/L	107	90	110			
WG571995CCB5	CCB	08/10/23 0:58				U	mg/L		-0.02	0.02			

Nitrite as N M353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG571995													
WG571995ICV	ICV	08/09/23 23:47	WI230701-1	.608		.607	mg/L	100	90	110			
WG571995ICB	ICB	08/09/23 23:49				U	mg/L		-0.01	0.01			
WG571995LFB	LFB	08/09/23 23:53	WI230228-3	1		1.045	mg/L	105	90	110			
WG571995CCV1	CCV	08/10/23 0:03	WI230809-7	1		1.015	mg/L	102	90	110			
WG571995CCB1	CCB	08/10/23 0:06				U	mg/L		-0.01	0.01			
L82345-01AS	AS	08/10/23 0:15	WI230228-3	1	U	1.096	mg/L	110	90	110			
L82345-02DUP	DUP	08/10/23 0:17			U	U	mg/L				0	20	RA
WG571995CCV2	CCV	08/10/23 0:20	WI230809-7	1		1.022	mg/L	102	90	110			
WG571995CCB2	CCB	08/10/23 0:23				U	mg/L		-0.01	0.01			
WG571995CCV3	CCV	08/10/23 0:38	WI230809-7	1		1.02	mg/L	102	90	110			
WG571995CCB3	CCB	08/10/23 0:41				U	mg/L		-0.01	0.01			

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572306													
WG572306ICV	ICV	08/15/23 20:56	II230729-1	20		19.69	mg/L	98	95	105			
WG572306ICB	ICB	08/15/23 21:02				U	mg/L		-1.5	1.5			
WG572306PQV	PQV	08/15/23 21:05	II230720-2	1.004		1.17	mg/L	117	70	130			
WG572306SIC	SIC	08/15/23 21:08	II230726-1	1.004		1.12	mg/L	112	80	120			
WG572306LFB	LFB	08/15/23 21:15	II230804-2	99.95693		101.2	mg/L	101	85	115			
WG572306CCV1	CCV	08/15/23 21:45	II230725-1	10		9.68	mg/L	97	90	110			
WG572306CCB1	CCB	08/15/23 21:48				U	mg/L		-1.5	1.5			
L82345-01AS	AS	08/15/23 22:10	II230804-2	99.95693	6.22	112.7	mg/L	107	85	115			
L82345-01ASD	ASD	08/15/23 22:13	II230804-2	99.95693	6.22	112.9	mg/L	107	85	115	0	20	
WG572306CCV2	CCV	08/15/23 22:23	II230725-1	10		10.07	mg/L	101	90	110			
WG572306CCB2	CCB	08/15/23 22:25				U	mg/L		-1.5	1.5			
WG572306CCV3	CCV	08/15/23 22:45	II230725-1	10		10.25	mg/L	103	90	110			
WG572306CCB3	CCB	08/15/23 22:48				U	mg/L		-1.5	1.5			

GCC

ACZ Project ID: ***L82345***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572284													
WG572284PBW	PBW	08/15/23 11:30				U	mg/L		-20	20			
WG572284LCSW	LCSW	08/15/23 11:32	PCN625515	1000		980	mg/L	98	80	120			
L82381-02DUP	DUP	08/15/23 12:30			27200	26500	mg/L				3	10	

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572391													
WG572391ICV	ICV	08/17/23 13:49	MS230712-3	.05		.05282	mg/L	106	90	110			
WG572391ICB	ICB	08/17/23 13:51				.00011	mg/L		-0.00022	0.00022			
WG572391LFB	LFB	08/17/23 13:54	MS230810-2	.05005		.05347	mg/L	107	85	115			
L82339-03AS	AS	08/17/23 13:58	MS230810-2	.05005	.00011	.05233	mg/L	104	70	130			
L82339-03ASD	ASD	08/17/23 14:01	MS230810-2	.05005	.00011	.05422	mg/L	108	70	130	4	20	
WG572391CCV1	CCV	08/17/23 14:17	MS230809-2	.1001		.10473	mg/L	105	90	110			
WG572391CCB1	CCB	08/17/23 14:19				.00017	mg/L		-0.0003	0.0003			
WG572391CCV2	CCV	08/17/23 14:45	MS230809-2	.1001		.11007	mg/L	110	90	110			
WG572391CCB2	CCB	08/17/23 14:47				.00016	mg/L		-0.0003	0.0003			
WG572391CCV3	CCV	08/17/23 15:01	MS230809-2	.1001		.103	mg/L	103	90	110			
WG572391CCB3	CCB	08/17/23 15:03				.00016	mg/L		-0.0003	0.0003			
WG572573													
WG572573ICV	ICV	08/20/23 17:26	MS230712-3	.05		.05103	mg/L	102	90	110			
WG572573ICB	ICB	08/20/23 17:28				U	mg/L		-0.00022	0.00022			
WG572573LFB	LFB	08/20/23 17:30	MS230810-2	.05005		.05103	mg/L	102	85	115			
L82297-01AS	AS	08/20/23 17:39	MS230810-2	.05005	.0009	.05379	mg/L	106	70	130			
L82297-01ASD	ASD	08/20/23 17:41	MS230810-2	.05005	.0009	.05397	mg/L	106	70	130	0	20	
WG572573CCV1	CCV	08/20/23 17:45	MS230809-2	.1001		.10146	mg/L	101	90	110			
WG572573CCB1	CCB	08/20/23 17:46				U	mg/L		-0.0003	0.0003			
WG572573CCV2	CCV	08/20/23 18:07	MS230809-2	.1001		.1005	mg/L	100	90	110			
WG572573CCB2	CCB	08/20/23 18:08				U	mg/L		-0.0003	0.0003			
WG572573CCV3	CCV	08/20/23 18:23	MS230809-2	.1001		.10108	mg/L	101	90	110			
WG572573CCB3	CCB	08/20/23 18:25				U	mg/L		-0.0003	0.0003			

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572536													
WG572536ICV	ICV	08/18/23 12:13	II230729-1	100		98.24	mg/L	98	95	105			
WG572536ICB	ICB	08/18/23 12:19				U	mg/L		-0.6	0.6			
WG572536PQV	PQV	08/18/23 12:22	II230720-2	1.0055		1.16	mg/L	115	70	130			
WG572536SIC	SIC	08/18/23 12:25	II230726-1	1.0055		1.09	mg/L	108	80	120			
WG572536LFB	LFB	08/18/23 12:31	II230804-2	100.0094		97.99	mg/L	98	85	115			
WG572536CCV1	CCV	08/18/23 13:01	II230815-1	50		49.69	mg/L	99	90	110			
WG572536CCB1	CCB	08/18/23 13:04				U	mg/L		-0.6	0.6			
WG572536CCV2	CCV	08/18/23 13:39	II230815-1	50		50.1	mg/L	100	90	110			
WG572536CCB2	CCB	08/18/23 13:41				.41	mg/L		-0.6	0.6			
L82345-07AS	AS	08/18/23 13:51	II230804-2	100.0094	494	564.1	mg/L	70	85	115			M3
L82345-07ASD	ASD	08/18/23 13:54	II230804-2	100.0094	494	543.9	mg/L	50	85	115	4	20	M3
WG572536CCV3	CCV	08/18/23 14:00	II230815-1	50		50.72	mg/L	101	90	110			
WG572536CCB3	CCB	08/18/23 14:03				.59	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L82345***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sulfate D516-02/-07/-11 - TURBIDIMETRIC

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572697													
WG572697ICB	ICB	08/22/23 9:20				U	mg/L		-3	3			
WG572697ICV	ICV	08/22/23 9:20	WI230810-2	20		20.7	mg/L	104	90	110			
WG572697CCV1	CCV	08/22/23 13:06	WI230810-1	25		25.8	mg/L	103	90	110			
WG572697CCB1	CCB	08/22/23 13:06				U	mg/L		-3	3			
WG572697LFB	LFB	08/22/23 13:06	WI230119-9	10		10.4	mg/L	104	90	110			
WG572697CCV2	CCV	08/22/23 13:08	WI230810-1	25		25.2	mg/L	101	90	110			
WG572697CCB2	CCB	08/22/23 13:08				U	mg/L		-3	3			
WG572697CCV3	CCV	08/22/23 13:10	WI230810-1	25		25.3	mg/L	101	90	110			
WG572697CCB3	CCB	08/22/23 13:10				U	mg/L		-3	3			
WG572697CCV4	CCV	08/22/23 13:12	WI230810-1	25		25	mg/L	100	90	110			
WG572697CCB4	CCB	08/22/23 13:12				U	mg/L		-3	3			
WG572697CCV5	CCV	08/22/23 14:29	WI230810-1	25		25.7	mg/L	103	90	110			
WG572697CCB5	CCB	08/22/23 14:29				U	mg/L		-3	3			
L82345-05AS	AS	08/22/23 14:31	SO4TURB50X	10	1380	1331.8	mg/L	-482	90	110			M3
L82345-06DUP	DUP	08/22/23 14:33			1350	1371.7	mg/L				2	20	
WG572697CCV6	CCV	08/22/23 14:33	WI230810-1	25		25.2	mg/L	101	90	110			
WG572697CCB6	CCB	08/22/23 14:33				U	mg/L		-3	3			
WG572697CCV7	CCV	08/22/23 14:36	WI230810-1	25		26.2	mg/L	105	90	110			
WG572697CCB7	CCB	08/22/23 14:36				U	mg/L		-3	3			
WG572697CCV8	CCV	08/22/23 14:48	WI230810-1	25		25.6	mg/L	102	90	110			
WG572697CCB8	CCB	08/22/23 14:48				U	mg/L		-3	3			
WG572697CCV9	CCV	08/22/23 14:49	WI230810-1	25		25.6	mg/L	102	90	110			
WG572697CCB9	CCB	08/22/23 14:49				U	mg/L		-3	3			

Vanadium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572306													
WG572306ICV	ICV	08/15/23 20:56	II230729-1	2		2.004	mg/L	100	95	105			
WG572306ICB	ICB	08/15/23 21:02				.0061	mg/L		-0.015	0.015			
WG572306PQV	PQV	08/15/23 21:05	II230720-2	.025025		.03	mg/L	120	70	130			
WG572306SIC	SIC	08/15/23 21:08	II230726-1	.1001		.091	mg/L	91	80	120			
WG572306LFB	LFB	08/15/23 21:15	II230804-2	.5005		.5208	mg/L	104	85	115			
WG572306CCV1	CCV	08/15/23 21:45	II230725-1	1		.983	mg/L	98	90	110			
WG572306CCB1	CCB	08/15/23 21:48				U	mg/L		-0.03	0.03			
L82345-01AS	AS	08/15/23 22:10	II230804-2	.5005	U	.5144	mg/L	103	85	115			
L82345-01ASD	ASD	08/15/23 22:13	II230804-2	.5005	U	.514	mg/L	103	85	115	0	20	
WG572306CCV2	CCV	08/15/23 22:23	II230725-1	1		1.003	mg/L	100	90	110			
WG572306CCB2	CCB	08/15/23 22:25				U	mg/L		-0.03	0.03			
WG572306CCV3	CCV	08/15/23 22:45	II230725-1	1		1.032	mg/L	103	90	110			
WG572306CCB3	CCB	08/15/23 22:48				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L82345***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Zinc, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572306													
WG572306ICV	ICV	08/15/23 20:56	II230729-1	2		1.966	mg/L	98	95	105			
WG572306ICB	ICB	08/15/23 21:02				U	mg/L		-0.06	0.06			
WG572306PQV	PQV	08/15/23 21:05	II230720-2	.05005		.059	mg/L	118	70	130			
WG572306SIC	SIC	08/15/23 21:08	II230726-1	.1001		.12	mg/L	120	80	120			
WG572306LFB	LFB	08/15/23 21:15	II230804-2	.50045		.536	mg/L	107	85	115			
WG572306CCV1	CCV	08/15/23 21:45	II230725-1	1		.968	mg/L	97	90	110			
WG572306CCB1	CCB	08/15/23 21:48				U	mg/L		-0.06	0.06			
L82345-01AS	AS	08/15/23 22:10	II230804-2	.50045	U	.532	mg/L	106	85	115			
L82345-01ASD	ASD	08/15/23 22:13	II230804-2	.50045	U	.525	mg/L	105	85	115	1	20	
WG572306CCV2	CCV	08/15/23 22:23	II230725-1	1		.986	mg/L	99	90	110			
WG572306CCB2	CCB	08/15/23 22:25				U	mg/L		-0.06	0.06			
WG572306CCV3	CCV	08/15/23 22:45	II230725-1	1		1.004	mg/L	100	90	110			
WG572306CCB3	CCB	08/15/23 22:48				U	mg/L		-0.06	0.06			

GCC Rio Grande ACZ Project ID: ***L82345***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L82345-01	WG572391	Cadmium, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG572107	Chloride	SM4500Cl-E	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
			SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG572391	Cobalt, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG572306	Lithium, dissolved	M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG571995	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG572573	Selenium, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG572536	Sodium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG572697	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L82345-02	WG572391	Arsenic, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
		Cadmium, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG572107	Chloride	SM4500Cl-E	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
			SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG572391	Cobalt, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
		Lead, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG572306	Lithium, dissolved	M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG571995	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG572573	Selenium, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG572536	Sodium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG572697	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

GCC Rio Grande ACZ Project ID: ***L82345***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L82345-03	WG572391	Arsenic, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
		Cadmium, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG572107	Chloride	SM4500Cl-E	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
			SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG572391	Lead, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG572306	Lithium, dissolved	M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG571995	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG572536	Sodium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG572697	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L82345-04	WG572391	Arsenic, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
		Cadmium, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG572107	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG572391	Lead, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG572306	Lithium, dissolved	M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG571995	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG572536	Sodium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG572697	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

GCC Rio Grande

ACZ Project ID: ***L82345***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L82345-05	WG572391	Arsenic, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
		Cadmium, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG572107	Chloride	SM4500Cl-E	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
			SM4500Cl-E	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG572391	Cobalt, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
		Lead, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG572306	Lithium, dissolved	M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG571995	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG572391	Selenium, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG572536	Sodium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG572697	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

GCC Rio Grande ACZ Project ID: ***L82345***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L82345-06	WG572391	Arsenic, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
		Cadmium, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG572107	Chloride	SM4500Cl-E	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
			SM4500Cl-E	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG572391	Cobalt, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
		Lead, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG572306	Lithium, dissolved	M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG571995	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG572391	Selenium, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG572536	Sodium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG572697	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

GCC Rio Grande ACZ Project ID: ***L82345***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L82345-07	WG572391	Arsenic, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
		Cadmium, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG572107	Chloride	SM4500Cl-E	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
			SM4500Cl-E	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG572391	Cobalt, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
		Lead, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG572306	Lithium, dissolved	M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG571995	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	DB	Sample required dilution due to low bias result.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG572536	Sodium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG572697	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L82345-08	WG572391	Cadmium, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG572107	Chloride	SM4500Cl-E	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
			SM4500Cl-E	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG572391	Lead, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG572306	Lithium, dissolved	M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG571995	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG572573	Selenium, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG572536	Sodium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG572697	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

Certification Qualifiers

GCC Rio Grande ACZ Project ID: ***L82345***

No certification qualifiers associated with this analysis

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

GCC Rio Grande
183230

ACZ Project ID: L82345
Date Received: 08/09/2023 11:24
Received By:
Date Printed: 8/10/2023

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]	X		
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?			X
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
7315	4.3	<=6.0	15	N/A

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

GCC Rio Grande
183230

ACZ Project ID: L82345
Date Received: 08/09/2023 11:24
Received By:
Date Printed: 8/10/2023

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L82345

CHAIN of CUSTODY

Report to:

Name: Amy Veek	Address: 3372 Lime Road
Company: GCC Rio Grande Inc	Pueblo CO 81004
E-mail: aveek@gcc.com	Telephone: 719-647-6861

Copy of Report to:

Name: Landon Beck	E-mail: lbeck@resourcehydrogeologic.com
Company: Resource Hydrogeologic	Telephone: (970) 459-4865

Invoice to:

Name: Amy Veek	Address: 3372 Lime Road
Company: GCC Rio Grande Inc	Pueblo CO 81004
E-mail: aveek@gcc.com	Telephone: 719-647-6861

Copy of Invoice to:

Name:	Address:
Company:	
E-mail:	Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes No ✓

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: ~~Amy Veek~~ David Bemis Sampler's Site Information State CO Zip code 81004 Time Zone MDT

*Sampler's Signature:

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: GW-COMPLIANCE

PO#: 183230

Reporting state for compliance testing:

Check box if samples include NRC licensed material?

ANALYSES REQUESTED (attach list or use quote number)

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	GW-COMpliance
MW-14	8/8/2023 10:16	GW	3	✓
MW-13	8/8/2023 11:23	GW	3	✓
MW-6	8/8/2023 12:42	GW	3	✓
MW-7	8/8/2023 13:21	GW	3	✓
MW-8	8/8/2023 14:19	GW	3	✓
MW-2B	8/8/2023 12:00	GW	3	✓
MW-11	8/8/2023 15:43	GW	3	✓
MW-12	8/8/2023 16:37	GW	3	✓

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
David Bemis	08/08/23 17:20		8/9/23 1129

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

L82345 Chain of Custod

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

September 06, 2023

Report to:
Amy Veek
GCC Rio Grande
3372 Lime Road
Pueblo, CO 81004

cc: Landon Beck

Bill to:
Amy Veek
GCC Rio Grande
3372 Lime Road
Pueblo, CO 81004

Project ID: 183230
ACZ Project ID: L82382

Amy Veek:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on August 10, 2023. This project has been assigned to ACZ's project number, L82382. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L82382. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after September 05, 2024. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

GCC Rio Grande

September 06, 2023

Project ID: 183230
ACZ Project ID: L82382

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 2 groundwater samples from GCC Rio Grande on August 10, 2023. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L82382. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

All analyses were performed within EPA recommended holding times except for parameters flagged with an "H2" requiring re-analysis after the hold time had expired.

Sample Analysis

These samples were analyzed for inorganic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Inorganic Analytical Results

GCC Rio Grande
Project ID: 183230
Sample ID: MW-09

ACZ Sample ID: ***L82382-01***
Date Sampled: *08/09/23 09:03*
Date Received: *08/10/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.151	B		mg/L	0.05	0.25	08/16/23 19:01	wtc
Arsenic, dissolved	M200.8 ICP-MS	5	<0.001	U		mg/L	0.001	0.005	08/21/23 14:52	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	08/16/23 19:01	wtc
Boron, dissolved	M200.7 ICP	1	1.32			mg/L	0.03	0.1	08/16/23 19:01	wtc
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U		mg/L	0.00025	0.00125	08/21/23 14:52	gjl/scp
Calcium, dissolved	M200.7 ICP	1	395		*	mg/L	0.1	0.5	08/16/23 19:01	wtc
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	08/16/23 19:01	wtc
Cobalt, dissolved	M200.8 ICP-MS	5	0.00224			mg/L	0.00025	0.00125	08/21/23 14:52	gjl/scp
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	08/16/23 19:01	wtc
Iron, dissolved	M200.7 ICP	1	1.69			mg/L	0.06	0.15	08/16/23 19:01	wtc
Lead, dissolved	M200.8 ICP-MS	5	<0.0005	U		mg/L	0.0005	0.0025	08/21/23 14:52	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.441		*	mg/L	0.008	0.04	08/16/23 19:01	wtc
Magnesium, dissolved	M200.7 ICP	1	158			mg/L	0.2	1	08/16/23 19:01	wtc
Manganese, dissolved	M200.7 ICP	1	0.501		*	mg/L	0.01	0.05	08/16/23 19:01	wtc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	08/17/23 15:10	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	08/16/23 19:01	wtc
Potassium, dissolved	M200.7 ICP	1	8.62			mg/L	0.5	1	08/16/23 19:01	wtc
Selenium, dissolved	M200.8 ICP-MS	5	<0.0005	U		mg/L	0.0005	0.00125	08/21/23 14:52	gjl/scp
Sodium, dissolved	M200.7 ICP	1	747		*	mg/L	0.2	1	08/16/23 19:01	wtc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	08/16/23 19:01	wtc
Zinc, dissolved	M200.7 ICP	1	0.738		*	mg/L	0.02	0.05	08/16/23 19:01	wtc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-09

ACZ Sample ID: ***L82382-01***
Date Sampled: *08/09/23 09:03*
Date Received: *08/10/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	393			mg/L	2	20	08/11/23 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	08/11/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	08/11/23 0:00	emk
Total Alkalinity		1	393		*	mg/L	2	20	08/11/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-2.9			%			09/06/23 0:00	calc
Sum of Anions			70			meq/L			09/06/23 0:00	calc
Sum of Cations			66.0			meq/L			09/06/23 0:00	calc
Chloride	SM4500Cl-E	1	48.5		*	mg/L	1	2	08/14/23 14:07	aps
Fluoride	SM4500F-C	1	0.39		*	mg/L	0.15	0.35	08/22/23 11:14	svm
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		1640			mg/L	0.2	5	09/06/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		0.053	B		mg/L	0.02	0.1	09/06/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	0.053	B	*	mg/L	0.02	0.1	08/11/23 0:16	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	08/11/23 0:16	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	4640	H	*	mg/L	40	80	08/23/23 9:44	smr
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	120	2870		*	mg/L	120	600	08/24/23 12:01	aps
TDS (calculated)	Calculation		4470			mg/L			09/06/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.04						09/06/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-10

ACZ Sample ID: ***L82382-02***
Date Sampled: *08/09/23 09:38*
Date Received: *08/10/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	08/16/23 19:17	wtc
Arsenic, dissolved	M200.8 ICP-MS	1	0.00110			mg/L	0.0002	0.001	08/21/23 14:55	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	08/16/23 19:17	wtc
Boron, dissolved	M200.7 ICP	1	1.25			mg/L	0.03	0.1	08/16/23 19:17	wtc
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U		mg/L	0.00005	0.00025	08/21/23 14:55	gjl/scp
Calcium, dissolved	M200.7 ICP	1	32.6		*	mg/L	0.1	0.5	08/16/23 19:17	wtc
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	08/16/23 19:17	wtc
Cobalt, dissolved	M200.8 ICP-MS	1	0.000075	B		mg/L	0.00005	0.00025	08/21/23 14:55	gjl/scp
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	08/16/23 19:17	wtc
Iron, dissolved	M200.7 ICP	1	0.332		*	mg/L	0.06	0.15	08/16/23 19:17	wtc
Lead, dissolved	M200.8 ICP-MS	1	0.00010	B		mg/L	0.0001	0.0005	08/21/23 14:55	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.318		*	mg/L	0.008	0.04	08/16/23 19:17	wtc
Magnesium, dissolved	M200.7 ICP	1	10.2			mg/L	0.2	1	08/16/23 19:17	wtc
Manganese, dissolved	M200.7 ICP	1	0.016	B	*	mg/L	0.01	0.05	08/16/23 19:17	wtc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	08/17/23 15:11	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	08/16/23 19:17	wtc
Potassium, dissolved	M200.7 ICP	1	5.54			mg/L	0.5	1	08/16/23 19:17	wtc
Selenium, dissolved	M200.8 ICP-MS	5	<0.0005	U	*	mg/L	0.0005	0.00125	08/22/23 17:07	gjl/scp
Sodium, dissolved	M200.7 ICP	2	1110		*	mg/L	0.4	2	08/17/23 14:39	wtc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	08/16/23 19:17	wtc
Zinc, dissolved	M200.7 ICP	1	<0.02	U	*	mg/L	0.02	0.05	08/16/23 19:17	wtc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-10

ACZ Sample ID: ***L82382-02***
Date Sampled: *08/09/23 09:38*
Date Received: *08/10/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	696			mg/L	2	20	08/11/23 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	08/11/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	08/11/23 0:00	emk
Total Alkalinity		1	696		*	mg/L	2	20	08/11/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-4.6			%			09/06/23 0:00	calc
Sum of Anions			57.0			meq/L			09/06/23 0:00	calc
Sum of Cations			52			meq/L			09/06/23 0:00	calc
Chloride	SM4500Cl-E	5	410		*	mg/L	5	10	08/14/23 14:37	aps
Fluoride	SM4500F-C	1	1.27			mg/L	0.15	0.35	08/22/23 11:24	svm
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		123			mg/L	0.2	5	09/06/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	09/06/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	08/11/23 0:18	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	08/11/23 0:18	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	3600			mg/L	20	40	08/16/23 16:35	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	120	1500		*	mg/L	120	600	08/24/23 12:01	aps
TDS (calculated)	Calculation		3490			mg/L			09/06/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.03						09/06/23 0:00	calc

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4) EPA SW-846. Test Methods for Evaluating Solid Waste.
(5) Standard Methods for the Examination of Water and Wastewater.

Comments

(1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

GCC

ACZ Project ID: ***L82382***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572140													
WG572140PBW1	PBW	08/11/23 15:44				U	mg/L		-20	20			
WG572140LCSW2	LCSW	08/11/23 15:50	WC230729-1	820.0001		878.7	mg/L	107	90	110			
WG572140LCSW4	LCSW	08/11/23 17:11	WC230729-1	820.0001		820.6	mg/L	100	90	110			
WG572140PBW2	PBW	08/11/23 17:17				13.1	mg/L		-20	20			
WG572140LCSW6	LCSW	08/11/23 18:52	WC230729-1	820.0001		815.1	mg/L	99	90	110			
WG572140PBW3	PBW	08/11/23 18:57				2.8	mg/L		-20	20			
WG572140LCSW8	LCSW	08/11/23 20:36	WC230729-1	820.0001		821	mg/L	100	90	110			
WG572140PBW4	PBW	08/11/23 20:42				2.8	mg/L		-20	20			
L82386-01DUP	DUP	08/11/23 21:57			U	U	mg/L				0	20	RA
WG572140LCSW10	LCSW	08/11/23 22:02	WC230729-1	820.0001		821	mg/L	100	90	110			
WG572140PBW5	PBW	08/11/23 22:08				U	mg/L		-20	20			
WG572140LCSW12	LCSW	08/11/23 23:17	WC230729-1	820.0001		823.9	mg/L	100	90	110			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572419													
WG572419ICV	ICV	08/16/23 17:38	II230729-1	2		2.015	mg/L	101	95	105			
WG572419ICB	ICB	08/16/23 17:44				U	mg/L		-0.15	0.15			
WG572419PQV	PQV	08/16/23 17:47	II230720-2	.25025		.236	mg/L	94	70	130			
WG572419SIC	SIC	08/16/23 17:50	II230726-1	200.45025		208.4	mg/L	104	1	200			
WG572419LFB	LFB	08/16/23 17:56	II230804-2	1.001		1.043	mg/L	104	85	115			
WG572419CCV1	CCV	08/16/23 18:26	II230815-1	1		.981	mg/L	98	90	110			
WG572419CCB1	CCB	08/16/23 18:29				U	mg/L		-0.15	0.15			
WG572419CCV2	CCV	08/16/23 19:04	II230815-1	1		.956	mg/L	96	90	110			
WG572419CCB2	CCB	08/16/23 19:07				U	mg/L		-0.15	0.15			
L82382-01AS	AS	08/16/23 19:10	II230804-2	1.001	.151	1.065	mg/L	91	85	115			
L82382-01ASD	ASD	08/16/23 19:14	II230804-2	1.001	.151	1.06	mg/L	91	85	115	0	20	
WG572419CCV3	CCV	08/16/23 19:26	II230815-1	1		.965	mg/L	97	90	110			
WG572419CCB3	CCB	08/16/23 19:29				U	mg/L		-0.15	0.15			

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572577													
WG572577ICV	ICV	08/21/23 13:49	MS230712-3	.05		.04499	mg/L	90	90	110			
WG572577ICB	ICB	08/21/23 13:51				U	mg/L		-0.00044	0.00044			
WG572577LFB	LFB	08/21/23 13:53	MS230810-2	.0501		.0492	mg/L	98	85	115			
WG572577CCV1	CCV	08/21/23 14:15	MS230809-2	.1002		.0974	mg/L	97	90	110			
WG572577CCB1	CCB	08/21/23 14:17				U	mg/L		-0.0006	0.0006			
L82360-04AS	AS	08/21/23 14:30	MS230810-2	.1002	.00056	.08003	mg/L	79	70	130			
L82360-04ASD	ASD	08/21/23 14:33	MS230810-2	.1002	.00056	.08366	mg/L	83	70	130	4	20	
WG572577CCV2	CCV	08/21/23 14:41	MS230809-2	.1002		.10063	mg/L	100	90	110			
WG572577CCB2	CCB	08/21/23 14:44				U	mg/L		-0.0006	0.0006			
WG572577CCV3	CCV	08/21/23 14:57	MS230809-2	.1002		.09877	mg/L	99	90	110			
WG572577CCB3	CCB	08/21/23 14:59				U	mg/L		-0.0006	0.0006			

GCC

ACZ Project ID: ***L82382***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Beryllium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572419													
WG572419ICV	ICV	08/16/23 17:38	II230729-1	2		1.943	mg/L	97	95	105			
WG572419ICB	ICB	08/16/23 17:44				U	mg/L		-0.03	0.03			
WG572419PQV	PQV	08/16/23 17:47	II230720-2	.05005		.051	mg/L	102	70	130			
WG572419SIC	SIC	08/16/23 17:50	II230726-1	.1001		.097	mg/L	97	80	120			
WG572419LFB	LFB	08/16/23 17:56	II230804-2	.5005		.502	mg/L	100	85	115			
WG572419CCV1	CCV	08/16/23 18:26	II230815-1	1		.955	mg/L	96	90	110			
WG572419CCB1	CCB	08/16/23 18:29				U	mg/L		-0.03	0.03			
WG572419CCV2	CCV	08/16/23 19:04	II230815-1	1		.93	mg/L	93	90	110			
WG572419CCB2	CCB	08/16/23 19:07				U	mg/L		-0.03	0.03			
L82382-01AS	AS	08/16/23 19:10	II230804-2	.5005	U	.469	mg/L	94	85	115			
L82382-01ASD	ASD	08/16/23 19:14	II230804-2	.5005	U	.467	mg/L	93	85	115	0	20	
WG572419CCV3	CCV	08/16/23 19:26	II230815-1	1		.941	mg/L	94	90	110			
WG572419CCB3	CCB	08/16/23 19:29				U	mg/L		-0.03	0.03			

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572419													
WG572419ICV	ICV	08/16/23 17:38	II230729-1	2		2.051	mg/L	103	95	105			
WG572419ICB	ICB	08/16/23 17:44				U	mg/L		-0.09	0.09			
WG572419PQV	PQV	08/16/23 17:47	II230720-2	.1001		.106	mg/L	106	70	130			
WG572419SIC	SIC	08/16/23 17:50	II230726-1	.1001		.101	mg/L	101	80	120			
WG572419LFB	LFB	08/16/23 17:56	II230804-2	.5005		.513	mg/L	102	85	115			
WG572419CCV1	CCV	08/16/23 18:26	II230815-1	1		1.009	mg/L	101	90	110			
WG572419CCB1	CCB	08/16/23 18:29				U	mg/L		-0.09	0.09			
WG572419CCV2	CCV	08/16/23 19:04	II230815-1	1		.993	mg/L	99	90	110			
WG572419CCB2	CCB	08/16/23 19:07				U	mg/L		-0.09	0.09			
L82382-01AS	AS	08/16/23 19:10	II230804-2	.5005	1.32	1.756	mg/L	87	85	115			
L82382-01ASD	ASD	08/16/23 19:14	II230804-2	.5005	1.32	1.754	mg/L	87	85	115	0	20	
WG572419CCV3	CCV	08/16/23 19:26	II230815-1	1		1.004	mg/L	100	90	110			
WG572419CCB3	CCB	08/16/23 19:29				U	mg/L		-0.09	0.09			

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572577													
WG572577ICV	ICV	08/21/23 13:49	MS230712-3	.05		.049004	mg/L	98	90	110			
WG572577ICB	ICB	08/21/23 13:51				U	mg/L		-0.00011	0.00011			
WG572577LFB	LFB	08/21/23 13:53	MS230810-2	.05005		.050475	mg/L	101	85	115			
WG572577CCV1	CCV	08/21/23 14:15	MS230809-2	.1001		.102096	mg/L	102	90	110			
WG572577CCB1	CCB	08/21/23 14:17				.000054	mg/L		-0.00015	0.00015			
L82360-04AS	AS	08/21/23 14:30	MS230810-2	.1001	U	.092816	mg/L	93	70	130			
L82360-04ASD	ASD	08/21/23 14:33	MS230810-2	.1001	U	.097675	mg/L	98	70	130	5	20	
WG572577CCV2	CCV	08/21/23 14:41	MS230809-2	.1001		.105158	mg/L	105	90	110			
WG572577CCB2	CCB	08/21/23 14:44				U	mg/L		-0.00015	0.00015			
WG572577CCV3	CCV	08/21/23 14:57	MS230809-2	.1001		.103727	mg/L	104	90	110			
WG572577CCB3	CCB	08/21/23 14:59				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: ***L82382***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572419													
WG572419ICV	ICV	08/16/23 17:38	II230729-1	100		100.75	mg/L	101	95	105			
WG572419ICB	ICB	08/16/23 17:44				U	mg/L		-0.3	0.3			
WG572419PQV	PQV	08/16/23 17:47	II230720-2	.4999		.5	mg/L	100	70	130			
WG572419SIC	SIC	08/16/23 17:50	II230726-1	200.4599		202.7	mg/L	101	1	200			
WG572419LFB	LFB	08/16/23 17:56	II230804-2	67.98753		72.25	mg/L	106	85	115			
WG572419CCV1	CCV	08/16/23 18:26	II230815-1	50		49.52	mg/L	99	90	110			
WG572419CCB1	CCB	08/16/23 18:29				U	mg/L		-0.3	0.3			
WG572419CCV2	CCV	08/16/23 19:04	II230815-1	50		48.36	mg/L	97	90	110			
WG572419CCB2	CCB	08/16/23 19:07				U	mg/L		-0.3	0.3			
L82382-01AS	AS	08/16/23 19:10	II230804-2	67.98753	395	444.2	mg/L	72	85	115			M3
L82382-01ASD	ASD	08/16/23 19:14	II230804-2	67.98753	395	445.4	mg/L	74	85	115	0	20	M3
WG572419CCV3	CCV	08/16/23 19:26	II230815-1	50		49.04	mg/L	98	90	110			
WG572419CCB3	CCB	08/16/23 19:29				U	mg/L		-0.3	0.3			

Chloride SM4500Cl-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572220													
WG572220ICV	ICV	08/14/23 13:46	WI230501-8	55		54.27	mg/L	99	90	110			
WG572220ICB	ICB	08/14/23 13:47				U	mg/L						
WG572220LFB1	LFB	08/14/23 13:47	WI230629-2	30.03		28.16	mg/L	94	90	110			
WG572220CCV1	CCV	08/14/23 13:52	WI221021-5	49.95		52.86	mg/L	106	90	110			
WG572220CCB1	CCB	08/14/23 13:53				U	mg/L						
WG572220CCV2	CCV	08/14/23 13:59	WI221021-5	49.95		50.71	mg/L	102	90	110			
WG572220CCB2	CCB	08/14/23 13:59				U	mg/L						
WG572220LFB2	LFB	08/14/23 14:02	WI230629-2	30.03		28.25	mg/L	94	90	110			
L82366-03AS	AS	08/14/23 14:03	WI230629-2	30.03	44.3	63.68	mg/L	65	90	110			M2
L82366-04DUP	DUP	08/14/23 14:04			23.9	21.9	mg/L				9	20	
WG572220CCV3	CCV	08/14/23 14:05	WI221021-5	49.95		53.89	mg/L	108	90	110			
WG572220CCB3	CCB	08/14/23 14:05				U	mg/L						
WG572220CCV4	CCV	08/14/23 14:09	WI221021-5	49.95		51.79	mg/L	104	90	110			
WG572220CCB4	CCB	08/14/23 14:10				U	mg/L						
WG572220CCV7	CCV	08/14/23 14:37	WI221021-5	49.95		54.61	mg/L	109	90	110			
WG572220CCB7	CCB	08/14/23 14:37				U	mg/L						
WG572220CCV8	CCV	08/14/23 14:38	WI221021-5	49.95		52.96	mg/L	106	90	110			
WG572220CCB8	CCB	08/14/23 14:38				U	mg/L						

GCC

ACZ Project ID: ***L82382***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Chromium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572419													
WG572419ICV	ICV	08/16/23 17:38	II230729-1	2		1.959	mg/L	98	95	105			
WG572419ICB	ICB	08/16/23 17:44				U	mg/L		-0.06	0.06			
WG572419PQV	PQV	08/16/23 17:47	II230720-2	.05005		.051	mg/L	102	70	130			
WG572419SIC	SIC	08/16/23 17:50	II230726-1	.1001		.097	mg/L	97	80	120			
WG572419LFB	LFB	08/16/23 17:56	II230804-2	.5005		.501	mg/L	100	85	115			
WG572419CCV1	CCV	08/16/23 18:26	II230815-1	1		.969	mg/L	97	90	110			
WG572419CCB1	CCB	08/16/23 18:29				U	mg/L		-0.06	0.06			
WG572419CCV2	CCV	08/16/23 19:04	II230815-1	1		.948	mg/L	95	90	110			
WG572419CCB2	CCB	08/16/23 19:07				U	mg/L		-0.06	0.06			
L82382-01AS	AS	08/16/23 19:10	II230804-2	.5005	U	.474	mg/L	95	85	115			
L82382-01ASD	ASD	08/16/23 19:14	II230804-2	.5005	U	.472	mg/L	94	85	115	0	20	
WG572419CCV3	CCV	08/16/23 19:26	II230815-1	1		.957	mg/L	96	90	110			
WG572419CCB3	CCB	08/16/23 19:29				U	mg/L		-0.06	0.06			

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572577													
WG572577ICV	ICV	08/21/23 13:49	MS230712-3	.05		.047544	mg/L	95	90	110			
WG572577ICB	ICB	08/21/23 13:51				U	mg/L		-0.00011	0.00011			
WG572577LFB	LFB	08/21/23 13:53	MS230810-2	.05005		.049811	mg/L	100	85	115			
WG572577CCV1	CCV	08/21/23 14:15	MS230809-2	.1001		.100132	mg/L	100	90	110			
WG572577CCB1	CCB	08/21/23 14:17				.000061	mg/L		-0.00015	0.00015			
L82360-04AS	AS	08/21/23 14:30	MS230810-2	.1001	.0268	.105031	mg/L	78	70	130			
L82360-04ASD	ASD	08/21/23 14:33	MS230810-2	.1001	.0268	.109883	mg/L	83	70	130	5	20	
WG572577CCV2	CCV	08/21/23 14:41	MS230809-2	.1001		.098372	mg/L	98	90	110			
WG572577CCB2	CCB	08/21/23 14:44				U	mg/L		-0.00015	0.00015			
WG572577CCV3	CCV	08/21/23 14:57	MS230809-2	.1001		.0974	mg/L	97	90	110			
WG572577CCB3	CCB	08/21/23 14:59				U	mg/L		-0.00015	0.00015			

Copper, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572419													
WG572419ICV	ICV	08/16/23 17:38	II230729-1	2		1.972	mg/L	99	95	105			
WG572419ICB	ICB	08/16/23 17:44				U	mg/L		-0.03	0.03			
WG572419PQV	PQV	08/16/23 17:47	II230720-2	.05005		.05	mg/L	100	70	130			
WG572419SIC	SIC	08/16/23 17:50	II230726-1	.1001		.098	mg/L	98	80	120			
WG572419LFB	LFB	08/16/23 17:56	II230804-2	.5005		.497	mg/L	99	85	115			
WG572419CCV1	CCV	08/16/23 18:26	II230815-1	1		.967	mg/L	97	90	110			
WG572419CCB1	CCB	08/16/23 18:29				U	mg/L		-0.03	0.03			
WG572419CCV2	CCV	08/16/23 19:04	II230815-1	1		.94	mg/L	94	90	110			
WG572419CCB2	CCB	08/16/23 19:07				U	mg/L		-0.03	0.03			
L82382-01AS	AS	08/16/23 19:10	II230804-2	.5005	U	.498	mg/L	100	85	115			
L82382-01ASD	ASD	08/16/23 19:14	II230804-2	.5005	U	.495	mg/L	99	85	115	1	20	
WG572419CCV3	CCV	08/16/23 19:26	II230815-1	1		.951	mg/L	95	90	110			
WG572419CCB3	CCB	08/16/23 19:29				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L82382***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Fluoride SM4500F-C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572661													
WG572661ICV	ICV	08/22/23 9:58	WC230811-2	2.002		1.99	mg/L	99	90	110			
WG572661ICB	ICB	08/22/23 10:06				U	mg/L		-0.3	0.3			
WG572661PQV	PQV	08/22/23 10:09	WC230814-1	.35035		.35	mg/L	100	70	130			
WG572661LFB	LFB	08/22/23 10:13	WC221227-7	5.02		5.19	mg/L	103	90	110			
WG572661CCV1	CCV	08/22/23 11:06	WC230811-2	2.002		1.995	mg/L	100	90	110			
WG572661CCB1	CCB	08/22/23 11:10				U	mg/L		-0.3	0.3			
L82382-01AS	AS	08/22/23 11:17	WC221227-7	5.02	.39	4.81	mg/L	88	90	110			MA
L82382-01ASD	ASD	08/22/23 11:20	WC221227-7	5.02	.39	4.95	mg/L	91	90	110	3	20	
WG572661CCV2	CCV	08/22/23 11:55	WC230811-2	2.002		2.014	mg/L	101	90	110			
WG572661CCB2	CCB	08/22/23 12:03				U	mg/L		-0.3	0.3			
L82424-01AS	AS	08/22/23 12:20	WC221227-7	5.02	.2	5.29	mg/L	101	90	110			
L82424-01ASD	ASD	08/22/23 12:24	WC221227-7	5.02	.2	5.24	mg/L	100	90	110	1	20	
WG572661CCV3	CCV	08/22/23 12:27	WC230811-2	2.002		1.976	mg/L	99	90	110			
WG572661CCB3	CCB	08/22/23 12:35				U	mg/L		-0.3	0.3			

Iron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572419													
WG572419ICV	ICV	08/16/23 17:38	II230729-1	2		1.958	mg/L	98	95	105			
WG572419ICB	ICB	08/16/23 17:44				U	mg/L		-0.18	0.18			
WG572419PQV	PQV	08/16/23 17:47	II230720-2	.1506		.144	mg/L	96	70	130			
WG572419SIC	SIC	08/16/23 17:50	II230726-1	200.9506		198	mg/L	99	1	200			
WG572419LFB	LFB	08/16/23 17:56	II230804-2	1.004		1.032	mg/L	103	85	115			
WG572419CCV1	CCV	08/16/23 18:26	II230815-1	1		.961	mg/L	96	90	110			
WG572419CCB1	CCB	08/16/23 18:29				U	mg/L		-0.18	0.18			
WG572419CCV2	CCV	08/16/23 19:04	II230815-1	1		.954	mg/L	95	90	110			
WG572419CCB2	CCB	08/16/23 19:07				U	mg/L		-0.18	0.18			
L82382-01AS	AS	08/16/23 19:10	II230804-2	1.004	1.69	2.228	mg/L	54	85	115			M2
L82382-01ASD	ASD	08/16/23 19:14	II230804-2	1.004	1.69	2.224	mg/L	53	85	115	0	20	M2
WG572419CCV3	CCV	08/16/23 19:26	II230815-1	1		.95	mg/L	95	90	110			
WG572419CCB3	CCB	08/16/23 19:29				U	mg/L		-0.18	0.18			

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572577													
WG572577ICV	ICV	08/21/23 13:49	MS230712-3	.05		.04938	mg/L	99	90	110			
WG572577ICB	ICB	08/21/23 13:51				U	mg/L		-0.00022	0.00022			
WG572577LFB	LFB	08/21/23 13:53	MS230810-2	.05005		.05065	mg/L	101	85	115			
WG572577CCV1	CCV	08/21/23 14:15	MS230809-2	.25025		.25987	mg/L	104	90	110			
WG572577CCB1	CCB	08/21/23 14:17				.00013	mg/L		-0.0003	0.0003			
L82360-04AS	AS	08/21/23 14:30	MS230810-2	.1001	U	.08249	mg/L	82	70	130			
L82360-04ASD	ASD	08/21/23 14:33	MS230810-2	.1001	U	.08763	mg/L	88	70	130	6	20	
WG572577CCV2	CCV	08/21/23 14:41	MS230809-2	.25025		.25141	mg/L	100	90	110			
WG572577CCB2	CCB	08/21/23 14:44				U	mg/L		-0.0003	0.0003			
WG572577CCV3	CCV	08/21/23 14:57	MS230809-2	.25025		.25194	mg/L	101	90	110			
WG572577CCB3	CCB	08/21/23 14:59				U	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: ***L82382***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572419													
WG572419ICV	ICV	08/16/23 17:38	II230729-1	2		1.9995	mg/L	100	95	105			
WG572419ICB	ICB	08/16/23 17:44				U	mg/L		-0.024	0.024			
WG572419PQV	PQV	08/16/23 17:47	II230720-2	.04012		.0389	mg/L	97	70	130			
WG572419SIC	SIC	08/16/23 17:50	II230726-1	.1003		.1085	mg/L	108	80	120			
WG572419LFB	LFB	08/16/23 17:56	II230804-2	1.003		1.025	mg/L	102	85	115			
WG572419CCV1	CCV	08/16/23 18:26	II230815-1	1		.9637	mg/L	96	90	110			
WG572419CCB1	CCB	08/16/23 18:29				U	mg/L		-0.024	0.024			
WG572419CCV2	CCV	08/16/23 19:04	II230815-1	1		.9382	mg/L	94	90	110			
WG572419CCB2	CCB	08/16/23 19:07				U	mg/L		-0.024	0.024			
L82382-01AS	AS	08/16/23 19:10	II230804-2	1.003	.441	1.608	mg/L	116	85	115			M1
L82382-01ASD	ASD	08/16/23 19:14	II230804-2	1.003	.441	1.609	mg/L	116	85	115	0	20	M1
WG572419CCV3	CCV	08/16/23 19:26	II230815-1	1		.954	mg/L	95	90	110			
WG572419CCB3	CCB	08/16/23 19:29				U	mg/L		-0.024	0.024			

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572419													
WG572419ICV	ICV	08/16/23 17:38	II230729-1	100		100.27	mg/L	100	95	105			
WG572419ICB	ICB	08/16/23 17:44				U	mg/L		-0.6	0.6			
WG572419PQV	PQV	08/16/23 17:47	II230720-2	1.0023		.96	mg/L	96	70	130			
WG572419SIC	SIC	08/16/23 17:50	II230726-1	202.2023		208.9	mg/L	103	1	200			
WG572419LFB	LFB	08/16/23 17:56	II230804-2	49.99752		52.4	mg/L	105	85	115			
WG572419CCV1	CCV	08/16/23 18:26	II230815-1	50		48.99	mg/L	98	90	110			
WG572419CCB1	CCB	08/16/23 18:29				U	mg/L		-0.6	0.6			
WG572419CCV2	CCV	08/16/23 19:04	II230815-1	50		47.93	mg/L	96	90	110			
WG572419CCB2	CCB	08/16/23 19:07				U	mg/L		-0.6	0.6			
L82382-01AS	AS	08/16/23 19:10	II230804-2	49.99752	158	203	mg/L	90	85	115			
L82382-01ASD	ASD	08/16/23 19:14	II230804-2	49.99752	158	204.2	mg/L	92	85	115	1	20	
WG572419CCV3	CCV	08/16/23 19:26	II230815-1	50		48.57	mg/L	97	90	110			
WG572419CCB3	CCB	08/16/23 19:29				U	mg/L		-0.6	0.6			

Manganese, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572419													
WG572419ICV	ICV	08/16/23 17:38	II230729-1	2		1.899	mg/L	95	95	105			
WG572419ICB	ICB	08/16/23 17:44				U	mg/L		-0.03	0.03			
WG572419PQV	PQV	08/16/23 17:47	II230720-2	.04995		.049	mg/L	98	70	130			
WG572419SIC	SIC	08/16/23 17:50	II230726-1	49.99995		46.36	mg/L	93	1	200			
WG572419LFB	LFB	08/16/23 17:56	II230804-2	.4995		.497	mg/L	99	85	115			
WG572419CCV1	CCV	08/16/23 18:26	II230815-1	1		.937	mg/L	94	90	110			
WG572419CCB1	CCB	08/16/23 18:29				U	mg/L		-0.03	0.03			
WG572419CCV2	CCV	08/16/23 19:04	II230815-1	1		.916	mg/L	92	90	110			
WG572419CCB2	CCB	08/16/23 19:07				U	mg/L		-0.03	0.03			
L82382-01AS	AS	08/16/23 19:10	II230804-2	.4995	.501	.866	mg/L	73	85	115			M2
L82382-01ASD	ASD	08/16/23 19:14	II230804-2	.4995	.501	.868	mg/L	73	85	115	0	20	M2
WG572419CCV3	CCV	08/16/23 19:26	II230815-1	1		.926	mg/L	93	90	110			
WG572419CCB3	CCB	08/16/23 19:29				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L82382***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury, dissolved M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572410													
WG572410ICV	ICV	08/17/23 12:34	HG230814-3	.005		.00519	mg/L	104	95	105			
WG572410ICB	ICB	08/17/23 12:35				U	mg/L		-0.0002	0.0002			
WG572440													
WG572440CCV1	CCV	08/17/23 14:51	HG230814-3	.005		.00511	mg/L	102	90	110			
WG572440CCB1	CCB	08/17/23 14:52				U	mg/L		-0.0002	0.0002			
WG572440PQV	PQV	08/17/23 14:53	HG230814-5	.001001		.00106	mg/L	106	70	130			
WG572440LRB	LRB	08/17/23 14:54				U	mg/L		-0.00044	0.00044			
WG572440LFB	LFB	08/17/23 14:55	HG230814-6	.002002		.00207	mg/L	103	85	115			
WG572440CCV2	CCV	08/17/23 15:03	HG230814-3	.005		.00511	mg/L	102	90	110			
WG572440CCB2	CCB	08/17/23 15:04				U	mg/L		-0.0002	0.0002			
L82383-03LFM	LFM	08/17/23 15:13	HG230814-6	.002002	U	.00218	mg/L	109	85	115			
WG572440CCV3	CCV	08/17/23 15:14	HG230814-3	.005		.00494	mg/L	99	90	110			
WG572440CCB3	CCB	08/17/23 15:15				U	mg/L		-0.0002	0.0002			
L82383-03LFMD	LFMD	08/17/23 15:16	HG230814-6	.002002	U	.00205	mg/L	102	85	115	6	20	
WG572440CCV4	CCV	08/17/23 15:22	HG230814-3	.005		.0051	mg/L	102	90	110			
WG572440CCB4	CCB	08/17/23 15:23				U	mg/L		-0.0002	0.0002			

Nickel, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572419													
WG572419ICV	ICV	08/16/23 17:38	II230729-1	2.002		2.0538	mg/L	103	95	105			
WG572419ICB	ICB	08/16/23 17:44				U	mg/L		-0.024	0.024			
WG572419PQV	PQV	08/16/23 17:47	II230720-2	.04		.0462	mg/L	116	70	130			
WG572419SIC	SIC	08/16/23 17:50	II230726-1	.1		.1043	mg/L	104	80	120			
WG572419LFB	LFB	08/16/23 17:56	II230804-2	.5		.5231	mg/L	105	85	115			
WG572419CCV1	CCV	08/16/23 18:26	II230815-1	1.001		1.014	mg/L	101	90	110			
WG572419CCB1	CCB	08/16/23 18:29				U	mg/L		-0.024	0.024			
WG572419CCV2	CCV	08/16/23 19:04	II230815-1	1.001		.9881	mg/L	99	90	110			
WG572419CCB2	CCB	08/16/23 19:07				U	mg/L		-0.024	0.024			
L82382-01AS	AS	08/16/23 19:10	II230804-2	.5	U	.5018	mg/L	100	85	115			
L82382-01ASD	ASD	08/16/23 19:14	II230804-2	.5	U	.4959	mg/L	99	85	115	1	20	
WG572419CCV3	CCV	08/16/23 19:26	II230815-1	1.001		1.005	mg/L	100	90	110			
WG572419CCB3	CCB	08/16/23 19:29				U	mg/L		-0.024	0.024			

Nitrate/Nitrite as N M353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572089													
WG572089ICV	ICV	08/10/23 23:50	WI230701-1	2.416		2.348	mg/L	97	90	110			
WG572089ICB	ICB	08/10/23 23:51				U	mg/L		-0.02	0.02			
WG572089LFB	LFB	08/10/23 23:55	WI230228-3	2		2.013	mg/L	101	90	110			
WG572089CCV1	CCV	08/11/23 0:05	WI230809-7	2		2.023	mg/L	101	90	110			
WG572089CCB1	CCB	08/11/23 0:08				U	mg/L		-0.02	0.02			
L82382-01AS	AS	08/11/23 0:17	WI230228-3	2	.053	2.078	mg/L	101	90	110			
L82382-02DUP	DUP	08/11/23 0:19			U	U	mg/L				0	20	RA
WG572089CCV2	CCV	08/11/23 0:24	WI230809-7	2		2.031	mg/L	102	90	110			
WG572089CCB2	CCB	08/11/23 0:26				U	mg/L		-0.02	0.02			

GCC

ACZ Project ID: ***L82382***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nitrite as N M353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572089													
WG572089ICV	ICV	08/10/23 23:50	WI230701-1	.608		.602	mg/L	99	90	110			
WG572089ICB	ICB	08/10/23 23:51				U	mg/L		-0.01	0.01			
WG572089LFB	LFB	08/10/23 23:55	WI230228-3	1		1.036	mg/L	104	90	110			
WG572089CCV1	CCV	08/11/23 0:05	WI230809-7	1		1	mg/L	100	90	110			
WG572089CCB1	CCB	08/11/23 0:08				U	mg/L		-0.01	0.01			
L82382-01AS	AS	08/11/23 0:17	WI230228-3	1	U	1.055	mg/L	106	90	110			
L82382-02DUP	DUP	08/11/23 0:19			U	U	mg/L				0	20	RA
WG572089CCV2	CCV	08/11/23 0:24	WI230809-7	1		1.008	mg/L	101	90	110			
WG572089CCB2	CCB	08/11/23 0:26				U	mg/L		-0.01	0.01			

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572419													
WG572419ICV	ICV	08/16/23 17:38	II230729-1	20		19.87	mg/L	99	95	105			
WG572419ICB	ICB	08/16/23 17:44				U	mg/L		-1.5	1.5			
WG572419PQV	PQV	08/16/23 17:47	II230720-2	1.004		.98	mg/L	98	70	130			
WG572419SIC	SIC	08/16/23 17:50	II230726-1	1.004		.93	mg/L	93	80	120			
WG572419LFB	LFB	08/16/23 17:56	II230804-2	99.95693		104.3	mg/L	104	85	115			
WG572419CCV1	CCV	08/16/23 18:26	II230815-1	10		9.81	mg/L	98	90	110			
WG572419CCB1	CCB	08/16/23 18:29				U	mg/L		-1.5	1.5			
WG572419CCV2	CCV	08/16/23 19:04	II230815-1	10		9.52	mg/L	95	90	110			
WG572419CCB2	CCB	08/16/23 19:07				U	mg/L		-1.5	1.5			
L82382-01AS	AS	08/16/23 19:10	II230804-2	99.95693	8.62	115.7	mg/L	107	85	115			
L82382-01ASD	ASD	08/16/23 19:14	II230804-2	99.95693	8.62	115.7	mg/L	107	85	115	0	20	
WG572419CCV3	CCV	08/16/23 19:26	II230815-1	10		9.75	mg/L	98	90	110			
WG572419CCB3	CCB	08/16/23 19:29				U	mg/L		-1.5	1.5			

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572420													
WG572420PBW	PBW	08/16/23 16:30				U	mg/L		-20	20			
WG572420LCSW	LCSW	08/16/23 16:32	PCN625512	1000		978	mg/L	98	80	120			
L82431-05DUP	DUP	08/16/23 17:01			1560	1574	mg/L				1	10	
WG572759													
WG572759PBW	PBW	08/23/23 9:26				U	mg/L		-20	20			
WG572759LCSW	LCSW	08/23/23 9:28	PCN625513	1000		958	mg/L	96	80	120			
L82511-01DUP	DUP	08/23/23 9:49			396	404	mg/L				2	10	

GCC

ACZ Project ID: ***L82382***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572577													
WG572577ICV	ICV	08/21/23 13:49	MS230712-3	.05		.04799	mg/L	96	90	110			
WG572577ICB	ICB	08/21/23 13:51				.00013	mg/L		-0.00022	0.00022			
WG572577LFB	LFB	08/21/23 13:53	MS230810-2	.05005		.04947	mg/L	99	85	115			
WG572577CCV1	CCV	08/21/23 14:15	MS230809-2	.1001		.09742	mg/L	97	90	110			
WG572577CCB1	CCB	08/21/23 14:17				.00022	mg/L		-0.0003	0.0003			
L82360-04AS	AS	08/21/23 14:30	MS230810-2	.1001	.00034	.09213	mg/L	92	70	130			
L82360-04ASD	ASD	08/21/23 14:33	MS230810-2	.1001	.00034	.09572	mg/L	95	70	130	4	20	
WG572577CCV2	CCV	08/21/23 14:41	MS230809-2	.1001		.10254	mg/L	102	90	110			
WG572577CCB2	CCB	08/21/23 14:44				.00018	mg/L		-0.0003	0.0003			
WG572577CCV3	CCV	08/21/23 14:57	MS230809-2	.1001		.09863	mg/L	99	90	110			
WG572577CCB3	CCB	08/21/23 14:59				.00018	mg/L		-0.0003	0.0003			
WG572689													
WG572689ICV	ICV	08/22/23 16:54	MS230712-3	.05		.05211	mg/L	104	90	110			
WG572689ICB	ICB	08/22/23 16:56				.0002	mg/L		-0.00022	0.00022			
WG572689LFB	LFB	08/22/23 16:58	MS230810-2	.05005		.05062	mg/L	101	85	115			
L82462-01AS	AS	08/22/23 17:14	MS230810-2	.05005	U	.05731	mg/L	115	70	130			
L82462-01ASD	ASD	08/22/23 17:16	MS230810-2	.05005	U	.05439	mg/L	109	70	130	5	20	
WG572689CCV1	CCV	08/22/23 17:20	MS230809-2	.1001		.10567	mg/L	106	90	110			
WG572689CCB1	CCB	08/22/23 17:23				.00026	mg/L		-0.0003	0.0003			
WG572689CCV2	CCV	08/22/23 17:31	MS230809-2	.1001		.10485	mg/L	105	90	110			
WG572689CCB2	CCB	08/22/23 17:34				.00025	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: ***L82382***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572419													
WG572419ICV	ICV	08/16/23 17:38	II230729-1	100		99.83	mg/L	100	95	105			
WG572419ICB	ICB	08/16/23 17:44				U	mg/L		-0.6	0.6			
WG572419PQV	PQV	08/16/23 17:47	II230720-2	1.0055		1.05	mg/L	104	70	130			
WG572419SIC	SIC	08/16/23 17:50	II230726-1	1.0055		1.09	mg/L	108	80	120			
WG572419LFB	LFB	08/16/23 17:56	II230804-2	100.0094		103.5	mg/L	103	85	115			
WG572419CCV1	CCV	08/16/23 18:26	II230815-1	50		49.24	mg/L	98	90	110			
WG572419CCB1	CCB	08/16/23 18:29				U	mg/L		-0.6	0.6			
WG572419CCV2	CCV	08/16/23 19:04	II230815-1	50		48	mg/L	96	90	110			
WG572419CCB2	CCB	08/16/23 19:07				U	mg/L		-0.6	0.6			
L82382-01AS	AS	08/16/23 19:10	II230804-2	100.0094	747	807.6	mg/L	61	85	115			M3
L82382-01ASD	ASD	08/16/23 19:14	II230804-2	100.0094	747	809.4	mg/L	62	85	115	0	20	M3
WG572419CCV3	CCV	08/16/23 19:26	II230815-1	50		48.68	mg/L	97	90	110			
WG572419CCB3	CCB	08/16/23 19:29				U	mg/L		-0.6	0.6			
WG572454													
WG572454ICV	ICV	08/17/23 12:55	II230729-1	100		98.03	mg/L	98	95	105			
WG572454ICB	ICB	08/17/23 13:01				U	mg/L		-0.6	0.6			
WG572454PQV	PQV	08/17/23 13:04	II230720-2	1.0055		1.15	mg/L	114	70	130			
WG572454SIC	SIC	08/17/23 13:07	II230726-1	1.0055		1.07	mg/L	106	80	120			
WG572454LFB	LFB	08/17/23 13:13	II230804-2	100.0094		101.4	mg/L	101	85	115			
WG572454CCV1	CCV	08/17/23 13:43	II230815-1	50		49.43	mg/L	99	90	110			
WG572454CCB1	CCB	08/17/23 13:46				U	mg/L		-0.6	0.6			
L82314-05AS	AS	08/17/23 14:12	II230804-2	2000.188	10600	12554	mg/L	98	85	115			
L82314-05ASD	ASD	08/17/23 14:15	II230804-2	2000.188	10600	12670	mg/L	103	85	115	1	20	
WG572454CCV2	CCV	08/17/23 14:21	II230815-1	50		50.11	mg/L	100	90	110			
WG572454CCB2	CCB	08/17/23 14:24				.66	mg/L		-0.6	0.6			B7 BF
WG572454CCV3	CCV	08/17/23 14:43	II230815-1	50		49.76	mg/L	100	90	110			
WG572454CCB3	CCB	08/17/23 14:46				.38	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L82382***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sulfate D516-02/-07/-11 - TURBIDIMETRIC

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572884													
WG572884ICB	ICB	08/24/23 11:18				U	mg/L		-3	3			
WG572884ICV	ICV	08/24/23 11:18	WI230810-2	20		19.9	mg/L	100	90	110			
WG572884CCV1	CCV	08/24/23 11:27	WI230810-1	25		24.7	mg/L	99	90	110			
WG572884CCB1	CCB	08/24/23 11:27				U	mg/L		-3	3			
WG572884LFB	LFB	08/24/23 11:27	WI230119-9	10		10.1	mg/L	101	90	110			
WG572884CCV2	CCV	08/24/23 11:29	WI230810-1	25		24.2	mg/L	97	90	110			
WG572884CCB2	CCB	08/24/23 11:29				1.3	mg/L		-3	3			
WG572884CCV3	CCV	08/24/23 11:31	WI230810-1	25		24.5	mg/L	98	90	110			
WG572884CCB3	CCB	08/24/23 11:31				U	mg/L		-3	3			
WG572884CCV4	CCV	08/24/23 11:32	WI230810-1	25		24.8	mg/L	99	90	110			
WG572884CCB4	CCB	08/24/23 11:32				U	mg/L		-3	3			
WG572884CCV5	CCV	08/24/23 12:00	WI230810-1	25		24.7	mg/L	99	90	110			
WG572884CCB5	CCB	08/24/23 12:00				U	mg/L		-3	3			
L82374-03AS	AS	08/24/23 12:00	SO4TURB25X	10	280	281.7	mg/L	17	90	110			M3
L82375-01DUP	DUP	08/24/23 12:01			71.2	72.5	mg/L				2	20	
WG572884CCV6	CCV	08/24/23 12:02	WI230810-1	25		24.5	mg/L	98	90	110			
WG572884CCB6	CCB	08/24/23 12:02				U	mg/L		-3	3			
WG572884CCV7	CCV	08/24/23 12:05	WI230810-1	25		25.5	mg/L	102	90	110			
WG572884CCB7	CCB	08/24/23 12:05				U	mg/L		-3	3			

Vanadium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572419													
WG572419ICV	ICV	08/16/23 17:38	II230729-1	2		1.983	mg/L	99	95	105			
WG572419ICB	ICB	08/16/23 17:44				U	mg/L		-0.015	0.015			
WG572419PQV	PQV	08/16/23 17:47	II230720-2	.025025		.026	mg/L	104	70	130			
WG572419SIC	SIC	08/16/23 17:50	II230726-1	.1001		.088	mg/L	88	80	120			
WG572419LFB	LFB	08/16/23 17:56	II230804-2	.5005		.5115	mg/L	102	85	115			
WG572419CCV1	CCV	08/16/23 18:26	II230815-1	1		.969	mg/L	97	90	110			
WG572419CCB1	CCB	08/16/23 18:29				U	mg/L		-0.03	0.03			
WG572419CCV2	CCV	08/16/23 19:04	II230815-1	1		.943	mg/L	94	90	110			
WG572419CCB2	CCB	08/16/23 19:07				U	mg/L		-0.03	0.03			
L82382-01AS	AS	08/16/23 19:10	II230804-2	.5005	U	.49	mg/L	98	85	115			
L82382-01ASD	ASD	08/16/23 19:14	II230804-2	.5005	U	.492	mg/L	98	85	115	0	20	
WG572419CCV3	CCV	08/16/23 19:26	II230815-1	1		.961	mg/L	96	90	110			
WG572419CCB3	CCB	08/16/23 19:29				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L82382***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Zinc, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG572419													
WG572419ICV	ICV	08/16/23 17:38	II230729-1	2		1.943	mg/L	97	95	105			
WG572419ICB	ICB	08/16/23 17:44				U	mg/L		-0.06	0.06			
WG572419PQV	PQV	08/16/23 17:47	II230720-2	.05005		.05	mg/L	100	70	130			
WG572419SIC	SIC	08/16/23 17:50	II230726-1	.1001		.11	mg/L	110	80	120			
WG572419LFB	LFB	08/16/23 17:56	II230804-2	.50045		.528	mg/L	106	85	115			
WG572419CCV1	CCV	08/16/23 18:26	II230815-1	1		.954	mg/L	95	90	110			
WG572419CCB1	CCB	08/16/23 18:29				U	mg/L		-0.06	0.06			
WG572419CCV2	CCV	08/16/23 19:04	II230815-1	1		.979	mg/L	98	90	110			
WG572419CCB2	CCB	08/16/23 19:07				.031	mg/L		-0.06	0.06			
L82382-01AS	AS	08/16/23 19:10	II230804-2	.50045	.738	.545	mg/L	-39	85	115			M2
L82382-01ASD	ASD	08/16/23 19:14	II230804-2	.50045	.738	.533	mg/L	-41	85	115	2	20	M2
WG572419CCV3	CCV	08/16/23 19:26	II230815-1	1		.965	mg/L	97	90	110			
WG572419CCB3	CCB	08/16/23 19:29				U	mg/L		-0.06	0.06			

GCC Rio Grande ACZ Project ID: ***L82382***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L82382-01	WG572419	Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG572220	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG572661	Fluoride	SM4500F-C	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG572419	Lithium, dissolved	M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
		Manganese, dissolved	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG572089	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG572759	Residue, Filterable (TDS) @180C	SM2540C	H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
	WG572419	Sodium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG572884	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG572140	Total Alkalinity	SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG572419	Zinc, dissolved	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
L82382-02	WG572419	Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG572220	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG572419	Iron, dissolved	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
		Lithium, dissolved	M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
		Manganese, dissolved	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG572089	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG572689	Selenium, dissolved	M200.8 ICP-MS	D1	Sample required dilution due to matrix.
	WG572454	Sodium, dissolved	M200.7 ICP	B7	Target analyte detected in prep / method blank at or above acceptance limit. Sample value is > 10X the concentration in the method blank.
	WG572884	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG572140	Total Alkalinity	SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG572419	Zinc, dissolved	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.

Certification Qualifiers

GCC Rio Grande ACZ Project ID: ***L82382***

No certification qualifiers associated with this analysis

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

GCC Rio Grande
183230

ACZ Project ID: L82382
Date Received: 08/10/2023 10:59
Received By:
Date Printed: 8/11/2023

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]	X		
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?			X
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

Sample 3 (method blank) was removed as per project manager.

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
6688	2.3	<=6.0	15	Yes

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

GCC Rio Grande
183230

ACZ Project ID: L82382
Date Received: 08/10/2023 10:59
Received By:
Date Printed: 8/11/2023

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L82382

CHAIN of CUSTODY

Report to:

Name: Amy Veek	Address: 3372 Lime Road
Company: GCC Rio Grande Inc	Pueblo CO 81004
E-mail: aveek@gcc.com	Telephone: 719-647-6861

Copy of Report to:

Name: Landon Beck	E-mail: lbeck@resourcehydrogeologic.com
Company: Resource Hydrogeologic	Telephone: (970) 459-4865

Invoice to:

Name: Amy Veek	Address: 3372 Lime Road
Company: GCC Rio Grande Inc	Pueblo CO 81004
E-mail: aveek@gcc.com	Telephone: 719-647-6861

Copy of Invoice to:

Name:	Address:
Company:	
E-mail:	Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes No ✓

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: David Bemis **Sampler's Site Information** **State** CO **Zip code** 81004 **Time Zone** MDT

***Sampler's Signature:** David Bemis

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: GW-COMPLIANCE

PO#: 183230

Reporting state for compliance testing:

Check box if samples include NRC licensed material?

ANALYSES REQUESTED (attach list or use quote number)

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	GW-COMpliance	Dissolved metals
MW-09	8/9/2023 09:03	GW	3	✓	
MW-10	8/9/2023 09:38	GW	3	✓	
Method Blank	8/9/2023 00:00	GW	3		✓

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Disposable field filter method blank for dissolved metals for QA/QC of field filtration method

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
David Bemis	08/09/23 11:00		8/10/23 10:59

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

L82382 Chain of Custod

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

December 22, 2023

Report to:
Amy Rodrigues
GCC Rio Grande
3372 Lime Road
Pueblo, CO 81004

cc: Landon Beck

Bill to:
Amy Rodrigues
GCC Rio Grande
3372 Lime Road
Pueblo, CO 81004

Project ID: 183230
ACZ Project ID: L84579

Amy Rodrigues:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on November 15, 2023. This project has been assigned to ACZ's project number, L84579. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L84579. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after December 21, 2024. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

GCC Rio Grande
Project ID: 183230
Sample ID: MW-14

ACZ Sample ID: ***L84579-01***
Date Sampled: *11/14/23 12:06*
Date Received: *11/15/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	11/21/23 19:26	wtc
Arsenic, dissolved	M200.8 ICP-MS	5	0.00236	B		mg/L	0.001	0.005	12/08/23 15:12	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	11/21/23 19:26	wtc
Boron, dissolved	M200.7 ICP	1	1.23			mg/L	0.03	0.1	11/21/23 19:26	wtc
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U		mg/L	0.00025	0.00125	12/21/23 16:18	gjl/scp
Calcium, dissolved	M200.7 ICP	1	16.3			mg/L	0.1	0.5	11/21/23 19:26	wtc
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	11/21/23 19:26	wtc
Cobalt, dissolved	M200.8 ICP-MS	5	<0.00025	U		mg/L	0.00025	0.00125	12/21/23 16:18	gjl/scp
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	11/21/23 19:26	wtc
Iron, dissolved	M200.7 ICP	1	0.532			mg/L	0.06	0.15	11/21/23 19:26	wtc
Lead, dissolved	M200.8 ICP-MS	5	<0.0005	U		mg/L	0.0005	0.0025	12/08/23 15:12	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.557		*	mg/L	0.008	0.04	11/21/23 19:26	wtc
Magnesium, dissolved	M200.7 ICP	1	5.39			mg/L	0.2	1	11/21/23 19:26	wtc
Manganese, dissolved	M200.7 ICP	1	0.025	B		mg/L	0.01	0.05	11/21/23 19:26	wtc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	11/29/23 15:00	aeh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	11/21/23 19:26	wtc
Potassium, dissolved	M200.7 ICP	1	5.70			mg/L	0.5	1	11/21/23 19:26	wtc
Selenium, dissolved	M200.8 ICP-MS	5	<0.0005	U	*	mg/L	0.0005	0.00125	12/08/23 15:12	gjl/scp
Sodium, dissolved	M200.7 ICP	2	1590			mg/L	0.4	2	11/22/23 21:39	wtc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	11/21/23 19:26	wtc
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	11/21/23 19:26	wtc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-14

ACZ Sample ID: ***L84579-01***
Date Sampled: *11/14/23 12:06*
Date Received: *11/15/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	1470			mg/L	2	20	11/22/23 0:00	emk
Carbonate as CaCO3		1	34.9			mg/L	2	20	11/22/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	11/22/23 0:00	emk
Total Alkalinity		1	1500			mg/L	2	20	11/22/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-6.6			%			12/22/23 0:00	calc
Sum of Anions			81			meq/L			12/22/23 0:00	calc
Sum of Cations			71			meq/L			12/22/23 0:00	calc
Chloride	SM4500Cl-E	25	1630		*	mg/L	25	50	12/08/23 13:09	cbp/mrd
Fluoride	SM4500F-C	1	4.01			mg/L	0.15	0.35	12/07/23 11:46	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		63			mg/L	0.2	5	12/22/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	12/22/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U		mg/L	0.02	0.1	11/16/23 1:12	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U		mg/L	0.01	0.05	11/16/23 1:12	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	4590			mg/L	40	80	11/20/23 17:10	emk
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	25	232		*	mg/L	25	125	12/11/23 12:24	bls
TDS (calculated)	Calculation		4400			mg/L			12/22/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.04						12/22/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-13

ACZ Sample ID: ***L84579-02***
Date Sampled: *11/14/23 13:18*
Date Received: *11/15/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	11/21/23 19:35	wtc
Arsenic, dissolved	M200.8 ICP-MS	2	0.00040	B		mg/L	0.0004	0.002	12/08/23 15:14	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	11/21/23 19:35	wtc
Boron, dissolved	M200.7 ICP	1	1.07			mg/L	0.03	0.1	11/21/23 19:35	wtc
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U		mg/L	0.0001	0.0005	12/21/23 16:20	gjl/scp
Calcium, dissolved	M200.7 ICP	1	6.70			mg/L	0.1	0.5	11/21/23 19:35	wtc
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	11/21/23 19:35	wtc
Cobalt, dissolved	M200.8 ICP-MS	2	<0.0001	U		mg/L	0.0001	0.0005	12/21/23 16:20	gjl/scp
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	11/21/23 19:35	wtc
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	11/21/23 19:35	wtc
Lead, dissolved	M200.8 ICP-MS	2	<0.0002	U		mg/L	0.0002	0.001	12/08/23 15:14	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.265		*	mg/L	0.008	0.04	11/21/23 19:35	wtc
Magnesium, dissolved	M200.7 ICP	1	1.74			mg/L	0.2	1	11/21/23 19:35	wtc
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	11/21/23 19:35	wtc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	11/29/23 15:01	aeh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	11/21/23 19:35	wtc
Potassium, dissolved	M200.7 ICP	1	3.62			mg/L	0.5	1	11/21/23 19:35	wtc
Selenium, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.0005	12/08/23 15:14	gjl/scp
Sodium, dissolved	M200.7 ICP	1	891		*	mg/L	0.2	1	11/21/23 19:35	wtc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	11/21/23 19:35	wtc
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	11/21/23 19:35	wtc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-13

ACZ Sample ID: ***L84579-02***
Date Sampled: *11/14/23 13:18*
Date Received: *11/15/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	1290			mg/L	2	20	11/22/23 0:00	emk
Carbonate as CaCO3		1	73.2			mg/L	2	20	11/22/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	11/22/23 0:00	emk
Total Alkalinity		1	1360			mg/L	2	20	11/22/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-10.1			%			12/22/23 0:00	calc
Sum of Anions			49			meq/L			12/22/23 0:00	calc
Sum of Cations			40			meq/L			12/22/23 0:00	calc
Chloride	SM4500Cl-E	25	677		*	mg/L	25	50	12/08/23 13:10	cbp/mrd
Fluoride	SM4500F-C	1	6.82			mg/L	0.15	0.35	12/07/23 12:00	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		24			mg/L	0.2	5	12/22/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	12/22/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U		mg/L	0.02	0.1	11/16/23 1:13	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U		mg/L	0.01	0.05	11/16/23 1:13	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	2640			mg/L	40	80	11/20/23 17:12	emk
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	132		*	mg/L	5	25	12/08/23 11:20	bls
TDS (calculated)	Calculation		2550			mg/L			12/22/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.04						12/22/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-8

ACZ Sample ID: ***L84579-03***
Date Sampled: *11/14/23 15:00*
Date Received: *11/15/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	11/21/23 19:38	wtc
Arsenic, dissolved	M200.8 ICP-MS	2	0.00095	B		mg/L	0.0004	0.002	12/08/23 15:21	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	11/21/23 19:38	wtc
Boron, dissolved	M200.7 ICP	1	0.875			mg/L	0.03	0.1	11/21/23 19:38	wtc
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U		mg/L	0.0001	0.0005	12/21/23 16:27	gjl/scp
Calcium, dissolved	M200.7 ICP	1	63.6			mg/L	0.1	0.5	11/21/23 19:38	wtc
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	11/21/23 19:38	wtc
Cobalt, dissolved	M200.8 ICP-MS	2	0.000233	B		mg/L	0.0001	0.0005	12/21/23 16:27	gjl/scp
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	11/21/23 19:38	wtc
Iron, dissolved	M200.7 ICP	1	0.852			mg/L	0.06	0.15	11/21/23 19:38	wtc
Lead, dissolved	M200.8 ICP-MS	2	<0.0002	U		mg/L	0.0002	0.001	12/08/23 15:21	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.436		*	mg/L	0.008	0.04	11/21/23 19:38	wtc
Magnesium, dissolved	M200.7 ICP	1	25.7			mg/L	0.2	1	11/21/23 19:38	wtc
Manganese, dissolved	M200.7 ICP	1	0.227			mg/L	0.01	0.05	11/21/23 19:38	wtc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	11/29/23 15:02	aeh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	11/21/23 19:38	wtc
Potassium, dissolved	M200.7 ICP	1	6.39			mg/L	0.5	1	11/21/23 19:38	wtc
Selenium, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.0005	12/08/23 15:21	gjl/scp
Sodium, dissolved	M200.7 ICP	2	1150			mg/L	0.4	2	11/22/23 21:42	wtc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	11/21/23 19:38	wtc
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	11/21/23 19:38	wtc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-8

ACZ Sample ID: ***L84579-03***
Date Sampled: *11/14/23 15:00*
Date Received: *11/15/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	1260			mg/L	2	20	11/22/23 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	11/22/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	11/22/23 0:00	emk
Total Alkalinity		1	1260			mg/L	2	20	11/22/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-4.3			%			12/22/23 0:00	calc
Sum of Anions			61			meq/L			12/22/23 0:00	calc
Sum of Cations			56			meq/L			12/22/23 0:00	calc
Chloride	SM4500Cl-E	5	275		*	mg/L	5	10	12/08/23 13:11	cbp/mrd
Fluoride	SM4500F-C	1	1.06			mg/L	0.15	0.35	12/07/23 12:04	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		265			mg/L	0.2	5	12/22/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	12/22/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U		mg/L	0.02	0.1	11/16/23 1:15	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U		mg/L	0.01	0.05	11/16/23 1:15	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	3550		*	mg/L	20	40	11/21/23 8:58	trt
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	50	1320		*	mg/L	50	250	12/08/23 11:21	bls
TDS (calculated)	Calculation		3610			mg/L			12/22/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.98						12/22/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-7

ACZ Sample ID: ***L84579-04***
Date Sampled: *11/14/23 15:32*
Date Received: *11/15/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	11/21/23 19:41	wtc
Arsenic, dissolved	M200.8 ICP-MS	5	<0.001	U		mg/L	0.001	0.005	12/08/23 15:23	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	11/21/23 19:41	wtc
Boron, dissolved	M200.7 ICP	1	0.362			mg/L	0.03	0.1	11/21/23 19:41	wtc
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U		mg/L	0.00025	0.00125	12/21/23 16:29	gjl/scp
Calcium, dissolved	M200.7 ICP	1	333			mg/L	0.1	0.5	11/21/23 19:41	wtc
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	11/21/23 19:41	wtc
Cobalt, dissolved	M200.8 ICP-MS	5	0.00135			mg/L	0.00025	0.00125	12/21/23 16:29	gjl/scp
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	11/21/23 19:41	wtc
Iron, dissolved	M200.7 ICP	1	0.637			mg/L	0.06	0.15	11/21/23 19:41	wtc
Lead, dissolved	M200.8 ICP-MS	5	<0.0005	U		mg/L	0.0005	0.0025	12/08/23 15:23	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.617		*	mg/L	0.008	0.04	11/21/23 19:41	wtc
Magnesium, dissolved	M200.7 ICP	1	353			mg/L	0.2	1	11/21/23 19:41	wtc
Manganese, dissolved	M200.7 ICP	1	0.091			mg/L	0.01	0.05	11/21/23 19:41	wtc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	11/29/23 15:05	aeh
Nickel, dissolved	M200.7 ICP	1	0.0081	B		mg/L	0.008	0.04	11/21/23 19:41	wtc
Potassium, dissolved	M200.7 ICP	1	10.2			mg/L	0.5	1	11/21/23 19:41	wtc
Selenium, dissolved	M200.8 ICP-MS	5	<0.0005	U		mg/L	0.0005	0.00125	12/08/23 15:23	gjl/scp
Sodium, dissolved	M200.7 ICP	1	707		*	mg/L	0.2	1	11/21/23 19:41	wtc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	11/21/23 19:41	wtc
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	11/21/23 19:41	wtc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-7

ACZ Sample ID: ***L84579-04***
Date Sampled: *11/14/23 15:32*
Date Received: *11/15/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	552			mg/L	2	20	11/22/23 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	11/22/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	11/22/23 0:00	emk
Total Alkalinity		1	552			mg/L	2	20	11/22/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-1.9			%			12/22/23 0:00	calc
Sum of Anions			80			meq/L			12/22/23 0:00	calc
Sum of Cations			77.0			meq/L			12/22/23 0:00	calc
Chloride	SM4500Cl-E	5	117		*	mg/L	5	10	12/08/23 11:52	cbp/mrd
Fluoride	SM4500F-C	1	0.58			mg/L	0.15	0.35	12/07/23 12:10	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		2290			mg/L	0.2	5	12/22/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	12/22/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U		mg/L	0.02	0.1	11/16/23 1:16	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U		mg/L	0.01	0.05	11/16/23 1:16	pjb
Residue, Filterable (TDS) @180C	SM2540C	5	5630	H	*	mg/L	100	200	12/04/23 17:45	trt
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	120	3140		*	mg/L	120	600	12/08/23 11:30	bls
TDS (calculated)	Calculation		5000			mg/L			12/22/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.13						12/22/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-6

ACZ Sample ID: ***L84579-05***
Date Sampled: *11/14/23 16:00*
Date Received: *11/15/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	5	<0.25	U		mg/L	0.25	1.25	11/22/23 21:45	wtc
Arsenic, dissolved	M200.8 ICP-MS	5	<0.001	U		mg/L	0.001	0.005	12/08/23 15:26	gjl/scp
Beryllium, dissolved	M200.7 ICP	5	<0.05	U		mg/L	0.05	0.25	11/22/23 21:45	wtc
Boron, dissolved	M200.7 ICP	5	0.242	B		mg/L	0.15	0.5	11/22/23 21:45	wtc
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U		mg/L	0.00025	0.00125	12/21/23 16:32	gjl/scp
Calcium, dissolved	M200.7 ICP	5	414		*	mg/L	0.5	2.5	11/22/23 21:45	wtc
Chromium, dissolved	M200.7 ICP	5	<0.1	U		mg/L	0.1	0.25	11/22/23 21:45	wtc
Cobalt, dissolved	M200.8 ICP-MS	5	0.0347			mg/L	0.00025	0.00125	12/21/23 16:32	gjl/scp
Copper, dissolved	M200.7 ICP	5	<0.05	U		mg/L	0.05	0.25	11/22/23 21:45	wtc
Iron, dissolved	M200.7 ICP	5	0.855			mg/L	0.3	0.75	11/22/23 21:45	wtc
Lead, dissolved	M200.8 ICP-MS	5	<0.0005	U		mg/L	0.0005	0.0025	12/08/23 15:26	gjl/scp
Lithium, dissolved	M200.7 ICP	5	0.429			mg/L	0.04	0.2	11/22/23 21:45	wtc
Magnesium, dissolved	M200.7 ICP	5	408			mg/L	1	5	11/22/23 21:45	wtc
Manganese, dissolved	M200.7 ICP	5	0.420			mg/L	0.05	0.25	11/22/23 21:45	wtc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	11/29/23 15:06	aeh
Nickel, dissolved	M200.7 ICP	5	0.0830	B		mg/L	0.04	0.2	11/22/23 21:45	wtc
Potassium, dissolved	M200.7 ICP	5	11.3			mg/L	2.5	5	11/22/23 21:45	wtc
Selenium, dissolved	M200.8 ICP-MS	5	0.00445			mg/L	0.0005	0.00125	12/08/23 15:26	gjl/scp
Sodium, dissolved	M200.7 ICP	5	521			mg/L	1	5	11/22/23 21:45	wtc
Vanadium, dissolved	M200.7 ICP	5	<0.05	U		mg/L	0.05	0.125	11/22/23 21:45	wtc
Zinc, dissolved	M200.7 ICP	5	<0.1	U		mg/L	0.1	0.25	11/22/23 21:45	wtc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-6

ACZ Sample ID: ***L84579-05***
Date Sampled: *11/14/23 16:00*
Date Received: *11/15/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	448			mg/L	2	20	11/22/23 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	11/22/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	11/22/23 0:00	emk
Total Alkalinity		1	448			mg/L	2	20	11/22/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.7			%			12/22/23 0:00	calc
Sum of Anions			76			meq/L			12/22/23 0:00	calc
Sum of Cations			77			meq/L			12/22/23 0:00	calc
Chloride	SM4500Cl-E	5	68.3		*	mg/L	5	10	12/08/23 11:53	cbp/mrd
Fluoride	SM4500F-C	1	0.55			mg/L	0.15	0.35	12/07/23 12:18	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		2710			mg/L	1	30	12/22/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		0.156			mg/L	0.02	0.1	12/22/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	0.156			mg/L	0.02	0.1	11/16/23 1:17	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U		mg/L	0.01	0.05	11/16/23 1:17	pjb
Residue, Filterable (TDS) @180C	SM2540C	5	5200	H	*	mg/L	100	200	12/04/23 17:48	trt
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	120	3120		*	mg/L	120	600	12/08/23 11:30	bls
TDS (calculated)	Calculation		4820			mg/L			12/22/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.08						12/22/23 0:00	calc

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1)	EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2)	EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3)	EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4)	EPA SW-846. Test Methods for Evaluating Solid Waste.
(5)	Standard Methods for the Examination of Water and Wastewater.

Comments

(1)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2)	Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3)	Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4)	An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5)	If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

GCC

ACZ Project ID: ***L84579***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579274													
WG579274PBW1	PBW	11/22/23 16:09				U	mg/L		-20	20			
WG579274LCSW3	LCSW	11/22/23 16:26	WC231116-1	820.0001		809.6	mg/L	99	90	110			
WG579274LCSW6	LCSW	11/22/23 20:33	WC231116-1	820.0001		854	mg/L	104	90	110			
WG579274PBW2	PBW	11/22/23 20:40				9.1	mg/L		-20	20			
L84602-02DUP	DUP	11/22/23 22:41			64.2	63.9	mg/L				0	20	
WG579274LCSW9	LCSW	11/23/23 0:38	WC231116-1	820.0001		846.8	mg/L	103	90	110			
WG579274PBW3	PBW	11/23/23 0:46				7.2	mg/L		-20	20			
WG579274LCSW12	LCSW	11/23/23 4:14	WC231116-1	820.0001		835.1	mg/L	102	90	110			
WG579274PBW4	PBW	11/23/23 4:22				4.9	mg/L		-20	20			
WG579274LCSW15	LCSW	11/23/23 7:25	WC231116-1	820.0001		846.5	mg/L	103	90	110			
WG579274PBW5	PBW	11/23/23 7:32				4.5	mg/L		-20	20			
WG579274LCSW18	LCSW	11/23/23 8:53	WC231116-1	820.0001		842.6	mg/L	103	90	110			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579194													
WG579194ICV	ICV	11/21/23 19:05	II231107-1	2		1.991	mg/L	100	95	105			
WG579194ICB	ICB	11/21/23 19:11				U	mg/L		-0.15	0.15			
WG579194PQV	PQV	11/21/23 19:14	II231121-4	.25025		.247	mg/L	99	70	130			
WG579194SIC	SIC	11/21/23 19:17	II231121-5	200.45025		201.4	mg/L	100	1	200			
WG579194LFB	LFB	11/21/23 19:23	II231120-3	1.001		1.018	mg/L	102	85	115			
L84579-01AS	AS	11/21/23 19:29	II231120-3	1.001	U	1.039	mg/L	104	85	115			
L84579-01ASD	ASD	11/21/23 19:32	II231120-3	1.001	U	1.031	mg/L	103	85	115	1	20	
WG579194CCV1	CCV	11/21/23 19:54	II231012-1	1		.977	mg/L	98	90	110			
WG579194CCB1	CCB	11/21/23 19:57				U	mg/L		-0.15	0.15			
WG579194CCV2	CCV	11/21/23 20:32	II231012-1	1		.977	mg/L	98	90	110			
WG579194CCB2	CCB	11/21/23 20:35				U	mg/L		-0.15	0.15			
WG579194CCV3	CCV	11/21/23 20:53	II231012-1	1		.993	mg/L	99	90	110			
WG579194CCB3	CCB	11/21/23 20:56				U	mg/L		-0.15	0.15			
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	2		2.007	mg/L	100	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.15	0.15			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	.25025		.245	mg/L	98	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	200.45025		203.7	mg/L	102	1	200			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	1.001		1.009	mg/L	101	85	115			
L84577-06AS	AS	11/22/23 21:27	II231120-3	1.001	U	1.068	mg/L	107	85	115			
L84577-06ASD	ASD	11/22/23 21:30	II231120-3	1.001	U	1.058	mg/L	106	85	115	1	20	
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	1		.994	mg/L	99	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.15	0.15			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	1		.99	mg/L	99	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-0.15	0.15			
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	1		1.017	mg/L	102	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-0.15	0.15			

GCC

ACZ Project ID: ***L84579***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG580120													
WG580120ICV	ICV	12/08/23 14:21	MS231205-4	.05		.04585	mg/L	92	90	110			
WG580120ICB	ICB	12/08/23 14:23				U	mg/L		-0.00044	0.00044			
WG580120LFB	LFB	12/08/23 14:26	MS231108-4	.0501		.051	mg/L	102	85	115			
WG580120CCV1	CCV	12/08/23 14:49	MS231205-1	.1002		.09872	mg/L	99	90	110			
WG580120CCB1	CCB	12/08/23 14:51				U	mg/L		-0.0006	0.0006			
L84564-04AS	AS	12/08/23 15:03	MS231108-4	.0501	U	.05518	mg/L	110	70	130			
L84564-04ASD	ASD	12/08/23 15:05	MS231108-4	.0501	U	.05466	mg/L	109	70	130	1	20	
WG580120CCV2	CCV	12/08/23 15:16	MS231205-1	.1002		.09655	mg/L	96	90	110			
WG580120CCB2	CCB	12/08/23 15:19				U	mg/L		-0.0006	0.0006			
WG580120CCV3	CCV	12/08/23 15:33	MS231205-1	.1002		.09405	mg/L	94	90	110			
WG580120CCB3	CCB	12/08/23 15:35				U	mg/L		-0.0006	0.0006			

Beryllium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579194													
WG579194ICV	ICV	11/21/23 19:05	II231107-1	2		1.945	mg/L	97	95	105			
WG579194ICB	ICB	11/21/23 19:11				U	mg/L		-0.03	0.03			
WG579194PQV	PQV	11/21/23 19:14	II231121-4	.05005		.056	mg/L	112	70	130			
WG579194SIC	SIC	11/21/23 19:17	II231121-5	.1001		.103	mg/L	103	80	120			
WG579194LFB	LFB	11/21/23 19:23	II231120-3	.5005		.508	mg/L	101	85	115			
L84579-01AS	AS	11/21/23 19:29	II231120-3	.5005	U	.508	mg/L	101	85	115			
L84579-01ASD	ASD	11/21/23 19:32	II231120-3	.5005	U	.507	mg/L	101	85	115	0	20	
WG579194CCV1	CCV	11/21/23 19:54	II231012-1	1		.971	mg/L	97	90	110			
WG579194CCB1	CCB	11/21/23 19:57				U	mg/L		-0.03	0.03			
WG579194CCV2	CCV	11/21/23 20:32	II231012-1	1		.97	mg/L	97	90	110			
WG579194CCB2	CCB	11/21/23 20:35				U	mg/L		-0.03	0.03			
WG579194CCV3	CCV	11/21/23 20:53	II231012-1	1		.978	mg/L	98	90	110			
WG579194CCB3	CCB	11/21/23 20:56				U	mg/L		-0.03	0.03			
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	2		1.97	mg/L	99	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.03	0.03			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	.05005		.054	mg/L	108	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	.1001		.101	mg/L	101	80	120			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	.5005		.502	mg/L	100	85	115			
L84577-06AS	AS	11/22/23 21:27	II231120-3	.5005	U	.49	mg/L	98	85	115			
L84577-06ASD	ASD	11/22/23 21:30	II231120-3	.5005	U	.489	mg/L	98	85	115	0	20	
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	1		.994	mg/L	99	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.03	0.03			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	1		.983	mg/L	98	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-0.03	0.03			
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	1		1.002	mg/L	100	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L84579***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579194													
WG579194ICV	ICV	11/21/23 19:05	II231107-1	2		2.065	mg/L	103	95	105			
WG579194ICB	ICB	11/21/23 19:11				U	mg/L		-0.09	0.09			
WG579194PQV	PQV	11/21/23 19:14	II231121-4	.1001		.114	mg/L	114	70	130			
WG579194SIC	SIC	11/21/23 19:17	II231121-5	.1001		.109	mg/L	109	80	120			
WG579194LFB	LFB	11/21/23 19:23	II231120-3	.5005		.524	mg/L	105	85	115			
L84579-01AS	AS	11/21/23 19:29	II231120-3	.5005	1.23	1.685	mg/L	91	85	115			
L84579-01ASD	ASD	11/21/23 19:32	II231120-3	.5005	1.23	1.692	mg/L	92	85	115	0	20	
WG579194CCV1	CCV	11/21/23 19:54	II231012-1	1		1.018	mg/L	102	90	110			
WG579194CCB1	CCB	11/21/23 19:57				U	mg/L		-0.09	0.09			
WG579194CCV2	CCV	11/21/23 20:32	II231012-1	1		1.029	mg/L	103	90	110			
WG579194CCB2	CCB	11/21/23 20:35				U	mg/L		-0.09	0.09			
WG579194CCV3	CCV	11/21/23 20:53	II231012-1	1		1.032	mg/L	103	90	110			
WG579194CCB3	CCB	11/21/23 20:56				U	mg/L		-0.09	0.09			
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	2		2.062	mg/L	103	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.09	0.09			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	.1001		.103	mg/L	103	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	.1001		.097	mg/L	97	80	120			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	.5005		.508	mg/L	101	85	115			
L84577-06AS	AS	11/22/23 21:27	II231120-3	.5005	U	.525	mg/L	105	85	115			
L84577-06ASD	ASD	11/22/23 21:30	II231120-3	.5005	U	.517	mg/L	103	85	115	2	20	
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	1		1.038	mg/L	104	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.09	0.09			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	1		1.027	mg/L	103	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-0.09	0.09			
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	1		1.055	mg/L	106	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-0.09	0.09			

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG580905													
WG580905ICV	ICV	12/21/23 15:38	MS231205-4	.05		.049354	mg/L	99	90	110			
WG580905ICB	ICB	12/21/23 15:40				U	mg/L		-0.00011	0.00011			
WG580905LFB	LFB	12/21/23 15:42	MS231108-4	.05005		.049048	mg/L	98	85	115			
WG580905CCV1	CCV	12/21/23 16:06	MS231205-1	.1001		.099772	mg/L	100	90	110			
WG580905CCB1	CCB	12/21/23 16:08				U	mg/L		-0.00015	0.00015			
L84579-02AS	AS	12/21/23 16:22	MS231108-4	.1001	U	.095771	mg/L	96	70	130			
L84579-02ASD	ASD	12/21/23 16:25	MS231108-4	.1001	U	.097965	mg/L	98	70	130	2	20	
WG580905CCV2	CCV	12/21/23 16:34	MS231205-1	.1001		.099127	mg/L	99	90	110			
WG580905CCB2	CCB	12/21/23 16:36				U	mg/L		-0.00015	0.00015			
WG580905CCV3	CCV	12/21/23 16:50	MS231205-1	.1001		.100037	mg/L	100	90	110			
WG580905CCB3	CCB	12/21/23 16:53				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: ***L84579***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579194													
WG579194ICV	ICV	11/21/23 19:05	II231107-1	100		98.18	mg/L	98	95	105			
WG579194ICB	ICB	11/21/23 19:11				U	mg/L		-0.3	0.3			
WG579194PQV	PQV	11/21/23 19:14	II231121-4	.4999		.49	mg/L	98	70	130			
WG579194SIC	SIC	11/21/23 19:17	II231121-5	201.4999		196.8	mg/L	98	1	200			
WG579194LFB	LFB	11/21/23 19:23	II231120-3	67.98753		68.19	mg/L	100	85	115			
L84579-01AS	AS	11/21/23 19:29	II231120-3	67.98753	16.3	83.79	mg/L	99	85	115			
L84579-01ASD	ASD	11/21/23 19:32	II231120-3	67.98753	16.3	83.84	mg/L	99	85	115	0	20	
WG579194CCV1	CCV	11/21/23 19:54	II231012-1	50		48.47	mg/L	97	90	110			
WG579194CCB1	CCB	11/21/23 19:57				U	mg/L		-0.3	0.3			
WG579194CCV2	CCV	11/21/23 20:32	II231012-1	50		48.89	mg/L	98	90	110			
WG579194CCB2	CCB	11/21/23 20:35				U	mg/L		-0.3	0.3			
WG579194CCV3	CCV	11/21/23 20:53	II231012-1	50		49.26	mg/L	99	90	110			
WG579194CCB3	CCB	11/21/23 20:56				U	mg/L		-0.3	0.3			
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	100		98.23	mg/L	98	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.3	0.3			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	.4999		.51	mg/L	102	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	201.4999		197	mg/L	98	1	200			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	67.98753		66.82	mg/L	98	85	115			
L84577-06AS	AS	11/22/23 21:27	II231120-3	67.98753	422	461.2	mg/L	58	85	115			M3
L84577-06ASD	ASD	11/22/23 21:30	II231120-3	67.98753	422	459.3	mg/L	55	85	115	0	20	M3
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	50		49.57	mg/L	99	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.3	0.3			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	50		49.68	mg/L	99	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-0.3	0.3			
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	50		50.26	mg/L	101	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-0.3	0.3			

GCC

ACZ Project ID: ***L84579***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Chloride SM4500Cl-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579907													
WG579907ICV1	ICV	12/08/23 11:21	WI231129-1	54.945		53.75	mg/L	98	90	110			
WG579907ICB1	ICB	12/08/23 11:21				U	mg/L						
WG579907ICV2	ICV	12/08/23 11:22	WI231207-5	8.008		7.61	mg/L	95	90	110			
WG579907ICV3	ICV	12/08/23 11:22	WI231207-5	8.008		7.31	mg/L	91	90	110			
WG579907ICV4	ICV	12/08/23 11:23	WI231207-5	8.008		7.66	mg/L	96	90	110			
WG579907ICV5	ICV	12/08/23 11:23	WI231207-5	8.008		7.62	mg/L	95	90	110			
WG580126													
WG580126ICV	ICV	12/08/23 11:48	WI231129-1	54.945		53.17	mg/L	97	90	110			
WG580126ICB	ICB	12/08/23 11:48				U	mg/L						
WG580126LFB	LFB	12/08/23 11:49	WI230629-2	30.03		30.03	mg/L	100	90	110			
WG580126CCV3	CCV	12/08/23 12:03	WI231113-5	50.05		49.81	mg/L	100	90	110			
WG580126CCB3	CCB	12/08/23 12:04				U	mg/L						
WG580126CCV9	CCV	12/08/23 13:08	WI231113-5	50.05		49.86	mg/L	100	90	110			
WG580126CCB9	CCB	12/08/23 13:09				U	mg/L						
WG580126CCV1	CCV	12/08/23 13:12	WI231113-5	50.05		49.36	mg/L	99	90	110			
WG580126CCB1	CCB	12/08/23 13:12				U	mg/L						
L84605-01AS	AS	12/08/23 13:13	5XCL	30	99.7	119.23	mg/L	65	90	110			M2
L84605-02DUP	DUP	12/08/23 13:14			1030	1072.98	mg/L				4	20	
WG580126CCV2	CCV	12/08/23 13:18	WI231113-5	50.05		51.9	mg/L	104	90	110			
WG580126CCB2	CCB	12/08/23 13:18				U	mg/L						
WG580126CCV11	CCV	12/08/23 13:55	WI231113-5	50.05		50.51	mg/L	101	90	110			
WG580126CCB11	CCB	12/08/23 13:55				U	mg/L						
WG580126CCV12	CCV	12/08/23 13:59	WI231113-5	50.05		50.08	mg/L	100	90	110			
WG580126CCB12	CCB	12/08/23 13:59				U	mg/L						

GCC

ACZ Project ID: ***L84579***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Chromium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579194													
WG579194ICV	ICV	11/21/23 19:05	II231107-1	2		1.969	mg/L	98	95	105			
WG579194ICB	ICB	11/21/23 19:11				U	mg/L		-0.06	0.06			
WG579194PQV	PQV	11/21/23 19:14	II231121-4	.05005		.053	mg/L	106	70	130			
WG579194SIC	SIC	11/21/23 19:17	II231121-5	.1001		.086	mg/L	86	80	120			
WG579194LFB	LFB	11/21/23 19:23	II231120-3	.5005		.508	mg/L	101	85	115			
L84579-01AS	AS	11/21/23 19:29	II231120-3	.5005	U	.502	mg/L	100	85	115			
L84579-01ASD	ASD	11/21/23 19:32	II231120-3	.5005	U	.508	mg/L	101	85	115	1	20	
WG579194CCV1	CCV	11/21/23 19:54	II231012-1	1		.982	mg/L	98	90	110			
WG579194CCB1	CCB	11/21/23 19:57				U	mg/L		-0.06	0.06			
WG579194CCV2	CCV	11/21/23 20:32	II231012-1	1		.983	mg/L	98	90	110			
WG579194CCB2	CCB	11/21/23 20:35				U	mg/L		-0.06	0.06			
WG579194CCV3	CCV	11/21/23 20:53	II231012-1	1		.988	mg/L	99	90	110			
WG579194CCB3	CCB	11/21/23 20:56				U	mg/L		-0.06	0.06			
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	2		1.979	mg/L	99	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.06	0.06			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	.05005		.05	mg/L	100	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	.1001		.098	mg/L	98	80	120			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	.5005		.501	mg/L	100	85	115			
L84577-06AS	AS	11/22/23 21:27	II231120-3	.5005	U	.491	mg/L	98	85	115			
L84577-06ASD	ASD	11/22/23 21:30	II231120-3	.5005	U	.492	mg/L	98	85	115	0	20	
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	1		1.003	mg/L	100	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.06	0.06			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	1		.999	mg/L	100	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-0.06	0.06			
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	1		1.028	mg/L	103	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-0.06	0.06			

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG580905													
WG580905ICV	ICV	12/21/23 15:38	MS231205-4	.05		.052703	mg/L	105	90	110			
WG580905ICB	ICB	12/21/23 15:40				U	mg/L		-0.00011	0.00011			
WG580905LFB	LFB	12/21/23 15:42	MS231108-4	.05005		.053226	mg/L	106	85	115			
WG580905CCV1	CCV	12/21/23 16:06	MS231205-1	.1001		.098613	mg/L	99	90	110			
WG580905CCB1	CCB	12/21/23 16:08				U	mg/L		-0.00015	0.00015			
L84579-02AS	AS	12/21/23 16:22	MS231108-4	.1001	U	.095588	mg/L	95	70	130			
L84579-02ASD	ASD	12/21/23 16:25	MS231108-4	.1001	U	.097171	mg/L	97	70	130	2	20	
WG580905CCV2	CCV	12/21/23 16:34	MS231205-1	.1001		.102423	mg/L	102	90	110			
WG580905CCB2	CCB	12/21/23 16:36				U	mg/L		-0.00015	0.00015			
WG580905CCV3	CCV	12/21/23 16:50	MS231205-1	.1001		.10423	mg/L	104	90	110			
WG580905CCB3	CCB	12/21/23 16:53				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: ***L84579***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Copper, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579194													
WG579194ICV	ICV	11/21/23 19:05	II231107-1	2		1.936	mg/L	97	95	105			
WG579194ICB	ICB	11/21/23 19:11				U	mg/L		-0.03	0.03			
WG579194PQV	PQV	11/21/23 19:14	II231121-4	.05005		.052	mg/L	104	70	130			
WG579194SIC	SIC	11/21/23 19:17	II231121-5	.1001		.1	mg/L	100	80	120			
WG579194LFB	LFB	11/21/23 19:23	II231120-3	.5005		.506	mg/L	101	85	115			
L84579-01AS	AS	11/21/23 19:29	II231120-3	.5005	U	.511	mg/L	102	85	115			
L84579-01ASD	ASD	11/21/23 19:32	II231120-3	.5005	U	.513	mg/L	102	85	115	0	20	
WG579194CCV1	CCV	11/21/23 19:54	II231012-1	1		.957	mg/L	96	90	110			
WG579194CCB1	CCB	11/21/23 19:57				U	mg/L		-0.03	0.03			
WG579194CCV2	CCV	11/21/23 20:32	II231012-1	1		.959	mg/L	96	90	110			
WG579194CCB2	CCB	11/21/23 20:35				U	mg/L		-0.03	0.03			
WG579194CCV3	CCV	11/21/23 20:53	II231012-1	1		.963	mg/L	96	90	110			
WG579194CCB3	CCB	11/21/23 20:56				U	mg/L		-0.03	0.03			
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	2		1.952	mg/L	98	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.03	0.03			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	.05005		.053	mg/L	106	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	.1001		.1	mg/L	100	80	120			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	.5005		.501	mg/L	100	85	115			
L84577-06AS	AS	11/22/23 21:27	II231120-3	.5005	U	.558	mg/L	111	85	115			
L84577-06ASD	ASD	11/22/23 21:30	II231120-3	.5005	U	.527	mg/L	105	85	115	6	20	
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	1		.984	mg/L	98	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.03	0.03			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	1		.972	mg/L	97	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-0.03	0.03			
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	1		.993	mg/L	99	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-0.03	0.03			

Fluoride SM4500F-C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579939													
WG579939ICV	ICV	12/07/23 11:29	WC231206-1	2.002		2.12	mg/L	106	90	110			
WG579939ICB	ICB	12/07/23 11:34				U	mg/L		-0.3	0.3			
WG579939PQV	PQV	12/07/23 11:37	WC231121-7	.35035		.39	mg/L	111	70	130			
WG579939LFB1	LFB	12/07/23 11:42	WC230825-1	5.005		5.37	mg/L	107	90	110			
L84579-01AS	AS	12/07/23 11:51	WC230825-1	5.005	4.01	8.86	mg/L	97	90	110			
L84579-01ASD	ASD	12/07/23 11:55	WC230825-1	5.005	4.01	8.7	mg/L	94	90	110	2	20	
WG579939CCV1	CCV	12/07/23 12:28	WC231206-1	2.002		2.074	mg/L	104	90	110			
WG579939CCB1	CCB	12/07/23 12:36				U	mg/L		-0.3	0.3			
WG579939CCB2	CCB	12/07/23 13:49				U	mg/L		-0.3	0.3			
WG579939CCB3	CCB	12/07/23 14:55				U	mg/L		-0.3	0.3			
WG579939CCB4	CCB	12/07/23 16:08				U	mg/L		-0.3	0.3			
WG579939CCV5	CCV	12/07/23 17:09	WC231206-1	2.002		2.143	mg/L	107	90	110			
WG579939CCB5	CCB	12/07/23 17:17				U	mg/L		-0.3	0.3			
WG579939CCB6	CCB	12/07/23 17:38				U	mg/L		-0.3	0.3			

GCC

ACZ Project ID: ***L84579***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Iron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579194													
WG579194ICV	ICV	11/21/23 19:05	II231107-1	2		1.942	mg/L	97	95	105			
WG579194ICB	ICB	11/21/23 19:11				U	mg/L		-0.18	0.18			
WG579194PQV	PQV	11/21/23 19:14	II231121-4	.149715		.158	mg/L	106	70	130			
WG579194SIC	SIC	11/21/23 19:17	II231121-5	200.749715		190.5	mg/L	95	1	200			
WG579194LFB	LFB	11/21/23 19:23	II231120-3	.9981		1.026	mg/L	103	85	115			
L84579-01AS	AS	11/21/23 19:29	II231120-3	.9981	.532	1.519	mg/L	99	85	115			
L84579-01ASD	ASD	11/21/23 19:32	II231120-3	.9981	.532	1.518	mg/L	99	85	115	0	20	
WG579194CCV1	CCV	11/21/23 19:54	II231012-1	1		.972	mg/L	97	90	110			
WG579194CCB1	CCB	11/21/23 19:57				U	mg/L		-0.18	0.18			
WG579194CCV2	CCV	11/21/23 20:32	II231012-1	1		.976	mg/L	98	90	110			
WG579194CCB2	CCB	11/21/23 20:35				U	mg/L		-0.18	0.18			
WG579194CCV3	CCV	11/21/23 20:53	II231012-1	1		1.02	mg/L	102	90	110			
WG579194CCB3	CCB	11/21/23 20:56				U	mg/L		-0.18	0.18			
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	2		1.948	mg/L	97	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.18	0.18			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	.149715		.166	mg/L	111	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	200.749715		191.2	mg/L	95	1	200			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	.9981		1.02	mg/L	102	85	115			
L84577-06AS	AS	11/22/23 21:27	II231120-3	.9981	U	1.01	mg/L	101	85	115			
L84577-06ASD	ASD	11/22/23 21:30	II231120-3	.9981	U	1.007	mg/L	101	85	115	0	20	
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	1		1.001	mg/L	100	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.18	0.18			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	1		.99	mg/L	99	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-0.18	0.18			
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	1		1.024	mg/L	102	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-0.18	0.18			

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG580120													
WG580120ICV	ICV	12/08/23 14:21	MS231205-4	.05		.04816	mg/L	96	90	110			
WG580120ICB	ICB	12/08/23 14:23				.0001	mg/L		-0.00022	0.00022			
WG580120LFB	LFB	12/08/23 14:26	MS231108-4	.05005		.05105	mg/L	102	85	115			
WG580120CCV1	CCV	12/08/23 14:49	MS231205-1	.25025		.24737	mg/L	99	90	110			
WG580120CCB1	CCB	12/08/23 14:51				U	mg/L		-0.0003	0.0003			
L84564-04AS	AS	12/08/23 15:03	MS231108-4	.05005	U	.05265	mg/L	105	70	130			
L84564-04ASD	ASD	12/08/23 15:05	MS231108-4	.05005	U	.05238	mg/L	105	70	130	1	20	
WG580120CCV2	CCV	12/08/23 15:16	MS231205-1	.25025		.24178	mg/L	97	90	110			
WG580120CCB2	CCB	12/08/23 15:19				U	mg/L		-0.0003	0.0003			
WG580120CCV3	CCV	12/08/23 15:33	MS231205-1	.25025		.23837	mg/L	95	90	110			
WG580120CCB3	CCB	12/08/23 15:35				U	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: ***L84579***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579194													
WG579194ICV	ICV	11/21/23 19:05	II231107-1	2		2.0222	mg/L	101	95	105			
WG579194ICB	ICB	11/21/23 19:11				U	mg/L		-0.024	0.024			
WG579194PQV	PQV	11/21/23 19:14	II231121-4	.04012		.0445	mg/L	111	70	130			
WG579194SIC	SIC	11/21/23 19:17	II231121-5	.1003		.112	mg/L	112	80	120			
WG579194LFB	LFB	11/21/23 19:23	II231120-3	1.003		1.033	mg/L	103	85	115			
L84579-01AS	AS	11/21/23 19:29	II231120-3	1.003	.557	1.853	mg/L	129	85	115			M1
L84579-01ASD	ASD	11/21/23 19:32	II231120-3	1.003	.557	1.86	mg/L	130	85	115	0	20	M1
WG579194CCV1	CCV	11/21/23 19:54	II231012-1	1		.9858	mg/L	99	90	110			
WG579194CCB1	CCB	11/21/23 19:57				U	mg/L		-0.024	0.024			
WG579194CCV2	CCV	11/21/23 20:32	II231012-1	1		.9844	mg/L	98	90	110			
WG579194CCB2	CCB	11/21/23 20:35				U	mg/L		-0.024	0.024			
WG579194CCV3	CCV	11/21/23 20:53	II231012-1	1		.9892	mg/L	99	90	110			
WG579194CCB3	CCB	11/21/23 20:56				U	mg/L		-0.024	0.024			
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	2		2.032	mg/L	102	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.024	0.024			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	.04012		.0435	mg/L	108	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	.1003		.1117	mg/L	111	80	120			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	1.003		1.018	mg/L	101	85	115			
L84577-06AS	AS	11/22/23 21:27	II231120-3	1.003	.159	1.201	mg/L	104	85	115			
L84577-06ASD	ASD	11/22/23 21:30	II231120-3	1.003	.159	1.209	mg/L	105	85	115	1	20	
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	1		1.007	mg/L	101	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.024	0.024			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	1		.9886	mg/L	99	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-0.024	0.024			
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	1		1.013	mg/L	101	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-0.024	0.024			

GCC

ACZ Project ID: ***L84579***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579194													
WG579194ICV	ICV	11/21/23 19:05	II231107-1	100		97.52	mg/L	98	95	105			
WG579194ICB	ICB	11/21/23 19:11				U	mg/L		-0.6	0.6			
WG579194PQV	PQV	11/21/23 19:14	II231121-4	1.006		1.04	mg/L	103	70	130			
WG579194SIC	SIC	11/21/23 19:17	II231121-5	202.206		199.2	mg/L	99	1	200			
WG579194LFB	LFB	11/21/23 19:23	II231120-3	49.81683		49.6	mg/L	100	85	115			
L84579-01AS	AS	11/21/23 19:29	II231120-3	49.81683	5.39	54.84	mg/L	99	85	115			
L84579-01ASD	ASD	11/21/23 19:32	II231120-3	49.81683	5.39	54.67	mg/L	99	85	115	0	20	
WG579194CCV1	CCV	11/21/23 19:54	II231012-1	50		48.28	mg/L	97	90	110			
WG579194CCB1	CCB	11/21/23 19:57				U	mg/L		-0.6	0.6			
WG579194CCV2	CCV	11/21/23 20:32	II231012-1	50		48.43	mg/L	97	90	110			
WG579194CCB2	CCB	11/21/23 20:35				U	mg/L		-0.6	0.6			
WG579194CCV3	CCV	11/21/23 20:53	II231012-1	50		49.27	mg/L	99	90	110			
WG579194CCB3	CCB	11/21/23 20:56				U	mg/L		-0.6	0.6			
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	100		97.57	mg/L	98	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.6	0.6			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	1.006		1.07	mg/L	106	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	202.206		200	mg/L	99	1	200			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	49.81683		48.71	mg/L	98	85	115			
L84577-06AS	AS	11/22/23 21:27	II231120-3	49.81683	31.8	78.86	mg/L	94	85	115			
L84577-06ASD	ASD	11/22/23 21:30	II231120-3	49.81683	31.8	78.28	mg/L	93	85	115	1	20	
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	50		49.41	mg/L	99	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.6	0.6			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	50		49.5	mg/L	99	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-0.6	0.6			
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	50		50.16	mg/L	100	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L84579***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Manganese, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579194													
WG579194ICV	ICV	11/21/23 19:05	II231107-1	2		1.93	mg/L	97	95	105			
WG579194ICB	ICB	11/21/23 19:11				U	mg/L		-0.03	0.03			
WG579194PQV	PQV	11/21/23 19:14	II231121-4	.0502		.052	mg/L	104	70	130			
WG579194SIC	SIC	11/21/23 19:17	II231121-5	50.1502		47.15	mg/L	94	1	200			
WG579194LFB	LFB	11/21/23 19:23	II231120-3	.501		.51	mg/L	102	85	115			
L84579-01AS	AS	11/21/23 19:29	II231120-3	.501	.025	.529	mg/L	101	85	115			
L84579-01ASD	ASD	11/21/23 19:32	II231120-3	.501	.025	.533	mg/L	101	85	115	1	20	
WG579194CCV1	CCV	11/21/23 19:54	II231012-1	1		.966	mg/L	97	90	110			
WG579194CCB1	CCB	11/21/23 19:57				U	mg/L		-0.03	0.03			
WG579194CCV2	CCV	11/21/23 20:32	II231012-1	1		.968	mg/L	97	90	110			
WG579194CCB2	CCB	11/21/23 20:35				U	mg/L		-0.03	0.03			
WG579194CCV3	CCV	11/21/23 20:53	II231012-1	1		.988	mg/L	99	90	110			
WG579194CCB3	CCB	11/21/23 20:56				U	mg/L		-0.03	0.03			
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	2		1.944	mg/L	97	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.03	0.03			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	.0502		.051	mg/L	102	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	50.1502		47.34	mg/L	94	1	200			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	.501		.505	mg/L	101	85	115			
L84577-06AS	AS	11/22/23 21:27	II231120-3	.501	.028	.527	mg/L	100	85	115			
L84577-06ASD	ASD	11/22/23 21:30	II231120-3	.501	.028	.524	mg/L	99	85	115	1	20	
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	1		.992	mg/L	99	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.03	0.03			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	1		.988	mg/L	99	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-0.03	0.03			
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	1		1.008	mg/L	101	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-0.03	0.03			

Mercury, dissolved M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579437													
WG579437ICV	ICV	11/29/23 14:36	HG231106-3	.005		.00512	mg/L	102	95	105			
WG579437ICB	ICB	11/29/23 14:37				U	mg/L		-0.0002	0.0002			
WG579437PQV	PQV	11/29/23 14:38	HG231106-5	.001001		.00099	mg/L	99	70	130			
WG579437LRB	LRB	11/29/23 14:39				U	mg/L		-0.00044	0.00044			
WG579437LFB	LFB	11/29/23 14:40	HG231106-6	.002002		.00188	mg/L	94	85	115			
WG579437CCV1	CCV	11/29/23 14:47	HG231106-3	.005		.00552	mg/L	110	90	110			
WG579437CCB1	CCB	11/29/23 14:48				U	mg/L		-0.0002	0.0002			
WG579437CCV2	CCV	11/29/23 14:59	HG231106-3	.005		.00542	mg/L	108	90	110			
WG579437CCB2	CCB	11/29/23 15:00				U	mg/L		-0.0002	0.0002			
L84579-03LFM	LFM	11/29/23 15:03	HG231106-6	.002002	U	.00196	mg/L	98	85	115			
L84579-03LFMD	LFMD	11/29/23 15:04	HG231106-6	.002002	U	.00198	mg/L	99	85	115	1	20	
WG579437CCV3	CCV	11/29/23 15:07	HG231106-3	.005		.00537	mg/L	107	90	110			
WG579437CCB3	CCB	11/29/23 15:08				U	mg/L		-0.0002	0.0002			

GCC

ACZ Project ID: ***L84579***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nickel, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579194													
WG579194ICV	ICV	11/21/23 19:05	II231107-1	2.002		1.9962	mg/L	100	95	105			
WG579194ICB	ICB	11/21/23 19:11				U	mg/L		-0.024	0.024			
WG579194PQV	PQV	11/21/23 19:14	II231121-4	.04		.0405	mg/L	101	70	130			
WG579194SIC	SIC	11/21/23 19:17	II231121-5	.1		.0971	mg/L	97	80	120			
WG579194LFB	LFB	11/21/23 19:23	II231120-3	.5		.5084	mg/L	102	85	115			
L84579-01AS	AS	11/21/23 19:29	II231120-3	.5	U	.4924	mg/L	98	85	115			
L84579-01ASD	ASD	11/21/23 19:32	II231120-3	.5	U	.5063	mg/L	101	85	115	3	20	
WG579194CCV1	CCV	11/21/23 19:54	II231012-1	1.001		.9808	mg/L	98	90	110			
WG579194CCB1	CCB	11/21/23 19:57				U	mg/L		-0.024	0.024			
WG579194CCV2	CCV	11/21/23 20:32	II231012-1	1.001		.9983	mg/L	100	90	110			
WG579194CCB2	CCB	11/21/23 20:35				U	mg/L		-0.024	0.024			
WG579194CCV3	CCV	11/21/23 20:53	II231012-1	1.001		1.007	mg/L	101	90	110			
WG579194CCB3	CCB	11/21/23 20:56				U	mg/L		-0.024	0.024			
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	2.002		1.9882	mg/L	99	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.024	0.024			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	.04		.0431	mg/L	108	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	.1		.0958	mg/L	96	80	120			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	.5		.4958	mg/L	99	85	115			
L84577-06AS	AS	11/22/23 21:27	II231120-3	.5	U	.4849	mg/L	97	85	115			
L84577-06ASD	ASD	11/22/23 21:30	II231120-3	.5	U	.4894	mg/L	98	85	115	1	20	
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	1.001		1.016	mg/L	101	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.024	0.024			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	1.001		1.01	mg/L	101	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-0.024	0.024			
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	1.001		1.042	mg/L	104	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-0.024	0.024			

Nitrate/Nitrite as N M353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG578833													
WG578833ICV	ICV	11/16/23 0:33	WI231003-5	2.416		2.459	mg/L	102	90	110			
WG578833ICB	ICB	11/16/23 0:34				U	mg/L		-0.02	0.02			
WG578833LFB	LFB	11/16/23 0:38	WI230829-3	2		2.018	mg/L	101	90	110			
WG578833CCV1	CCV	11/16/23 0:48	WI231115-5	2		2.027	mg/L	101	90	110			
WG578833CCB1	CCB	11/16/23 0:51				U	mg/L		-0.02	0.02			
L84559-11DUP	DUP	11/16/23 1:03			2.79	2.778	mg/L				0	20	
WG578833CCV2	CCV	11/16/23 1:05	WI231115-5	2		2.02	mg/L	101	90	110			
WG578833CCB2	CCB	11/16/23 1:08				U	mg/L		-0.02	0.02			
WG578833CCV3	CCV	11/16/23 1:20	WI231115-5	2		2.042	mg/L	102	90	110			
WG578833CCB3	CCB	11/16/23 1:24				U	mg/L		-0.02	0.02			
WG578833CCV4	CCV	11/16/23 1:36	WI231115-5	2		1.961	mg/L	98	90	110			
WG578833CCB4	CCB	11/16/23 1:40				U	mg/L		-0.02	0.02			
WG578833CCV5	CCV	11/16/23 1:53	WI231115-5	2		1.954	mg/L	98	90	110			
WG578833CCB5	CCB	11/16/23 1:57				U	mg/L		-0.02	0.02			
L84559-10AS	AS	11/16/23 2:01	WI230829-3	30	15.7	45.618	mg/L	100	90	110			
WG578833CCV6	CCV	11/16/23 2:05	WI231115-5	2		1.948	mg/L	97	90	110			
WG578833CCB6	CCB	11/16/23 2:08				U	mg/L		-0.02	0.02			

GCC

ACZ Project ID: ***L84579***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nitrite as N M353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG578833													
WG578833ICV	ICV	11/16/23 0:33	WI231003-5	.608		.616	mg/L	101	90	110			
WG578833ICB	ICB	11/16/23 0:34				U	mg/L		-0.01	0.01			
WG578833LFB	LFB	11/16/23 0:38	WI230829-3	1		1.027	mg/L	103	90	110			
WG578833CCV1	CCV	11/16/23 0:48	WI231115-5	1		1.006	mg/L	101	90	110			
WG578833CCB1	CCB	11/16/23 0:51				U	mg/L		-0.01	0.01			
L84559-10AS	AS	11/16/23 1:00	WI230829-3	1	U	1.066	mg/L	107	90	110			
L84559-11DUP	DUP	11/16/23 1:03			.248	.246	mg/L				1	20	
WG578833CCV2	CCV	11/16/23 1:05	WI231115-5	1		1.012	mg/L	101	90	110			
WG578833CCB2	CCB	11/16/23 1:08				U	mg/L		-0.01	0.01			
WG578833CCV3	CCV	11/16/23 1:20	WI231115-5	1		1.011	mg/L	101	90	110			
WG578833CCB3	CCB	11/16/23 1:24				U	mg/L		-0.01	0.01			

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579194													
WG579194ICV	ICV	11/21/23 19:05	II231107-1	20		19.55	mg/L	98	95	105			
WG579194ICB	ICB	11/21/23 19:11				U	mg/L		-1.5	1.5			
WG579194PQV	PQV	11/21/23 19:14	II231121-4	1.004		1.05	mg/L	105	70	130			
WG579194SIC	SIC	11/21/23 19:17	II231121-5	1.004		1.05	mg/L	105	80	120			
WG579194LFB	LFB	11/21/23 19:23	II231120-3	99.97581		99.01	mg/L	99	85	115			
L84579-01AS	AS	11/21/23 19:29	II231120-3	99.97581	5.7	113.8	mg/L	108	85	115			
L84579-01ASD	ASD	11/21/23 19:32	II231120-3	99.97581	5.7	113.4	mg/L	108	85	115	0	20	
WG579194CCV1	CCV	11/21/23 19:54	II231012-1	10		9.83	mg/L	98	90	110			
WG579194CCB1	CCB	11/21/23 19:57				U	mg/L		-1.5	1.5			
WG579194CCV2	CCV	11/21/23 20:32	II231012-1	10		9.78	mg/L	98	90	110			
WG579194CCB2	CCB	11/21/23 20:35				U	mg/L		-1.5	1.5			
WG579194CCV3	CCV	11/21/23 20:53	II231012-1	10		9.78	mg/L	98	90	110			
WG579194CCB3	CCB	11/21/23 20:56				U	mg/L		-1.5	1.5			
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	20		19.62	mg/L	98	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-1.5	1.5			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	1.004		1.09	mg/L	109	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	1.004		1.07	mg/L	107	80	120			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	99.97581		96.9	mg/L	97	85	115			
L84577-06AS	AS	11/22/23 21:27	II231120-3	99.97581	55.9	153.2	mg/L	97	85	115			
L84577-06ASD	ASD	11/22/23 21:30	II231120-3	99.97581	55.9	152.5	mg/L	97	85	115	0	20	
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	10		10.02	mg/L	100	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-1.5	1.5			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	10		10.1	mg/L	101	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-1.5	1.5			
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	10		10.1	mg/L	101	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-1.5	1.5			

GCC

ACZ Project ID: ***L84579***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579106													
WG579106PBW	PBW	11/20/23 16:30				U	mg/L		-20	20			
WG579106LCSW	LCSW	11/20/23 16:31	PCN625809	1000		986	mg/L	99	80	120			
L84579-02DUP	DUP	11/20/23 17:14			2640	2648	mg/L				0	10	
WG579121													
WG579121PBW	PBW	11/21/23 8:45				U	mg/L		-20	20			
WG579121LCSW	LCSW	11/21/23 8:47	PCN626025	1000		968	mg/L	97	80	120			
L84579-04DUP	DUP	11/21/23 9:03			5650	5670	mg/L				0	10	
L84603-02DUP	DUP	11/21/23 9:45			620	612	mg/L				1	10	
WG579850													
WG579850PBW	PBW	12/04/23 17:25				U	mg/L		-20	20			
WG579850LCSW	LCSW	12/04/23 17:27	PCN626028	1000		984	mg/L	98	80	120			
L84579-05DUP	DUP	12/04/23 17:51			5200	5320	mg/L				2	10	

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG580120													
WG580120ICV	ICV	12/08/23 14:21	MS231205-4	.05		.0482	mg/L	96	90	110			
WG580120ICB	ICB	12/08/23 14:23				.00016	mg/L		-0.00022	0.00022			
WG580120LFB	LFB	12/08/23 14:26	MS231108-4	.05005		.05211	mg/L	104	85	115			
WG580120CCV1	CCV	12/08/23 14:49	MS231205-1	.1001		.09719	mg/L	97	90	110			
WG580120CCB1	CCB	12/08/23 14:51				.00019	mg/L		-0.0003	0.0003			
L84564-04AS	AS	12/08/23 15:03	MS231108-4	.05005	U	.05539	mg/L	111	70	130			
L84564-04ASD	ASD	12/08/23 15:05	MS231108-4	.05005	U	.05592	mg/L	112	70	130	1	20	
WG580120CCV2	CCV	12/08/23 15:16	MS231205-1	.1001		.09652	mg/L	96	90	110			
WG580120CCB2	CCB	12/08/23 15:19				.00017	mg/L		-0.0003	0.0003			
WG580120CCV3	CCV	12/08/23 15:33	MS231205-1	.1001		.09375	mg/L	94	90	110			
WG580120CCB3	CCB	12/08/23 15:35				.00018	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: ***L84579***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579194													
WG579194ICV	ICV	11/21/23 19:05	II231107-1	100		98.65	mg/L	99	95	105			
WG579194ICB	ICB	11/21/23 19:11				U	mg/L		-0.6	0.6			
WG579194PQV	PQV	11/21/23 19:14	II231121-4	1.0055		.98	mg/L	97	70	130			
WG579194SIC	SIC	11/21/23 19:17	II231121-5	1.0055		1.01	mg/L	100	80	120			
WG579194LFB	LFB	11/21/23 19:23	II231120-3	100.1305		99.12	mg/L	99	85	115			
L84579-01AS	AS	11/21/23 19:29	II231120-3	100.1305	1390	1433	mg/L	43	85	115			M3
L84579-01ASD	ASD	11/21/23 19:32	II231120-3	100.1305	1390	1415	mg/L	25	85	115	1	20	M3
WG579194CCV1	CCV	11/21/23 19:54	II231012-1	50		49.53	mg/L	99	90	110			
WG579194CCB1	CCB	11/21/23 19:57				.36	mg/L		-0.6	0.6			
WG579194CCV2	CCV	11/21/23 20:32	II231012-1	50		49.14	mg/L	98	90	110			
WG579194CCB2	CCB	11/21/23 20:35				.4	mg/L		-0.6	0.6			
WG579194CCV3	CCV	11/21/23 20:53	II231012-1	50		49.27	mg/L	99	90	110			
WG579194CCB3	CCB	11/21/23 20:56				U	mg/L		-0.6	0.6			
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	100		99.74	mg/L	100	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.6	0.6			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	1.0055		.92	mg/L	91	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	1.0055		.93	mg/L	92	80	120			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	100.1305		98.18	mg/L	98	85	115			
L84577-06AS	AS	11/22/23 21:27	II231120-3	100.1305	28.8	128	mg/L	99	85	115			
L84577-06ASD	ASD	11/22/23 21:30	II231120-3	100.1305	28.8	128.2	mg/L	99	85	115	0	20	
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	50		50.42	mg/L	101	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.6	0.6			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	50		51.16	mg/L	102	90	110			
WG579235CCB2	CCB	11/22/23 22:32				.81	mg/L		-0.6	0.6			BB
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	50		51.36	mg/L	103	90	110			
WG579235CCB3	CCB	11/22/23 22:53				.31	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L84579***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sulfate D516-02/-07/-11 - TURBIDIMETRIC

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG580129													
WG580129ICB	ICB	12/08/23 9:11				U	mg/L		-3	3			
WG580129ICV	ICV	12/08/23 9:11	WI231207-3	20		19.8	mg/L	99	85	115			
WG580129CCV1	CCV	12/08/23 11:00	WI231207-4	25		25.2	mg/L	101	85	115			
WG580129CCB1	CCB	12/08/23 11:00				U	mg/L		-3	3			
WG580129LFB	LFB	12/08/23 11:00	WI230119-9	10		9.3	mg/L	93	85	115			
WG580129CCV2	CCV	12/08/23 11:02	WI231207-4	25		25.5	mg/L	102	85	115			
WG580129CCB2	CCB	12/08/23 11:02				U	mg/L		-3	3			
WG580129CCV3	CCV	12/08/23 11:03	WI231207-4	25		24.8	mg/L	99	85	115			
WG580129CCB3	CCB	12/08/23 11:03				U	mg/L		-3	3			
WG580129CCV4	CCV	12/08/23 11:05	WI231207-4	25		24.9	mg/L	100	85	115			
WG580129CCB4	CCB	12/08/23 11:05				U	mg/L		-3	3			
WG580129CCV5	CCV	12/08/23 11:18	WI231207-4	25		24.9	mg/L	100	85	115			
WG580129CCB5	CCB	12/08/23 11:18				U	mg/L		-3	3			
L84579-03AS	AS	12/08/23 11:21	SO4TURB50X	10	1320	1275.8	mg/L	-442	85	115			M3
L84579-03ASD	ASD	12/08/23 11:21	SO4TURB50X	10	1320	1254.4	mg/L	-656	85	115	2	20	M3
WG580129CCV6	CCV	12/08/23 11:22	WI231207-4	25		24.5	mg/L	98	85	115			
WG580129CCB6	CCB	12/08/23 11:22				U	mg/L		-3	3			
WG580129CCV7	CCV	12/08/23 11:24	WI231207-4	25		24.2	mg/L	97	85	115			
WG580129CCB7	CCB	12/08/23 11:24				U	mg/L		-3	3			
WG580129CCV8	CCV	12/08/23 11:28	WI231207-4	25		24.8	mg/L	99	85	115			
WG580129CCB8	CCB	12/08/23 11:28				U	mg/L		-3	3			
WG580129CCV9	CCV	12/08/23 11:32	WI231207-4	25		24.5	mg/L	98	85	115			
WG580129CCB9	CCB	12/08/23 11:32				U	mg/L		-3	3			
WG580129CCV10	CCV	12/08/23 11:34	WI231207-4	25		25	mg/L	100	85	115			
WG580129CCB10	CCB	12/08/23 11:34				U	mg/L		-3	3			
WG580233													
WG580233ICB	ICB	12/11/23 8:51				U	mg/L		-3	3			
WG580233ICV	ICV	12/11/23 8:51	WI231207-3	20		19.9	mg/L	100	85	115			
WG580233CCV1	CCV	12/11/23 12:07	WI231207-4	25		24.9	mg/L	100	85	115			
WG580233CCB1	CCB	12/11/23 12:07				U	mg/L		-3	3			
WG580233LFB	LFB	12/11/23 12:07	WI230119-9	10		9.5	mg/L	95	85	115			
L84603-01AS	AS	12/11/23 12:07	WI230119-9	10	23.1	31.3	mg/L	82	85	115			M2
L84603-01ASD	ASD	12/11/23 12:07	WI230119-9	10	23.1	31.6	mg/L	85	85	115	1	20	M2
WG580233CCV2	CCV	12/11/23 12:09	WI231207-4	25		25	mg/L	100	85	115			
WG580233CCB2	CCB	12/11/23 12:09				U	mg/L		-3	3			
WG580233CCV3	CCV	12/11/23 12:13	WI231207-4	25		24.6	mg/L	98	85	115			
WG580233CCB3	CCB	12/11/23 12:13				U	mg/L		-3	3			
WG580233CCV4	CCV	12/11/23 12:16	WI231207-4	25		24.9	mg/L	100	85	115			
WG580233CCB4	CCB	12/11/23 12:16				U	mg/L		-3	3			
WG580233CCV5	CCV	12/11/23 12:19	WI231207-4	25		23.9	mg/L	96	85	115			
WG580233CCB5	CCB	12/11/23 12:19				U	mg/L		-3	3			
WG580233CCV6	CCV	12/11/23 12:23	WI231207-4	25		25.2	mg/L	101	85	115			
WG580233CCB6	CCB	12/11/23 12:23				U	mg/L		-3	3			
WG580233CCV7	CCV	12/11/23 12:25	WI231207-4	25		24.3	mg/L	97	85	115			
WG580233CCB7	CCB	12/11/23 12:25				U	mg/L		-3	3			
WG580233CCV8	CCV	12/11/23 12:27	WI231207-4	25		24.7	mg/L	99	85	115			
WG580233CCB8	CCB	12/11/23 12:27				U	mg/L		-3	3			
WG580233CCV9	CCV	12/11/23 12:29	WI231207-4	25		24.8	mg/L	99	85	115			
WG580233CCB9	CCB	12/11/23 12:29				U	mg/L		-3	3			

GCC

ACZ Project ID: ***L84579***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Vanadium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579194													
WG579194ICV	ICV	11/21/23 19:05	II231107-1	2		1.962	mg/L	98	95	105			
WG579194ICB	ICB	11/21/23 19:11				U	mg/L		-0.015	0.015			
WG579194PQV	PQV	11/21/23 19:14	II231121-4	.025025		.027	mg/L	108	70	130			
WG579194SIC	SIC	11/21/23 19:17	II231121-5	.1001		.087	mg/L	87	80	120			
WG579194LFB	LFB	11/21/23 19:23	II231120-3	.5005		.4958	mg/L	99	85	115			
L84579-01AS	AS	11/21/23 19:29	II231120-3	.5005	U	.5053	mg/L	101	85	115			
L84579-01ASD	ASD	11/21/23 19:32	II231120-3	.5005	U	.502	mg/L	100	85	115	1	20	
WG579194CCV1	CCV	11/21/23 19:54	II231012-1	1		.974	mg/L	97	90	110			
WG579194CCB1	CCB	11/21/23 19:57				U	mg/L		-0.03	0.03			
WG579194CCV2	CCV	11/21/23 20:32	II231012-1	1		.973	mg/L	97	90	110			
WG579194CCB2	CCB	11/21/23 20:35				U	mg/L		-0.03	0.03			
WG579194CCV3	CCV	11/21/23 20:53	II231012-1	1		.978	mg/L	98	90	110			
WG579194CCB3	CCB	11/21/23 20:56				U	mg/L		-0.03	0.03			
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	2		1.983	mg/L	99	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.015	0.015			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	.025025		.023	mg/L	92	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	.1001		.092	mg/L	92	80	120			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	.5005		.4933	mg/L	99	85	115			
L84577-06AS	AS	11/22/23 21:27	II231120-3	.5005		.4744	mg/L	95	85	115			
L84577-06ASD	ASD	11/22/23 21:30	II231120-3	.5005		.473	mg/L	95	85	115	0	20	
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	1		.995	mg/L	100	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.03	0.03			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	1		.995	mg/L	100	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-0.03	0.03			
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	1		1.01	mg/L	101	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L84579***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Zinc, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579194													
WG579194ICV	ICV	11/21/23 19:05	II231107-1	2		1.966	mg/L	98	95	105			
WG579194ICB	ICB	11/21/23 19:11				U	mg/L		-0.06	0.06			
WG579194PQV	PQV	11/21/23 19:14	II231121-4	.05005		.053	mg/L	106	70	130			
WG579194SIC	SIC	11/21/23 19:17	II231121-5	.1001		.103	mg/L	103	80	120			
WG579194LFB	LFB	11/21/23 19:23	II231120-3	.50045		.527	mg/L	105	85	115			
L84579-01AS	AS	11/21/23 19:29	II231120-3	.50045	U	.523	mg/L	105	85	115			
L84579-01ASD	ASD	11/21/23 19:32	II231120-3	.50045	U	.531	mg/L	106	85	115	2	20	
WG579194CCV1	CCV	11/21/23 19:54	II231012-1	1		.962	mg/L	96	90	110			
WG579194CCB1	CCB	11/21/23 19:57				U	mg/L		-0.06	0.06			
WG579194CCV2	CCV	11/21/23 20:32	II231012-1	1		.974	mg/L	97	90	110			
WG579194CCB2	CCB	11/21/23 20:35				U	mg/L		-0.06	0.06			
WG579194CCV3	CCV	11/21/23 20:53	II231012-1	1		1.066	mg/L	107	90	110			
WG579194CCB3	CCB	11/21/23 20:56				U	mg/L		-0.06	0.06			
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	2		1.967	mg/L	98	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.06	0.06			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	.05005		.051	mg/L	102	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	.1001		.099	mg/L	99	80	120			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	.50045		.515	mg/L	103	85	115			
L84577-06AS	AS	11/22/23 21:27	II231120-3	.50045	U	.514	mg/L	103	85	115			
L84577-06ASD	ASD	11/22/23 21:30	II231120-3	.50045	U	.513	mg/L	103	85	115	0	20	
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	1		.997	mg/L	100	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.06	0.06			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	1		1	mg/L	100	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-0.06	0.06			
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	1		1.051	mg/L	105	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-0.06	0.06			

GCC Rio Grande

ACZ Project ID: ***L84579***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L84579-01	WG580126	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG579194	Lithium, dissolved	M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG580120	Selenium, dissolved	M200.8 ICP-MS	DB	Sample required dilution due to low bias result.
			M200.8 ICP-MS	EA	Concentration estimated. Analytical result was less than the negative MDL due to matrix interferences.
	WG580233	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
L84579-02	WG580126	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG579194	Lithium, dissolved	M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG580120	Selenium, dissolved	M200.8 ICP-MS	DB	Sample required dilution due to low bias result.
			M200.8 ICP-MS	EA	Concentration estimated. Analytical result was less than the negative MDL due to matrix interferences.
	WG579194	Sodium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG580129	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L84579-03	WG580126	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG579194	Lithium, dissolved	M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG579121	Residue, Filterable (TDS) @180C	SM2540C	RO	The duplicate originally assigned to this sample was not used for precision assessment because residue density did not meet method limits. Another duplicate in the batch was used to assess precision. Method required duplicate frequency was met.
	WG580120	Selenium, dissolved	M200.8 ICP-MS	DB	Sample required dilution due to low bias result.
			M200.8 ICP-MS	EA	Concentration estimated. Analytical result was less than the negative MDL due to matrix interferences.
	WG580129	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L84579-04	WG580126	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG579194	Lithium, dissolved	M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG579850	Residue, Filterable (TDS) @180C	SM2540C	H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
	WG579194	Sodium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG580129	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

Inorganic Extended Qualifier Report

GCC Rio Grande ACZ Project ID: ***L84579***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L84579-05	WG579235	Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG580126	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG579850	Residue, Filterable (TDS) @180C	SM2540C	H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
	WG580129	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

No certification qualifiers associated with this analysis

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

GCC Rio Grande
183230

ACZ Project ID: L84579
Date Received: 11/15/2023 12:16
Received By:
Date Printed: 11/16/2023

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]	X		
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?			X
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
NA40591	4.2	<=6.0	15	Yes

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

GCC Rio Grande
183230

ACZ Project ID: L84579
Date Received: 11/15/2023 12:16
Received By:
Date Printed: 11/16/2023

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L84579

CHAIN of CUSTODY

Report to:

Name: Amy Rodrigues
Company: GCC Rio Grande Inc
E-mail: aveek@gcc.com
Address: 3372 Lime Road, Pueblo CO 81004
Telephone: 719-647-6861

Copy of Report to:

Name: Landon Beck
Company: Resource Hydrogeologic
E-mail: lbeck@resourcehydrogeologic.com
Telephone: (970) 459-4865

Invoice to:

Name: Amy Rodrigues
Company: GCC Rio Grande Inc
E-mail: aveek@gcc.com
Address: 3372 Lime Road, Pueblo CO 81004
Telephone: 719-647-6861

Copy of Invoice to:

Name:
Company:
E-mail:
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO
If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes ☐ No ✓
If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Amy Rodrigues **Sampler's Site Information** State CO Zip code 81004 Time Zone MST
***Sampler's Signature:** Amy Rodrigues
*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: GW-COMPLIANCE
PO#: 183230
Reporting state for compliance testing:
Check box if samples include NRC licensed material? ☐

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	GW-COMPLIANCE
MW-14	11/14/2023 12:06	GW	3	✓
MW-13	11/14/2023 13:18	GW	3	✓
MW-8	11/14/2023 15:00	GW	3	✓
MW-7	11/14/2023 15:32	GW	3	✓
MW-6	11/14/2023 16:00	GW	3	✓

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
Amy Rodrigues	11/14/23 16:40		11/15/23 12:16

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

L84579 Chain of Custod

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

December 19, 2023

Report to:
Amy Rodrigues
GCC Rio Grande
3372 Lime Road
Pueblo, CO 81004

cc: Landon Beck

Bill to:
Amy Rodrigues
GCC Rio Grande
3372 Lime Road
Pueblo, CO 81004

Project ID: 183230
ACZ Project ID: L84605

Amy Rodrigues:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on November 16, 2023. This project has been assigned to ACZ's project number, L84605. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L84605. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after December 18, 2024. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

GCC Rio Grande
Project ID: 183230
Sample ID: MW-11

ACZ Sample ID: ***L84605-01***
Date Sampled: *11/15/23 09:58*
Date Received: *11/16/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.526		*	mg/L	0.05	0.25	11/22/23 22:35	wtc
Arsenic, dissolved	M200.8 ICP-MS	1	0.00041	B		mg/L	0.0002	0.001	12/18/23 13:03	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	11/22/23 22:35	wtc
Boron, dissolved	M200.7 ICP	1	0.435			mg/L	0.03	0.1	11/22/23 22:35	wtc
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U		mg/L	0.00005	0.00025	12/18/23 13:03	gjl/scp
Calcium, dissolved	M200.7 ICP	1	90.9			mg/L	0.1	0.5	11/22/23 22:35	wtc
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	11/22/23 22:35	wtc
Cobalt, dissolved	M200.8 ICP-MS	1	0.000536			mg/L	0.00005	0.00025	12/18/23 13:03	gjl/scp
Copper, dissolved	M200.7 ICP	1	<0.01	U	*	mg/L	0.01	0.05	11/22/23 22:35	wtc
Iron, dissolved	M200.7 ICP	1	0.194			mg/L	0.06	0.15	11/22/23 22:35	wtc
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	12/18/23 13:03	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.164			mg/L	0.008	0.04	11/22/23 22:35	wtc
Magnesium, dissolved	M200.7 ICP	1	43.5			mg/L	0.2	1	11/22/23 22:35	wtc
Manganese, dissolved	M200.7 ICP	1	0.068			mg/L	0.01	0.05	11/22/23 22:35	wtc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	11/30/23 15:47	aeh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	11/22/23 22:35	wtc
Potassium, dissolved	M200.7 ICP	1	4.38			mg/L	0.5	1	11/22/23 22:35	wtc
Selenium, dissolved	M200.8 ICP-MS	1	0.0421		*	mg/L	0.0001	0.00025	12/18/23 13:03	gjl/scp
Sodium, dissolved	M200.7 ICP	1	422		*	mg/L	0.2	1	11/22/23 22:35	wtc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	11/22/23 22:35	wtc
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	11/22/23 22:35	wtc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-11

ACZ Sample ID: ***L84605-01***
Date Sampled: *11/15/23 09:58*
Date Received: *11/16/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	787			mg/L	2	20	11/29/23 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	11/29/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	11/29/23 0:00	emk
Total Alkalinity		1	787			mg/L	2	20	11/29/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-3.6			%			12/19/23 0:00	calc
Sum of Anions			29			meq/L			12/19/23 0:00	calc
Sum of Cations			27			meq/L			12/19/23 0:00	calc
Chloride	SM4500Cl-E	5	99.7		*	mg/L	5	10	12/08/23 13:11	cbp/mrd
Fluoride	SM4500F-C	1	0.85	H	*	mg/L	0.15	0.35	12/14/23 0:12	jck
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		406			mg/L	0.2	5	12/19/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	12/19/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	11/17/23 0:51	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	11/17/23 0:51	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	1630		*	mg/L	20	40	11/21/23 9:17	trt
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	40	471			mg/L	40	200	12/11/23 12:52	bls
TDS (calculated)	Calculation		1610			mg/L			12/19/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.01						12/19/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-12

ACZ Sample ID: ***L84605-02***
Date Sampled: *11/15/23 11:42*
Date Received: *11/16/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.25	11/22/23 22:44	wtc
Arsenic, dissolved	M200.8 ICP-MS	2	0.00246			mg/L	0.0004	0.002	12/18/23 13:10	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	11/22/23 22:44	wtc
Boron, dissolved	M200.7 ICP	1	0.926			mg/L	0.03	0.1	11/22/23 22:44	wtc
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U		mg/L	0.0001	0.0005	12/18/23 13:10	gjl/scp
Calcium, dissolved	M200.7 ICP	1	26.9			mg/L	0.1	0.5	11/22/23 22:44	wtc
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	11/22/23 22:44	wtc
Cobalt, dissolved	M200.8 ICP-MS	2	0.000818			mg/L	0.0001	0.0005	12/18/23 13:10	gjl/scp
Copper, dissolved	M200.7 ICP	1	<0.01	U	*	mg/L	0.01	0.05	11/22/23 22:44	wtc
Iron, dissolved	M200.7 ICP	1	0.120	B		mg/L	0.06	0.15	11/22/23 22:44	wtc
Lead, dissolved	M200.8 ICP-MS	2	<0.0002	U		mg/L	0.0002	0.001	12/18/23 13:10	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.261			mg/L	0.008	0.04	11/22/23 22:44	wtc
Magnesium, dissolved	M200.7 ICP	1	10.3			mg/L	0.2	1	11/22/23 22:44	wtc
Manganese, dissolved	M200.7 ICP	1	0.091			mg/L	0.01	0.05	11/22/23 22:44	wtc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	11/30/23 15:48	aeh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	11/22/23 22:44	wtc
Potassium, dissolved	M200.7 ICP	1	5.17			mg/L	0.5	1	11/22/23 22:44	wtc
Selenium, dissolved	M200.8 ICP-MS	10	<0.001	U	*	mg/L	0.001	0.0025	12/18/23 16:02	gjl/scp
Sodium, dissolved	M200.7 ICP	1	909		*	mg/L	0.2	1	11/22/23 22:44	wtc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	11/22/23 22:44	wtc
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	11/22/23 22:44	wtc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-12

ACZ Sample ID: ***L84605-02***
Date Sampled: *11/15/23 11:42*
Date Received: *11/16/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	602			mg/L	2	20	11/29/23 0:00	emk
Carbonate as CaCO3		1	20.4			mg/L	2	20	11/29/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	11/29/23 0:00	emk
Total Alkalinity		1	622			mg/L	2	20	11/29/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-6.7			%			12/19/23 0:00	calc
Sum of Anions			48.0			meq/L			12/19/23 0:00	calc
Sum of Cations			42			meq/L			12/19/23 0:00	calc
Chloride	SM4500Cl-E	25	1030		*	mg/L	25	50	12/08/23 13:13	cbp/mrd
Fluoride	SM4500F-C	1	1.79	H	*	mg/L	0.15	0.35	12/14/23 0:16	jck
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		110			mg/L	0.2	5	12/19/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	12/19/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	11/17/23 0:53	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	11/17/23 0:53	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	2730		*	mg/L	20	40	11/21/23 9:20	trt
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	40	315			mg/L	40	200	12/11/23 13:05	bls
TDS (calculated)	Calculation		2680			mg/L			12/19/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.02						12/19/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-9

ACZ Sample ID: ***L84605-03***
Date Sampled: *11/15/23 11:30*
Date Received: *11/16/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	11/27/23 23:43	brc
Arsenic, dissolved	M200.8 ICP-MS	5	<0.001	U		mg/L	0.001	0.005	12/18/23 13:13	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	11/27/23 23:43	brc
Boron, dissolved	M200.7 ICP	1	1.43			mg/L	0.03	0.1	11/27/23 23:43	brc
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U		mg/L	0.00025	0.00125	12/18/23 13:13	gjl/scp
Calcium, dissolved	M200.7 ICP	1	408			mg/L	0.1	0.5	11/27/23 23:43	brc
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	11/27/23 23:43	brc
Cobalt, dissolved	M200.8 ICP-MS	5	0.00180			mg/L	0.00025	0.00125	12/18/23 13:13	gjl/scp
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	11/27/23 23:43	brc
Iron, dissolved	M200.7 ICP	1	1.77			mg/L	0.06	0.15	11/27/23 23:43	brc
Lead, dissolved	M200.8 ICP-MS	5	<0.0005	U		mg/L	0.0005	0.0025	12/18/23 13:13	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.371			mg/L	0.008	0.04	11/27/23 23:43	brc
Magnesium, dissolved	M200.7 ICP	1	159			mg/L	0.2	1	11/27/23 23:43	brc
Manganese, dissolved	M200.7 ICP	1	0.419			mg/L	0.01	0.05	11/27/23 23:43	brc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	11/30/23 15:51	aeh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	11/27/23 23:43	brc
Potassium, dissolved	M200.7 ICP	1	9.17			mg/L	0.5	1	11/27/23 23:43	brc
Selenium, dissolved	M200.8 ICP-MS	5	<0.0005	U		mg/L	0.0005	0.00125	12/18/23 16:05	gjl/scp
Sodium, dissolved	M200.7 ICP	1	799		*	mg/L	0.2	1	11/28/23 22:39	brc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	11/27/23 23:43	brc
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	11/27/23 23:43	brc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-9

ACZ Sample ID: ***L84605-03***
Date Sampled: *11/15/23 11:30*
Date Received: *11/16/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	414			mg/L	2	20	11/29/23 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	11/29/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	11/29/23 0:00	emk
Total Alkalinity		1	414			mg/L	2	20	11/29/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.7			%			12/19/23 0:00	calc
Sum of Anions			68			meq/L			12/19/23 0:00	calc
Sum of Cations			69.0			meq/L			12/19/23 0:00	calc
Chloride	SM4500Cl-E	5	47.2		*	mg/L	5	10	12/08/23 13:14	cbp/mrd
Fluoride	SM4500F-C	1	0.42	H	*	mg/L	0.15	0.35	12/14/23 0:20	jck
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		1670			mg/L	0.2	5	12/19/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		0.095	B		mg/L	0.02	0.1	12/19/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	0.095	B	*	mg/L	0.02	0.1	11/17/23 0:56	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	11/17/23 0:56	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	4530	H	*	mg/L	40	80	12/04/23 17:59	trt
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	120	2770			mg/L	120	600	12/11/23 13:05	bls
TDS (calculated)	Calculation		4450			mg/L			12/19/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.02						12/19/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-10

ACZ Sample ID: ***L84605-04***
Date Sampled: *11/15/23 12:02*
Date Received: *11/16/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	11/27/23 23:46	brc
Arsenic, dissolved	M200.8 ICP-MS	5	0.00110	B		mg/L	0.001	0.005	12/18/23 13:15	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	11/27/23 23:46	brc
Boron, dissolved	M200.7 ICP	1	1.31			mg/L	0.03	0.1	11/27/23 23:46	brc
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U		mg/L	0.00025	0.00125	12/18/23 13:15	gjl/scp
Calcium, dissolved	M200.7 ICP	1	28.9			mg/L	0.1	0.5	11/27/23 23:46	brc
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	11/27/23 23:46	brc
Cobalt, dissolved	M200.8 ICP-MS	5	<0.00025	U		mg/L	0.00025	0.00125	12/18/23 13:15	gjl/scp
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	11/27/23 23:46	brc
Iron, dissolved	M200.7 ICP	1	0.266			mg/L	0.06	0.15	11/27/23 23:46	brc
Lead, dissolved	M200.8 ICP-MS	5	<0.0005	U		mg/L	0.0005	0.0025	12/18/23 13:15	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.255			mg/L	0.008	0.04	11/27/23 23:46	brc
Magnesium, dissolved	M200.7 ICP	1	8.63			mg/L	0.2	1	11/27/23 23:46	brc
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	11/27/23 23:46	brc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	11/30/23 15:52	aeh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	11/27/23 23:46	brc
Potassium, dissolved	M200.7 ICP	1	5.35			mg/L	0.5	1	11/27/23 23:46	brc
Selenium, dissolved	M200.8 ICP-MS	5	<0.0005	U		mg/L	0.0005	0.00125	12/18/23 16:07	gjl/scp
Sodium, dissolved	M200.7 ICP	5	1170		*	mg/L	1	5	11/28/23 22:42	brc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	11/27/23 23:46	brc
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	11/27/23 23:46	brc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-10

ACZ Sample ID: ***L84605-04***
Date Sampled: *11/15/23 12:02*
Date Received: *11/16/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	701			mg/L	2	20	11/29/23 0:00	emk
Carbonate as CaCO3		1	26.7			mg/L	2	20	11/29/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	11/29/23 0:00	emk
Total Alkalinity		1	727			mg/L	2	20	11/29/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			2.9			%			12/19/23 0:00	calc
Sum of Anions			51			meq/L			12/19/23 0:00	calc
Sum of Cations			54			meq/L			12/19/23 0:00	calc
Chloride	SM4500Cl-E	5	351		*	mg/L	5	10	12/08/23 13:15	cbp/mrd
Fluoride	SM4500F-C	1	1.26	H	*	mg/L	0.15	0.35	12/14/23 0:24	jck
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		108			mg/L	0.2	5	12/19/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	12/19/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	11/17/23 1:02	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	11/17/23 1:02	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	3360		*	mg/L	20	40	11/21/23 9:25	trt
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	40	1240		*	mg/L	40	200	12/11/23 12:52	bls
TDS (calculated)	Calculation		3250			mg/L			12/19/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.03						12/19/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-2B

ACZ Sample ID: ***L84605-05***
Date Sampled: *11/15/23 12:00*
Date Received: *11/16/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	11/27/23 23:50	brc
Arsenic, dissolved	M200.8 ICP-MS	5	0.00293	B		mg/L	0.001	0.005	12/18/23 13:17	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	11/27/23 23:50	brc
Boron, dissolved	M200.7 ICP	1	0.927			mg/L	0.03	0.1	11/27/23 23:50	brc
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U		mg/L	0.00025	0.00125	12/18/23 13:17	gjl/scp
Calcium, dissolved	M200.7 ICP	1	26.7			mg/L	0.1	0.5	11/27/23 23:50	brc
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	11/27/23 23:50	brc
Cobalt, dissolved	M200.8 ICP-MS	5	0.000829	B		mg/L	0.00025	0.00125	12/18/23 13:17	gjl/scp
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	11/27/23 23:50	brc
Iron, dissolved	M200.7 ICP	1	0.096	B		mg/L	0.06	0.15	11/27/23 23:50	brc
Lead, dissolved	M200.8 ICP-MS	5	<0.0005	U		mg/L	0.0005	0.0025	12/18/23 13:17	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.213			mg/L	0.008	0.04	11/27/23 23:50	brc
Magnesium, dissolved	M200.7 ICP	1	10.1			mg/L	0.2	1	11/27/23 23:50	brc
Manganese, dissolved	M200.7 ICP	1	0.086			mg/L	0.01	0.05	11/27/23 23:50	brc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	11/30/23 15:53	aeh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	11/27/23 23:50	brc
Potassium, dissolved	M200.7 ICP	1	4.48			mg/L	0.5	1	11/27/23 23:50	brc
Selenium, dissolved	M200.8 ICP-MS	5	<0.0005	U	*	mg/L	0.0005	0.00125	12/18/23 13:17	gjl/scp
Sodium, dissolved	M200.7 ICP	1	973		*	mg/L	0.2	1	11/28/23 22:45	brc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	11/27/23 23:50	brc
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	11/27/23 23:50	brc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-2B

ACZ Sample ID: ***L84605-05***
Date Sampled: *11/15/23 12:00*
Date Received: *11/16/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	613			mg/L	2	20	11/29/23 0:00	emk
Carbonate as CaCO3		1	26.0			mg/L	2	20	11/29/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	11/29/23 0:00	emk
Total Alkalinity		1	639			mg/L	2	20	11/29/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			12/19/23 0:00	calc
Sum of Anions			45			meq/L			12/19/23 0:00	calc
Sum of Cations			45			meq/L			12/19/23 0:00	calc
Chloride	SM4500Cl-E	25	923		*	mg/L	25	50	12/08/23 13:15	cbp/mrd
Fluoride	SM4500F-C	1	1.77	H	*	mg/L	0.15	0.35	12/14/23 0:35	jck
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		108			mg/L	0.2	5	12/19/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		0.035	B		mg/L	0.02	0.1	12/19/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	0.035	B	*	mg/L	0.02	0.1	11/17/23 1:03	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	11/17/23 1:03	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	3660		*	mg/L	20	40	11/21/23 9:28	trt
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	40	314		*	mg/L	40	200	12/11/23 13:05	bls
TDS (calculated)	Calculation		2640			mg/L			12/19/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.39						12/19/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: METHOD BLANK

ACZ Sample ID: ***L84605-06***
Date Sampled: *11/15/23 13:23*
Date Received: *11/16/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	11/27/23 23:53	brc
Arsenic, dissolved	M200.8 ICP-MS	1	<0.0002	U		mg/L	0.0002	0.001	12/18/23 13:24	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	11/27/23 23:53	brc
Boron, dissolved	M200.7 ICP	1	<0.03	U		mg/L	0.03	0.1	11/27/23 23:53	brc
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U		mg/L	0.00005	0.00025	12/18/23 13:24	gjl/scp
Calcium, dissolved	M200.7 ICP	1	<0.1	U		mg/L	0.1	0.5	11/27/23 23:53	brc
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	11/27/23 23:53	brc
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U		mg/L	0.00005	0.00025	12/18/23 13:24	gjl/scp
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	11/27/23 23:53	brc
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	11/27/23 23:53	brc
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	12/18/23 13:24	gjl/scp
Lithium, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	11/27/23 23:53	brc
Magnesium, dissolved	M200.7 ICP	1	<0.2	U		mg/L	0.2	1	11/27/23 23:53	brc
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	11/27/23 23:53	brc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	11/30/23 15:54	aeh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	11/27/23 23:53	brc
Potassium, dissolved	M200.7 ICP	1	<0.5	U		mg/L	0.5	1	11/27/23 23:53	brc
Selenium, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.00025	12/18/23 16:14	gjl/scp
Sodium, dissolved	M200.7 ICP	1	0.64	B	*	mg/L	0.2	1	11/28/23 23:01	brc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	11/27/23 23:53	brc
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	11/27/23 23:53	brc

GCC Rio Grande
Project ID: 183230
Sample ID: METHOD BLANK

ACZ Sample ID: ***L84605-06***
Date Sampled: *11/15/23 13:23*
Date Received: *11/16/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	2.9	B		mg/L	2	20	11/29/23 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	11/29/23 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	11/29/23 0:00	emk
Total Alkalinity		1	3.5	B		mg/L	2	20	11/29/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			n/a			%			12/19/23 0:00	calc
Sum of Anions			0.102	B		meq/L			12/19/23 0:00	calc
Sum of Cations			<	U		meq/L			12/19/23 0:00	calc
Chloride	SM4500Cl-E	1	<1	U	*	mg/L	1	2	12/08/23 13:16	cbp/mrd
Fluoride	SM4500F-C	1	<0.15	U	*	mg/L	0.15	0.35	12/07/23 15:09	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		<0.2	U		mg/L	0.2	5	12/19/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	12/19/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	11/17/23 1:04	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	11/17/23 1:04	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	26	B	*	mg/L	20	40	11/21/23 9:30	trt
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	2.1	B	*	mg/L	1	5	12/11/23 12:43	bls
TDS (calculated)	Calculation		4.51			mg/L			12/19/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		5.76						12/19/23 0:00	calc

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1)	EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2)	EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3)	EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4)	EPA SW-846. Test Methods for Evaluating Solid Waste.
(5)	Standard Methods for the Examination of Water and Wastewater.

Comments

(1)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2)	Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3)	Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4)	An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5)	If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

GCC

ACZ Project ID: ***L84605***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579534													
WG579534PBW1	PBW	11/29/23 15:07				14.8	mg/L		-20	20			
WG579534LCSW3	LCSW	11/29/23 15:26	WC231116-1	820.0001		827.2	mg/L	101	90	110			
L84652-01DUP	DUP	11/29/23 18:37			419	436.1	mg/L				4	20	
WG579534LCSW6	LCSW	11/29/23 18:57	WC231116-1	820.0001		842.2	mg/L	103	90	110			
WG579534PBW2	PBW	11/29/23 19:04				7.5	mg/L		-20	20			
WG579534LCSW9	LCSW	11/29/23 22:54	WC231129-1	820.0001		830.2	mg/L	101	90	110			
WG579534PBW3	PBW	11/29/23 23:02				5.1	mg/L		-20	20			
WG579534PBW4	PBW	11/30/23 7:01				U	mg/L		-20	20			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	2		2.007	mg/L	100	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.15	0.15			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	.25025		.245	mg/L	98	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	200.45025		203.7	mg/L	102	1	200			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	1.001		1.009	mg/L	101	85	115			
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	1		.994	mg/L	99	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.15	0.15			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	1		.99	mg/L	99	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-0.15	0.15			
L84605-01AS	AS	11/22/23 22:38	II231120-3	1.001	.526	1.051	mg/L	52	85	115			M2
L84605-01ASD	ASD	11/22/23 22:41	II231120-3	1.001	.526	1.068	mg/L	54	85	115	2	20	M2
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	1		1.017	mg/L	102	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-0.15	0.15			
WG579340													
WG579340ICV	ICV	11/27/23 22:36	II231107-1	2		1.984	mg/L	99	95	105			
WG579340ICB	ICB	11/27/23 22:42				U	mg/L		-0.15	0.15			
WG579340PQV	PQV	11/27/23 22:45	II231121-4	.25025		.231	mg/L	92	70	130			
WG579340SIC	SIC	11/27/23 22:49	II231121-5	200.45025		206.9	mg/L	103	1	200			
WG579340LFB	LFB	11/27/23 22:55	II231120-3	1.001		1.01	mg/L	101	85	115			
WG579340CCV1	CCV	11/27/23 23:27	II231012-1	1		.989	mg/L	99	90	110			
WG579340CCB1	CCB	11/27/23 23:30				U	mg/L		-0.15	0.15			
L84611-02AS	AS	11/28/23 0:03	II231120-3	1.001	U	1.049	mg/L	105	85	115			
WG579340CCV2	CCV	11/28/23 0:06	II231012-1	1		.985	mg/L	99	90	110			
WG579340CCB2	CCB	11/28/23 0:09				U	mg/L		-0.15	0.15			
L84611-02ASD	ASD	11/28/23 0:13	II231120-3	1.001	U	1.049	mg/L	105	85	115	0	20	
WG579340CCV3	CCV	11/28/23 0:29	II231012-1	1		.962	mg/L	96	90	110			
WG579340CCB3	CCB	11/28/23 0:32				U	mg/L		-0.15	0.15			

GCC

ACZ Project ID: ***L84605***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG580123													
WG580123ICV	ICV	12/18/23 12:38	MS231205-4	.05		.05046	mg/L	101	90	110			
WG580123ICB	ICB	12/18/23 12:40				U	mg/L		-0.00044	0.00044			
WG580123LFB	LFB	12/18/23 12:42	MS231108-4	.0501		.04857	mg/L	97	85	115			
L84460-01AS	AS	12/18/23 12:47	MS231108-4	1.002	U	1.00667	mg/L	100	70	130			
L84460-01ASD	ASD	12/18/23 12:49	MS231108-4	1.002	U	.98712	mg/L	99	70	130	2	20	
WG580123CCV1	CCV	12/18/23 13:06	MS231205-1	.1002		.09876	mg/L	99	90	110			
WG580123CCB1	CCB	12/18/23 13:08				U	mg/L		-0.0006	0.0006			
L84605-05AS	AS	12/18/23 13:20	MS231108-4	.2505	.00293	.21996	mg/L	87	70	130			
L84605-05ASD	ASD	12/18/23 13:22	MS231108-4	.2505	.00293	.24442	mg/L	96	70	130	11	20	
WG580123CCV2	CCV	12/18/23 13:34	MS231205-1	.1002		.09639	mg/L	96	90	110			
WG580123CCB2	CCB	12/18/23 13:36				U	mg/L		-0.0006	0.0006			
WG580123CCV3	CCV	12/18/23 13:50	MS231205-1	.1002		.09796	mg/L	98	90	110			
WG580123CCB3	CCB	12/18/23 13:52				U	mg/L		-0.0006	0.0006			

Beryllium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	2		1.97	mg/L	99	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.03	0.03			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	.05005		.054	mg/L	108	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	.1001		.101	mg/L	101	80	120			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	.5005		.502	mg/L	100	85	115			
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	1		.994	mg/L	99	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.03	0.03			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	1		.983	mg/L	98	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-0.03	0.03			
L84605-01AS	AS	11/22/23 22:38	II231120-3	.5005	U	.52	mg/L	104	85	115			
L84605-01ASD	ASD	11/22/23 22:41	II231120-3	.5005	U	.52	mg/L	104	85	115	0	20	
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	1		1.002	mg/L	100	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-0.03	0.03			
WG579340													
WG579340ICV	ICV	11/27/23 22:36	II231107-1	2		1.958	mg/L	98	95	105			
WG579340ICB	ICB	11/27/23 22:42				U	mg/L		-0.03	0.03			
WG579340PQV	PQV	11/27/23 22:45	II231121-4	.05005		.049	mg/L	98	70	130			
WG579340SIC	SIC	11/27/23 22:49	II231121-5	.1001		.099	mg/L	99	80	120			
WG579340LFB	LFB	11/27/23 22:55	II231120-3	.5005		.514	mg/L	103	85	115			
WG579340CCV1	CCV	11/27/23 23:27	II231012-1	1		.999	mg/L	100	90	110			
WG579340CCB1	CCB	11/27/23 23:30				U	mg/L		-0.03	0.03			
L84611-02AS	AS	11/28/23 0:03	II231120-3	.5005	U	.511	mg/L	102	85	115			
WG579340CCV2	CCV	11/28/23 0:06	II231012-1	1		.987	mg/L	99	90	110			
WG579340CCB2	CCB	11/28/23 0:09				U	mg/L		-0.03	0.03			
L84611-02ASD	ASD	11/28/23 0:13	II231120-3	.5005	U	.516	mg/L	103	85	115	1	20	
WG579340CCV3	CCV	11/28/23 0:29	II231012-1	1		.984	mg/L	98	90	110			
WG579340CCB3	CCB	11/28/23 0:32				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L84605***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	2		2.062	mg/L	103	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.09	0.09			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	.1001		.103	mg/L	103	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	.1001		.097	mg/L	97	80	120			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	.5005		.508	mg/L	101	85	115			
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	1		1.038	mg/L	104	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.09	0.09			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	1		1.027	mg/L	103	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-0.09	0.09			
L84605-01AS	AS	11/22/23 22:38	II231120-3	.5005	.435	.956	mg/L	104	85	115			
L84605-01ASD	ASD	11/22/23 22:41	II231120-3	.5005	.435	.953	mg/L	103	85	115	0	20	
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	1		1.055	mg/L	106	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-0.09	0.09			
WG579340													
WG579340ICV	ICV	11/27/23 22:36	II231107-1	2		2.058	mg/L	103	95	105			
WG579340ICB	ICB	11/27/23 22:42				U	mg/L		-0.09	0.09			
WG579340PQV	PQV	11/27/23 22:45	II231121-4	.1001		.095	mg/L	95	70	130			
WG579340SIC	SIC	11/27/23 22:49	II231121-5	.1001		.096	mg/L	96	80	120			
WG579340LFB	LFB	11/27/23 22:55	II231120-3	.5005		.517	mg/L	103	85	115			
WG579340CCV1	CCV	11/27/23 23:27	II231012-1	1		1.042	mg/L	104	90	110			
WG579340CCB1	CCB	11/27/23 23:30				U	mg/L		-0.09	0.09			
L84611-02AS	AS	11/28/23 0:03	II231120-3	.5005	1.24	1.7	mg/L	92	85	115			
WG579340CCV2	CCV	11/28/23 0:06	II231012-1	1		1.034	mg/L	103	90	110			
WG579340CCB2	CCB	11/28/23 0:09				U	mg/L		-0.09	0.09			
L84611-02ASD	ASD	11/28/23 0:13	II231120-3	.5005	1.24	1.731	mg/L	98	85	115	2	20	
WG579340CCV3	CCV	11/28/23 0:29	II231012-1	1		1.025	mg/L	103	90	110			
WG579340CCB3	CCB	11/28/23 0:32				U	mg/L		-0.09	0.09			

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG580123													
WG580123ICV	ICV	12/18/23 12:38	MS231205-4	.05		.051784	mg/L	104	90	110			
WG580123ICB	ICB	12/18/23 12:40				.000056	mg/L		-0.00011	0.00011			
WG580123LFB	LFB	12/18/23 12:42	MS231108-4	.05005		.047253	mg/L	94	85	115			
L84460-01AS	AS	12/18/23 12:47	MS231108-4	1.001	.00131	.975246	mg/L	97	70	130			
L84460-01ASD	ASD	12/18/23 12:49	MS231108-4	1.001	.00131	.968848	mg/L	97	70	130	1	20	
WG580123CCV1	CCV	12/18/23 13:06	MS231205-1	.1001		.101507	mg/L	101	90	110			
WG580123CCB1	CCB	12/18/23 13:08				U	mg/L		-0.00015	0.00015			
L84605-05AS	AS	12/18/23 13:20	MS231108-4	.25025	U	.220076	mg/L	88	70	130			
L84605-05ASD	ASD	12/18/23 13:22	MS231108-4	.25025	U	.250812	mg/L	100	70	130	13	20	
WG580123CCV2	CCV	12/18/23 13:34	MS231205-1	.1001		.099589	mg/L	99	90	110			
WG580123CCB2	CCB	12/18/23 13:36				U	mg/L		-0.00015	0.00015			
WG580123CCV3	CCV	12/18/23 13:50	MS231205-1	.1001		.100076	mg/L	100	90	110			
WG580123CCB3	CCB	12/18/23 13:52				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: ***L84605***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	100		98.23	mg/L	98	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.3	0.3			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	.4999		.51	mg/L	102	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	201.4999		197	mg/L	98	1	200			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	67.98753		66.82	mg/L	98	85	115			
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	50		49.57	mg/L	99	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.3	0.3			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	50		49.68	mg/L	99	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-0.3	0.3			
L84605-01AS	AS	11/22/23 22:38	II231120-3	67.98753	90.9	158	mg/L	99	85	115			
L84605-01ASD	ASD	11/22/23 22:41	II231120-3	67.98753	90.9	157.9	mg/L	99	85	115	0	20	
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	50		50.26	mg/L	101	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-0.3	0.3			
WG579340													
WG579340ICV	ICV	11/27/23 22:36	II231107-1	100		99.33	mg/L	99	95	105			
WG579340ICB	ICB	11/27/23 22:42				U	mg/L		-0.3	0.3			
WG579340PQV	PQV	11/27/23 22:45	II231121-4	.4999		.47	mg/L	94	70	130			
WG579340SIC	SIC	11/27/23 22:49	II231121-5	201.4999		200.1	mg/L	99	1	200			
WG579340LFB	LFB	11/27/23 22:55	II231120-3	67.98753		69.16	mg/L	102	85	115			
WG579340CCV1	CCV	11/27/23 23:27	II231012-1	50		50.6	mg/L	101	90	110			
WG579340CCB1	CCB	11/27/23 23:30				U	mg/L		-0.3	0.3			
L84611-02AS	AS	11/28/23 0:03	II231120-3	67.98753	16.1	84.3	mg/L	100	85	115			
WG579340CCV2	CCV	11/28/23 0:06	II231012-1	50		50.77	mg/L	102	90	110			
WG579340CCB2	CCB	11/28/23 0:09				U	mg/L		-0.3	0.3			
L84611-02ASD	ASD	11/28/23 0:13	II231120-3	67.98753	16.1	84.75	mg/L	101	85	115	1	20	
WG579340CCV3	CCV	11/28/23 0:29	II231012-1	50		49.71	mg/L	99	90	110			
WG579340CCB3	CCB	11/28/23 0:32				U	mg/L		-0.3	0.3			

GCC

ACZ Project ID: ***L84605***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Chloride SM4500Cl-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579907													
WG579907ICV1	ICV	12/08/23 11:21	WI231129-1	54.945		53.75	mg/L	98	90	110			
WG579907ICB1	ICB	12/08/23 11:21				U	mg/L						
WG579907ICV2	ICV	12/08/23 11:22	WI231207-5	8.008		7.61	mg/L	95	90	110			
WG579907ICV3	ICV	12/08/23 11:22	WI231207-5	8.008		7.31	mg/L	91	90	110			
WG579907ICV4	ICV	12/08/23 11:23	WI231207-5	8.008		7.66	mg/L	96	90	110			
WG579907ICV5	ICV	12/08/23 11:23	WI231207-5	8.008		7.62	mg/L	95	90	110			
WG580126													
WG580126ICV	ICV	12/08/23 11:48	WI231129-1	54.945		53.17	mg/L	97	90	110			
WG580126ICB	ICB	12/08/23 11:48				U	mg/L						
WG580126LFB	LFB	12/08/23 11:49	WI230629-2	30.03		30.03	mg/L	100	90	110			
WG580126CCV3	CCV	12/08/23 12:03	WI231113-5	50.05		49.81	mg/L	100	90	110			
WG580126CCB3	CCB	12/08/23 12:04				U	mg/L						
WG580126CCV9	CCV	12/08/23 13:08	WI231113-5	50.05		49.86	mg/L	100	90	110			
WG580126CCB9	CCB	12/08/23 13:09				U	mg/L						
WG580126CCV1	CCV	12/08/23 13:12	WI231113-5	50.05		49.36	mg/L	99	90	110			
WG580126CCB1	CCB	12/08/23 13:12				U	mg/L						
L84605-01AS	AS	12/08/23 13:13	5XCL	30	99.7	119.23	mg/L	65	90	110			M2
L84605-02DUP	DUP	12/08/23 13:14			1030	1072.98	mg/L				4	20	
WG580126CCV2	CCV	12/08/23 13:18	WI231113-5	50.05		51.9	mg/L	104	90	110			
WG580126CCB2	CCB	12/08/23 13:18				U	mg/L						
WG580126CCV11	CCV	12/08/23 13:55	WI231113-5	50.05		50.51	mg/L	101	90	110			
WG580126CCB11	CCB	12/08/23 13:55				U	mg/L						
L84964-02AS	AS	12/08/23 13:57	WI230629-2	6006	16700	19877.11	mg/L	53	90	110			M3
L84964-03DUP	DUP	12/08/23 13:57			17200	17615.12	mg/L				2	20	
WG580126CCV12	CCV	12/08/23 13:59	WI231113-5	50.05		50.08	mg/L	100	90	110			
WG580126CCB12	CCB	12/08/23 13:59				U	mg/L						

GCC

ACZ Project ID: ***L84605***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Chromium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	2		1.979	mg/L	99	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.06	0.06			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	.05005		.05	mg/L	100	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	.1001		.098	mg/L	98	80	120			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	.5005		.501	mg/L	100	85	115			
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	1		1.003	mg/L	100	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.06	0.06			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	1		.999	mg/L	100	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-0.06	0.06			
L84605-01AS	AS	11/22/23 22:38	II231120-3	.5005	U	.52	mg/L	104	85	115			
L84605-01ASD	ASD	11/22/23 22:41	II231120-3	.5005	U	.519	mg/L	104	85	115	0	20	
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	1		1.028	mg/L	103	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-0.06	0.06			
WG579340													
WG579340ICV	ICV	11/27/23 22:36	II231107-1	2		1.974	mg/L	99	95	105			
WG579340ICB	ICB	11/27/23 22:42				U	mg/L		-0.06	0.06			
WG579340PQV	PQV	11/27/23 22:45	II231121-4	.05005		.036	mg/L	72	70	130			
WG579340SIC	SIC	11/27/23 22:49	II231121-5	.1001		.099	mg/L	99	80	120			
WG579340LFB	LFB	11/27/23 22:55	II231120-3	.5005		.502	mg/L	100	85	115			
WG579340CCV1	CCV	11/27/23 23:27	II231012-1	1		1.006	mg/L	101	90	110			
WG579340CCB1	CCB	11/27/23 23:30				U	mg/L		-0.06	0.06			
L84611-02AS	AS	11/28/23 0:03	II231120-3	.5005	U	.502	mg/L	100	85	115			
WG579340CCV2	CCV	11/28/23 0:06	II231012-1	1		1.004	mg/L	100	90	110			
WG579340CCB2	CCB	11/28/23 0:09				U	mg/L		-0.06	0.06			
L84611-02ASD	ASD	11/28/23 0:13	II231120-3	.5005	U	.507	mg/L	101	85	115	1	20	
WG579340CCV3	CCV	11/28/23 0:29	II231012-1	1		.987	mg/L	99	90	110			
WG579340CCB3	CCB	11/28/23 0:32				U	mg/L		-0.06	0.06			

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG580123													
WG580123ICV	ICV	12/18/23 12:38	MS231205-4	.05		.053549	mg/L	107	90	110			
WG580123ICB	ICB	12/18/23 12:40				.000056	mg/L		-0.00011	0.00011			
WG580123LFB	LFB	12/18/23 12:42	MS231108-4	.05005		.04994	mg/L	100	85	115			
L84460-01AS	AS	12/18/23 12:47	MS231108-4	1.001	.00315	1.029668	mg/L	103	70	130			
L84460-01ASD	ASD	12/18/23 12:49	MS231108-4	1.001	.00315	1.021462	mg/L	102	70	130	1	20	
WG580123CCV1	CCV	12/18/23 13:06	MS231205-1	.1001		.103706	mg/L	104	90	110			
WG580123CCB1	CCB	12/18/23 13:08				U	mg/L		-0.00015	0.00015			
L84605-05AS	AS	12/18/23 13:20	MS231108-4	.25025	.000829	.234055	mg/L	93	70	130			
L84605-05ASD	ASD	12/18/23 13:22	MS231108-4	.25025	.000829	.262826	mg/L	105	70	130	12	20	
WG580123CCV2	CCV	12/18/23 13:34	MS231205-1	.1001		.099571	mg/L	99	90	110			
WG580123CCB2	CCB	12/18/23 13:36				U	mg/L		-0.00015	0.00015			
WG580123CCV3	CCV	12/18/23 13:50	MS231205-1	.1001		.097822	mg/L	98	90	110			
WG580123CCB3	CCB	12/18/23 13:52				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: ***L84605***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Copper, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	2		1.952	mg/L	98	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.03	0.03			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	.05005		.053	mg/L	106	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	.1001		.1	mg/L	100	80	120			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	.5005		.501	mg/L	100	85	115			
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	1		.984	mg/L	98	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.03	0.03			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	1		.972	mg/L	97	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-0.03	0.03			
L84605-01AS	AS	11/22/23 22:38	II231120-3	.5005	U	.191	mg/L	38	85	115			M2
L84605-01ASD	ASD	11/22/23 22:41	II231120-3	.5005	U	.168	mg/L	34	85	115	13	20	M2
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	1		.993	mg/L	99	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-0.03	0.03			
WG579340													
WG579340ICV	ICV	11/27/23 22:36	II231107-1	2		1.928	mg/L	96	95	105			
WG579340ICB	ICB	11/27/23 22:42				U	mg/L		-0.03	0.03			
WG579340PQV	PQV	11/27/23 22:45	II231121-4	.05005		.049	mg/L	98	70	130			
WG579340SIC	SIC	11/27/23 22:49	II231121-5	.1001		.102	mg/L	102	80	120			
WG579340LFB	LFB	11/27/23 22:55	II231120-3	.5005		.509	mg/L	102	85	115			
WG579340CCV1	CCV	11/27/23 23:27	II231012-1	1		.985	mg/L	99	90	110			
WG579340CCB1	CCB	11/27/23 23:30				U	mg/L		-0.03	0.03			
L84611-02AS	AS	11/28/23 0:03	II231120-3	.5005	U	.505	mg/L	101	85	115			
WG579340CCV2	CCV	11/28/23 0:06	II231012-1	1		.965	mg/L	97	90	110			
WG579340CCB2	CCB	11/28/23 0:09				U	mg/L		-0.03	0.03			
L84611-02ASD	ASD	11/28/23 0:13	II231120-3	.5005	U	.513	mg/L	102	85	115	2	20	
WG579340CCV3	CCV	11/28/23 0:29	II231012-1	1		.97	mg/L	97	90	110			
WG579340CCB3	CCB	11/28/23 0:32				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L84605***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Fluoride SM4500F-C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579939													
WG579939ICV	ICV	12/07/23 11:29	WC231206-1	2.002		2.12	mg/L	106	90	110			
WG579939ICB	ICB	12/07/23 11:34				U	mg/L		-0.3	0.3			
WG579939PQV	PQV	12/07/23 11:37	WC231121-7	.35035		.39	mg/L	111	70	130			
WG579939LFB1	LFB	12/07/23 11:42	WC230825-1	5.005		5.37	mg/L	107	90	110			
WG579939CCV1	CCV	12/07/23 12:28	WC231206-1	2.002		2.074	mg/L	104	90	110			
WG579939CCB1	CCB	12/07/23 12:36				U	mg/L		-0.3	0.3			
WG579939CCB2	CCB	12/07/23 13:49				U	mg/L		-0.3	0.3			
L84605-04AS	AS	12/07/23 14:39	WC230825-1	5.005	1.38	7.63	mg/L	125	90	110			M1
L84605-04ASD	ASD	12/07/23 14:42	WC230825-1	5.005	1.38	7.23	mg/L	117	90	110	5	20	M1
WG579939CCB3	CCB	12/07/23 14:55				U	mg/L		-0.3	0.3			
WG579939CCB4	CCB	12/07/23 16:08				U	mg/L		-0.3	0.3			
WG579939CCV5	CCV	12/07/23 17:09	WC231206-1	2.002		2.143	mg/L	107	90	110			
WG579939CCB5	CCB	12/07/23 17:17				U	mg/L		-0.3	0.3			
WG579939CCB6	CCB	12/07/23 17:38				U	mg/L		-0.3	0.3			
WG580510													
WG580510ICV	ICV	12/13/23 22:56	WC231213-7	2.002		1.96	mg/L	98	90	110			
WG580510ICB	ICB	12/13/23 23:04				U	mg/L		-0.3	0.3			
WG580510PQV	PQV	12/13/23 23:08	WC231121-7	.35035		.36	mg/L	103	70	130			
WG580510LFB1	LFB	12/13/23 23:11	WC230825-1	5.005		4.95	mg/L	99	90	110			
L84599-01AS	AS	12/13/23 23:19	WC230825-1	5.005	.55	5.39	mg/L	97	90	110			
L84599-01ASD	ASD	12/13/23 23:23	WC230825-1	5.005	.55	5.29	mg/L	95	90	110	2	20	
WG580510CCV1	CCV	12/13/23 23:58	WC231213-7	2.002		2.128	mg/L	106	90	110			
WG580510CCB1	CCB	12/14/23 0:04				U	mg/L		-0.3	0.3			
L84605-04AS	AS	12/14/23 0:28	WC230825-1	5.005	1.26	6.26	mg/L	100	90	110			
L84605-04ASD	ASD	12/14/23 0:31	WC230825-1	5.005	1.26	6.12	mg/L	97	90	110	2	20	
WG580510CCV2	CCV	12/14/23 0:49	WC231213-7	2.002		2.022	mg/L	101	90	110			
WG580510CCB2	CCB	12/14/23 0:57				U	mg/L		-0.3	0.3			
WG580510LFB2	LFB	12/14/23 1:27	WC230825-1	5.005		4.93	mg/L	99	90	110			
WG580510CCV3	CCV	12/14/23 1:47	WC231213-7	2.002		1.965	mg/L	98	90	110			
WG580510CCB3	CCB	12/14/23 1:55				U	mg/L		-0.3	0.3			
WG580510CCV4	CCV	12/14/23 2:47	WC231213-7	2.002		2.089	mg/L	104	90	110			
WG580510CCB4	CCB	12/14/23 2:54				U	mg/L		-0.3	0.3			
WG580510CCV5	CCV	12/14/23 3:39	WC231213-7	2.002		1.965	mg/L	98	90	110			
WG580510CCB5	CCB	12/14/23 3:47				U	mg/L		-0.3	0.3			
WG580510CCV6	CCV	12/14/23 3:58	WC231213-7	2.002		2.011	mg/L	100	90	110			
WG580510CCB6	CCB	12/14/23 4:06				U	mg/L		-0.3	0.3			

GCC

ACZ Project ID: ***L84605***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Iron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	2		1.948	mg/L	97	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.18	0.18			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	.149715		.166	mg/L	111	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	200.749715		191.2	mg/L	95	1	200			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	.9981		1.02	mg/L	102	85	115			
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	1		1.001	mg/L	100	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.18	0.18			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	1		.99	mg/L	99	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-0.18	0.18			
L84605-01AS	AS	11/22/23 22:38	II231120-3	.9981	.194	1.23	mg/L	104	85	115			
L84605-01ASD	ASD	11/22/23 22:41	II231120-3	.9981	.194	1.225	mg/L	103	85	115	0	20	
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	1		1.024	mg/L	102	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-0.18	0.18			
WG579340													
WG579340ICV	ICV	11/27/23 22:36	II231107-1	2		1.947	mg/L	97	95	105			
WG579340ICB	ICB	11/27/23 22:42				U	mg/L		-0.18	0.18			
WG579340PQV	PQV	11/27/23 22:45	II231121-4	.149715		.141	mg/L	94	70	130			
WG579340SIC	SIC	11/27/23 22:49	II231121-5	200.749715		192.5	mg/L	96	1	200			
WG579340LFB	LFB	11/27/23 22:55	II231120-3	.9981		1.022	mg/L	102	85	115			
WG579340CCV1	CCV	11/27/23 23:27	II231012-1	1		.996	mg/L	100	90	110			
WG579340CCB1	CCB	11/27/23 23:30				U	mg/L		-0.18	0.18			
L84611-02AS	AS	11/28/23 0:03	II231120-3	.9981	.309	1.31	mg/L	101	85	115			
WG579340CCV2	CCV	11/28/23 0:06	II231012-1	1		.997	mg/L	100	90	110			
WG579340CCB2	CCB	11/28/23 0:09				U	mg/L		-0.18	0.18			
L84611-02ASD	ASD	11/28/23 0:13	II231120-3	.9981	.309	1.34	mg/L	104	85	115	2	20	
WG579340CCV3	CCV	11/28/23 0:29	II231012-1	1		.975	mg/L	98	90	110			
WG579340CCB3	CCB	11/28/23 0:32				U	mg/L		-0.18	0.18			

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG580123													
WG580123ICV	ICV	12/18/23 12:38	MS231205-4	.05		.05218	mg/L	104	90	110			
WG580123ICB	ICB	12/18/23 12:40				.00012	mg/L		-0.00022	0.00022			
WG580123LFB	LFB	12/18/23 12:42	MS231108-4	.05005		.04891	mg/L	98	85	115			
L84460-01AS	AS	12/18/23 12:47	MS231108-4	1.001	.00234	1.03529	mg/L	103	70	130			
L84460-01ASD	ASD	12/18/23 12:49	MS231108-4	1.001	.00234	1.01011	mg/L	101	70	130	2	20	
WG580123CCV1	CCV	12/18/23 13:06	MS231205-1	.25025		.2533	mg/L	101	90	110			
WG580123CCB1	CCB	12/18/23 13:08				U	mg/L		-0.0003	0.0003			
L84605-05AS	AS	12/18/23 13:20	MS231108-4	.25025	U	.23399	mg/L	94	70	130			
L84605-05ASD	ASD	12/18/23 13:22	MS231108-4	.25025	U	.26795	mg/L	107	70	130	14	20	
WG580123CCV2	CCV	12/18/23 13:34	MS231205-1	.25025		.24945	mg/L	100	90	110			
WG580123CCB2	CCB	12/18/23 13:36				U	mg/L		-0.0003	0.0003			
WG580123CCV3	CCV	12/18/23 13:50	MS231205-1	.25025		.24677	mg/L	99	90	110			
WG580123CCB3	CCB	12/18/23 13:52				U	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: ***L84605***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	2		2.032	mg/L	102	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.024	0.024			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	.04012		.0435	mg/L	108	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	.1003		.1117	mg/L	111	80	120			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	1.003		1.018	mg/L	101	85	115			
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	1		1.007	mg/L	101	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.024	0.024			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	1		.9886	mg/L	99	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-0.024	0.024			
L84605-01AS	AS	11/22/23 22:38	II231120-3	1.003	.164	1.294	mg/L	113	85	115			
L84605-01ASD	ASD	11/22/23 22:41	II231120-3	1.003	.164	1.309	mg/L	114	85	115	1	20	
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	1		1.013	mg/L	101	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-0.024	0.024			
WG579340													
WG579340ICV	ICV	11/27/23 22:36	II231107-1	2		1.9478	mg/L	97	95	105			
WG579340ICB	ICB	11/27/23 22:42				U	mg/L		-0.024	0.024			
WG579340PQV	PQV	11/27/23 22:45	II231121-4	.04012		.0371	mg/L	92	70	130			
WG579340SIC	SIC	11/27/23 22:49	II231121-5	.1003		.0837	mg/L	83	80	120			
WG579340LFB	LFB	11/27/23 22:55	II231120-3	1.003		.994	mg/L	99	85	115			
WG579340CCV1	CCV	11/27/23 23:27	II231012-1	1		.9804	mg/L	98	90	110			
WG579340CCB1	CCB	11/27/23 23:30				U	mg/L		-0.024	0.024			
L84611-02AS	AS	11/28/23 0:03	II231120-3	1.003	.0374	1.052	mg/L	101	85	115			
WG579340CCV2	CCV	11/28/23 0:06	II231012-1	1		.9598	mg/L	96	90	110			
WG579340CCB2	CCB	11/28/23 0:09				U	mg/L		-0.024	0.024			
L84611-02ASD	ASD	11/28/23 0:13	II231120-3	1.003	.0374	1.055	mg/L	101	85	115	0	20	
WG579340CCV3	CCV	11/28/23 0:29	II231012-1	1		.9633	mg/L	96	90	110			
WG579340CCB3	CCB	11/28/23 0:32				U	mg/L		-0.024	0.024			

GCC

ACZ Project ID: ***L84605***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	100		97.57	mg/L	98	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.6	0.6			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	1.006		1.07	mg/L	106	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	202.206		200	mg/L	99	1	200			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	49.81683		48.71	mg/L	98	85	115			
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	50		49.41	mg/L	99	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.6	0.6			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	50		49.5	mg/L	99	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-0.6	0.6			
L84605-01AS	AS	11/22/23 22:38	II231120-3	49.81683	43.5	93.67	mg/L	101	85	115			
L84605-01ASD	ASD	11/22/23 22:41	II231120-3	49.81683	43.5	93.61	mg/L	101	85	115	0	20	
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	50		50.16	mg/L	100	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-0.6	0.6			
WG579340													
WG579340ICV	ICV	11/27/23 22:36	II231107-1	100		98.71	mg/L	99	95	105			
WG579340ICB	ICB	11/27/23 22:42				U	mg/L		-0.6	0.6			
WG579340PQV	PQV	11/27/23 22:45	II231121-4	1.006		.96	mg/L	95	70	130			
WG579340SIC	SIC	11/27/23 22:49	II231121-5	202.206		203.6	mg/L	101	1	200			
WG579340LFB	LFB	11/27/23 22:55	II231120-3	49.81683		50.08	mg/L	101	85	115			
WG579340CCV1	CCV	11/27/23 23:27	II231012-1	50		49.97	mg/L	100	90	110			
WG579340CCB1	CCB	11/27/23 23:30				U	mg/L		-0.6	0.6			
L84611-02AS	AS	11/28/23 0:03	II231120-3	49.81683	27.6	76.71	mg/L	99	85	115			
WG579340CCV2	CCV	11/28/23 0:06	II231012-1	50		50.68	mg/L	101	90	110			
WG579340CCB2	CCB	11/28/23 0:09				U	mg/L		-0.6	0.6			
L84611-02ASD	ASD	11/28/23 0:13	II231120-3	49.81683	27.6	77.73	mg/L	101	85	115	1	20	
WG579340CCV3	CCV	11/28/23 0:29	II231012-1	50		49.32	mg/L	99	90	110			
WG579340CCB3	CCB	11/28/23 0:32				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L84605***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Manganese, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	2		1.944	mg/L	97	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.03	0.03			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	.0502		.051	mg/L	102	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	50.1502		47.34	mg/L	94	1	200			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	.501		.505	mg/L	101	85	115			
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	1		.992	mg/L	99	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.03	0.03			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	1		.988	mg/L	99	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-0.03	0.03			
L84605-01AS	AS	11/22/23 22:38	II231120-3	.501	.068	.591	mg/L	104	85	115			
L84605-01ASD	ASD	11/22/23 22:41	II231120-3	.501	.068	.593	mg/L	105	85	115	0	20	
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	1		1.008	mg/L	101	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-0.03	0.03			
WG579340													
WG579340ICV	ICV	11/27/23 22:36	II231107-1	2		1.927	mg/L	96	95	105			
WG579340ICB	ICB	11/27/23 22:42				U	mg/L		-0.03	0.03			
WG579340PQV	PQV	11/27/23 22:45	II231121-4	.0502		.049	mg/L	98	70	130			
WG579340SIC	SIC	11/27/23 22:49	II231121-5	50.1502		47.78	mg/L	95	1	200			
WG579340LFB	LFB	11/27/23 22:55	II231120-3	.501		.507	mg/L	101	85	115			
WG579340CCV1	CCV	11/27/23 23:27	II231012-1	1		.992	mg/L	99	90	110			
WG579340CCB1	CCB	11/27/23 23:30				U	mg/L		-0.03	0.03			
L84611-02AS	AS	11/28/23 0:03	II231120-3	.501	.016	.523	mg/L	101	85	115			
WG579340CCV2	CCV	11/28/23 0:06	II231012-1	1		.981	mg/L	98	90	110			
WG579340CCB2	CCB	11/28/23 0:09				U	mg/L		-0.03	0.03			
L84611-02ASD	ASD	11/28/23 0:13	II231120-3	.501	.016	.533	mg/L	103	85	115	2	20	
WG579340CCV3	CCV	11/28/23 0:29	II231012-1	1		.972	mg/L	97	90	110			
WG579340CCB3	CCB	11/28/23 0:32				U	mg/L		-0.03	0.03			

Mercury, dissolved M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579454													
WG579454ICV	ICV	11/30/23 13:43	HG231106-3	.005		.005	mg/L	100	90	110			
WG579454ICB	ICB	11/30/23 13:44				U	mg/L		-0.0006	0.0006			
WG579567													
WG579567CCV1	CCV	11/30/23 15:38	HG231106-3	.005		.00519	mg/L	104	90	110			
WG579567CCB1	CCB	11/30/23 15:39				U	mg/L		-0.0002	0.0002			
WG579567PQV	PQV	11/30/23 15:40	HG231106-5	.001001		.001	mg/L	100	70	130			
WG579567LRB	LRB	11/30/23 15:41				U	mg/L		-0.00044	0.00044			
WG579567LFB	LFB	11/30/23 15:42	HG231106-6	.002002		.00201	mg/L	100	85	115			
L84493-03LFM	LFM	11/30/23 15:45	HG231106-6	.002002	U	.00192	mg/L	96	85	115			
L84493-03LFMD	LFMD	11/30/23 15:46	HG231106-6	.002002	U	.00195	mg/L	97	85	115	2	20	
WG579567CCV2	CCV	11/30/23 15:49	HG231106-3	.005		.00517	mg/L	103	90	110			
WG579567CCB2	CCB	11/30/23 15:50				U	mg/L		-0.0002	0.0002			
WG579567CCV3	CCV	11/30/23 16:01	HG231106-3	.005		.00498	mg/L	100	90	110			
WG579567CCB3	CCB	11/30/23 16:02				U	mg/L		-0.0002	0.0002			
WG579567CCV4	CCV	11/30/23 16:09	HG231106-3	.005		.00509	mg/L	102	90	110			
WG579567CCB4	CCB	11/30/23 16:10				U	mg/L		-0.0002	0.0002			

GCC

ACZ Project ID: ***L84605***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nickel, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	2.002		1.9882	mg/L	99	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.024	0.024			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	.04		.0431	mg/L	108	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	.1		.0958	mg/L	96	80	120			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	.5		.4958	mg/L	99	85	115			
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	1.001		1.016	mg/L	101	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.024	0.024			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	1.001		1.01	mg/L	101	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-0.024	0.024			
L84605-01AS	AS	11/22/23 22:38	II231120-3	.5	U	.5174	mg/L	103	85	115			
L84605-01ASD	ASD	11/22/23 22:41	II231120-3	.5	U	.5188	mg/L	104	85	115	0	20	
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	1.001		1.042	mg/L	104	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-0.024	0.024			
WG579340													
WG579340ICV	ICV	11/27/23 22:36	II231107-1	2.002		2.0045	mg/L	100	95	105			
WG579340ICB	ICB	11/27/23 22:42				U	mg/L		-0.024	0.024			
WG579340PQV	PQV	11/27/23 22:45	II231121-4	.04		.0387	mg/L	97	70	130			
WG579340SIC	SIC	11/27/23 22:49	II231121-5	.1		.0978	mg/L	98	80	120			
WG579340LFB	LFB	11/27/23 22:55	II231120-3	.5		.514	mg/L	103	85	115			
WG579340CCV1	CCV	11/27/23 23:27	II231012-1	1.001		1.029	mg/L	103	90	110			
WG579340CCB1	CCB	11/27/23 23:30				U	mg/L		-0.024	0.024			
L84611-02AS	AS	11/28/23 0:03	II231120-3	.5	U	.5171	mg/L	103	85	115			
WG579340CCV2	CCV	11/28/23 0:06	II231012-1	1.001		1.034	mg/L	103	90	110			
WG579340CCB2	CCB	11/28/23 0:09				U	mg/L		-0.024	0.024			
L84611-02ASD	ASD	11/28/23 0:13	II231120-3	.5	U	.5365	mg/L	107	85	115	4	20	
WG579340CCV3	CCV	11/28/23 0:29	II231012-1	1.001		1.018	mg/L	102	90	110			
WG579340CCB3	CCB	11/28/23 0:32				U	mg/L		-0.024	0.024			

Nitrate/Nitrite as N M353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG578910													
WG578910ICV	ICV	11/17/23 0:25	WI231003-5	2.416		2.387	mg/L	99	90	110			
WG578910ICB	ICB	11/17/23 0:26				U	mg/L		-0.02	0.02			
WG578910LFB	LFB	11/17/23 0:30	WI230829-3	2		1.983	mg/L	99	90	110			
WG578910CCV1	CCV	11/17/23 0:40	WI231115-5	2		2.012	mg/L	101	90	110			
WG578910CCB1	CCB	11/17/23 0:43				U	mg/L		-0.02	0.02			
L84605-01AS	AS	11/17/23 0:52	WI230829-3	2	U	1.96	mg/L	98	90	110			
L84605-02DUP	DUP	11/17/23 0:55			U	U	mg/L				0	20	RA
WG578910CCV2	CCV	11/17/23 0:57	WI231115-5	2		2.002	mg/L	100	90	110			
WG578910CCB2	CCB	11/17/23 1:00				U	mg/L		-0.02	0.02			
WG578910CCV3	CCV	11/17/23 1:14	WI231115-5	2		1.991	mg/L	100	90	110			
WG578910CCB3	CCB	11/17/23 1:18				U	mg/L		-0.02	0.02			
WG578910CCV4	CCV	11/17/23 1:27	WI231115-5	2		1.998	mg/L	100	90	110			
WG578910CCB4	CCB	11/17/23 1:30				U	mg/L		-0.02	0.02			

GCC

ACZ Project ID: ***L84605***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nitrite as N M353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG578910													
WG578910ICV	ICV	11/17/23 0:25	WI231003-5	.608		.601	mg/L	99	90	110			
WG578910ICB	ICB	11/17/23 0:26				U	mg/L		-0.01	0.01			
WG578910LFB	LFB	11/17/23 0:30	WI230829-3	1		1.006	mg/L	101	90	110			
WG578910CCV1	CCV	11/17/23 0:40	WI231115-5	1		.992	mg/L	99	90	110			
WG578910CCB1	CCB	11/17/23 0:43				U	mg/L		-0.01	0.01			
L84605-01AS	AS	11/17/23 0:52	WI230829-3	1	U	.85	mg/L	85	90	110			M2
L84605-02DUP	DUP	11/17/23 0:55			U	U	mg/L				0	20	RA
WG578910CCV2	CCV	11/17/23 0:57	WI231115-5	1		.993	mg/L	99	90	110			
WG578910CCB2	CCB	11/17/23 1:00				U	mg/L		-0.01	0.01			
WG578910CCV3	CCV	11/17/23 1:14	WI231115-5	1		.987	mg/L	99	90	110			
WG578910CCB3	CCB	11/17/23 1:18				U	mg/L		-0.01	0.01			
WG578910CCV4	CCV	11/17/23 1:27	WI231115-5	1		.987	mg/L	99	90	110			
WG578910CCB4	CCB	11/17/23 1:30				U	mg/L		-0.01	0.01			

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	20		19.62	mg/L	98	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-1.5	1.5			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	1.004		1.09	mg/L	109	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	1.004		1.07	mg/L	107	80	120			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	99.97581		96.9	mg/L	97	85	115			
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	10		10.02	mg/L	100	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-1.5	1.5			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	10		10.1	mg/L	101	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-1.5	1.5			
L84605-01AS	AS	11/22/23 22:38	II231120-3	99.97581	4.38	108.5	mg/L	104	85	115			
L84605-01ASD	ASD	11/22/23 22:41	II231120-3	99.97581	4.38	109.5	mg/L	105	85	115	1	20	
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	10		10.1	mg/L	101	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-1.5	1.5			
WG579340													
WG579340ICV	ICV	11/27/23 22:36	II231107-1	20		19.62	mg/L	98	95	105			
WG579340ICB	ICB	11/27/23 22:42				U	mg/L		-1.5	1.5			
WG579340PQV	PQV	11/27/23 22:45	II231121-4	1.004		1.03	mg/L	103	70	130			
WG579340SIC	SIC	11/27/23 22:49	II231121-5	1.004		1.09	mg/L	109	80	120			
WG579340LFB	LFB	11/27/23 22:55	II231120-3	99.97581		99.41	mg/L	99	85	115			
WG579340CCV1	CCV	11/27/23 23:27	II231012-1	10		9.86	mg/L	99	90	110			
WG579340CCB1	CCB	11/27/23 23:30				U	mg/L		-1.5	1.5			
L84611-02AS	AS	11/28/23 0:03	II231120-3	99.97581	5.17	106.6	mg/L	101	85	115			
WG579340CCV2	CCV	11/28/23 0:06	II231012-1	10		10.17	mg/L	102	90	110			
WG579340CCB2	CCB	11/28/23 0:09				U	mg/L		-1.5	1.5			
L84611-02ASD	ASD	11/28/23 0:13	II231120-3	99.97581	5.17	106.3	mg/L	101	85	115	0	20	
WG579340CCV3	CCV	11/28/23 0:29	II231012-1	10		9.92	mg/L	99	90	110			
WG579340CCB3	CCB	11/28/23 0:32				U	mg/L		-1.5	1.5			

GCC

ACZ Project ID: ***L84605***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579134													
WG579134PBW	PBW	11/21/23 9:02				U	mg/L		-20	20			
WG579134LCSW	LCSW	11/21/23 9:04	PCN626025	1000		1002	mg/L	100	80	120			
L84605-06DUP	DUP	11/21/23 9:33			26	20	mg/L				26	10	RA
WG579850													
WG579850PBW	PBW	12/04/23 17:25				U	mg/L		-20	20			
WG579850LCSW	LCSW	12/04/23 17:27	PCN626028	1000		984	mg/L	98	80	120			
L84792-01DUP	DUP	12/04/23 18:25			98	100	mg/L				2	10	RA

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG580123													
WG580123ICV	ICV	12/18/23 12:38	MS231205-4	.05		.05429	mg/L	109	90	110			
WG580123ICB	ICB	12/18/23 12:40				.0002	mg/L		-0.00022	0.00022			
WG580123LFB	LFB	12/18/23 12:42	MS231108-4	.05005		.04883	mg/L	98	85	115			
L84460-01AS	AS	12/18/23 12:47	MS231108-4	1.001	.0117	1.0578	mg/L	105	70	130			
L84460-01ASD	ASD	12/18/23 12:49	MS231108-4	1.001	.0117	1.04183	mg/L	103	70	130	2	20	
WG580123CCV1	CCV	12/18/23 13:06	MS231205-1	.1001		.10634	mg/L	106	90	110			
WG580123CCB1	CCB	12/18/23 13:08				.00129	mg/L		-0.0003	0.0003			BB BE
L84605-05AS	AS	12/18/23 13:20	MS231108-4	.25025	U	.22887	mg/L	91	70	130			
L84605-05ASD	ASD	12/18/23 13:22	MS231108-4	.25025	U	.25462	mg/L	102	70	130	11	20	
WG580123CCV2	CCV	12/18/23 13:34	MS231205-1	.1001		.10112	mg/L	101	90	110			
WG580123CCB2	CCB	12/18/23 13:36				.00026	mg/L		-0.0003	0.0003			
WG580123CCV3	CCV	12/18/23 13:50	MS231205-1	.1001		.10104	mg/L	101	90	110			
WG580123CCB3	CCB	12/18/23 13:52				.00021	mg/L		-0.0003	0.0003			
WG580801													
WG580801ICV	ICV	12/18/23 15:46	MS231205-4	.05		.05282	mg/L	106	90	110			
WG580801ICB	ICB	12/18/23 15:48				.00013	mg/L		-0.00022	0.00022			
WG580801LFB	LFB	12/18/23 15:51	MS231108-4	.05005		.05052	mg/L	101	85	115			
L84460-01AS	AS	12/18/23 15:55	MS231108-4	1.001	.00996	1.02012	mg/L	101	70	130			
L84460-01ASD	ASD	12/18/23 15:58	MS231108-4	1.001	.00996	.98616	mg/L	98	70	130	3	20	
WG580801CCV1	CCV	12/18/23 16:09	MS231205-1	.1001		.09937	mg/L	99	90	110			
WG580801CCB1	CCB	12/18/23 16:12				.00016	mg/L		-0.0003	0.0003			
WG580801CCV2	CCV	12/18/23 16:21	MS231205-1	.1001		.09695	mg/L	97	90	110			
WG580801CCB2	CCB	12/18/23 16:23				.00017	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: ***L84605***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	100		99.74	mg/L	100	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.6	0.6			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	1.0055		.92	mg/L	91	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	1.0055		.93	mg/L	92	80	120			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	100.1305		98.18	mg/L	98	85	115			
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	50		50.42	mg/L	101	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.6	0.6			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	50		51.16	mg/L	102	90	110			
WG579235CCB2	CCB	11/22/23 22:32				.81	mg/L		-0.6	0.6			BB
L84605-01AS	AS	11/22/23 22:38	II231120-3	100.1305	422	507.9	mg/L	86	85	115			
L84605-01ASD	ASD	11/22/23 22:41	II231120-3	100.1305	422	511.4	mg/L	89	85	115	1	20	
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	50		51.36	mg/L	103	90	110			
WG579235CCB3	CCB	11/22/23 22:53				.31	mg/L		-0.6	0.6			
WG579426													
WG579426ICV	ICV	11/28/23 21:19	II231107-1	100		97.53	mg/L	98	95	105			
WG579426ICB	ICB	11/28/23 21:25				U	mg/L		-0.6	0.6			
WG579426PQV	PQV	11/28/23 21:28	II231121-4	1.0055		.83	mg/L	83	70	130			
WG579426SIC	SIC	11/28/23 21:31	II231121-5	1.0055		.9	mg/L	90	80	120			
WG579426LFB	LFB	11/28/23 21:38	II231120-3	100.1305		99.69	mg/L	100	85	115			
WG579426CCV1	CCV	11/28/23 22:10	II231012-1	50		49.56	mg/L	99	90	110			
WG579426CCB1	CCB	11/28/23 22:13				U	mg/L		-0.6	0.6			
WG579426CCV2	CCV	11/28/23 22:49	II231012-1	50		50.17	mg/L	100	90	110			
WG579426CCB2	CCB	11/28/23 22:52				U	mg/L		-0.6	0.6			
L84605-05AS	AS	11/28/23 22:55	II231120-3	100.1305	973	1046	mg/L	73	85	115			M3
L84605-05ASD	ASD	11/28/23 22:58	II231120-3	100.1305	973	1025	mg/L	52	85	115	2	20	M3
WG579426CCV3	CCV	11/28/23 23:11	II231012-1	50		49.98	mg/L	100	90	110			
WG579426CCB3	CCB	11/28/23 23:14				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L84605***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sulfate D516-02/-07/-11 - TURBIDIMETRIC

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG580234													
WG580234ICB	ICB	12/11/23 8:51				U	mg/L		-3	3			
WG580234ICV	ICV	12/11/23 8:51	WI231207-3	20		19.9	mg/L	100	90	110			
WG580234CCV1	CCV	12/11/23 12:41	WI231207-4	25		23.4	mg/L	94	90	110			
WG580234CCB1	CCB	12/11/23 12:41				U	mg/L		-3	3			
WG580234LFB	LFB	12/11/23 12:41	WI230119-9	10		10.1	mg/L	101	90	110			
L84602-03AS	AS	12/11/23 12:41	WI230119-9	10	20.2	31.1	mg/L	109	90	110			
L84602-03ASD	ASD	12/11/23 12:41	WI230119-9	10	20.2	30.5	mg/L	103	90	110	2	20	
WG580234CCV2	CCV	12/11/23 12:43	WI231207-4	25		24.8	mg/L	99	90	110			
WG580234CCB2	CCB	12/11/23 12:43				U	mg/L		-3	3			
L84605-06AS	AS	12/11/23 12:44	WI230119-9	10	2.1	10.9	mg/L	88	90	110			M2
L84605-06ASD	ASD	12/11/23 12:44	WI230119-9	10	2.1	10.6	mg/L	85	90	110	3	20	M2
WG580234CCV3	CCV	12/11/23 12:44	WI231207-4	25		24.5	mg/L	98	90	110			
WG580234CCB3	CCB	12/11/23 12:44				U	mg/L		-3	3			
WG580234CCV4	CCV	12/11/23 12:47	WI231207-4	25		24.9	mg/L	100	90	110			
WG580234CCB4	CCB	12/11/23 12:47				U	mg/L		-3	3			
WG580234CCV5	CCV	12/11/23 12:50	WI231207-4	25		24.5	mg/L	98	90	110			
WG580234CCB5	CCB	12/11/23 12:50				U	mg/L		-3	3			
WG580234CCB6	CCB	12/11/23 12:53				U	mg/L		-3	3			
WG580234CCV6	CCV	12/11/23 12:53	WI231207-4	25		24.3	mg/L	97	90	110			
WG580234CCV7	CCV	12/11/23 12:59	WI231207-4	25		24.7	mg/L	99	90	110			
WG580234CCB7	CCB	12/11/23 12:59				U	mg/L		-3	3			
WG580234CCV8	CCV	12/11/23 13:06	WI231207-4	25		25	mg/L	100	90	110			
WG580234CCB8	CCB	12/11/23 13:06				U	mg/L		-3	3			

GCC

ACZ Project ID: ***L84605***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Vanadium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	2		1.983	mg/L	99	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.015	0.015			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	.025025		.023	mg/L	92	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	.1001		.092	mg/L	92	80	120			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	.5005		.4933	mg/L	99	85	115			
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	1		.995	mg/L	100	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.03	0.03			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	1		.995	mg/L	100	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-0.03	0.03			
L84605-01AS	AS	11/22/23 22:38	II231120-3	.5005	U	.5105	mg/L	102	85	115			
L84605-01ASD	ASD	11/22/23 22:41	II231120-3	.5005	U	.515	mg/L	103	85	115	1	20	
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	1		1.01	mg/L	101	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-0.03	0.03			
WG579340													
WG579340ICV	ICV	11/27/23 22:36	II231107-1	2		1.943	mg/L	97	95	105			
WG579340ICB	ICB	11/27/23 22:42				U	mg/L		-0.015	0.015			
WG579340PQV	PQV	11/27/23 22:45	II231121-4	.025025		.02	mg/L	80	70	130			
WG579340SIC	SIC	11/27/23 22:49	II231121-5	.1001		.086	mg/L	86	80	120			
WG579340LFB	LFB	11/27/23 22:55	II231120-3	.5005		.4934	mg/L	99	85	115			
WG579340CCV1	CCV	11/27/23 23:27	II231012-1	1		.989	mg/L	99	90	110			
WG579340CCB1	CCB	11/27/23 23:30				U	mg/L		-0.03	0.03			
L84611-02AS	AS	11/28/23 0:03	II231120-3	.5005	U	.4954	mg/L	99	85	115			
WG579340CCV2	CCV	11/28/23 0:06	II231012-1	1		.983	mg/L	98	90	110			
WG579340CCB2	CCB	11/28/23 0:09				U	mg/L		-0.03	0.03			
L84611-02ASD	ASD	11/28/23 0:13	II231120-3	.5005	U	.497	mg/L	99	85	115	0	20	
WG579340CCV3	CCV	11/28/23 0:29	II231012-1	1		.973	mg/L	97	90	110			
WG579340CCB3	CCB	11/28/23 0:32				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L84605***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Zinc, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG579235													
WG579235ICV	ICV	11/22/23 21:03	II231107-1	2		1.967	mg/L	98	95	105			
WG579235ICB	ICB	11/22/23 21:09				U	mg/L		-0.06	0.06			
WG579235PQV	PQV	11/22/23 21:12	II231121-4	.05005		.051	mg/L	102	70	130			
WG579235SIC	SIC	11/22/23 21:15	II231121-5	.1001		.099	mg/L	99	80	120			
WG579235LFB	LFB	11/22/23 21:21	II231120-3	.50045		.515	mg/L	103	85	115			
WG579235CCV1	CCV	11/22/23 21:52	II231012-1	1		.997	mg/L	100	90	110			
WG579235CCB1	CCB	11/22/23 21:54				U	mg/L		-0.06	0.06			
WG579235CCV2	CCV	11/22/23 22:29	II231012-1	1		1	mg/L	100	90	110			
WG579235CCB2	CCB	11/22/23 22:32				U	mg/L		-0.06	0.06			
L84605-01AS	AS	11/22/23 22:38	II231120-3	.50045	U	.537	mg/L	107	85	115			
L84605-01ASD	ASD	11/22/23 22:41	II231120-3	.50045	U	.533	mg/L	107	85	115	1	20	
WG579235CCV3	CCV	11/22/23 22:50	II231012-1	1		1.051	mg/L	105	90	110			
WG579235CCB3	CCB	11/22/23 22:53				U	mg/L		-0.06	0.06			
WG579340													
WG579340ICV	ICV	11/27/23 22:36	II231107-1	2		1.918	mg/L	96	95	105			
WG579340ICB	ICB	11/27/23 22:42				U	mg/L		-0.06	0.06			
WG579340PQV	PQV	11/27/23 22:45	II231121-4	.05005		.048	mg/L	96	70	130			
WG579340SIC	SIC	11/27/23 22:49	II231121-5	.1001		.095	mg/L	95	80	120			
WG579340LFB	LFB	11/27/23 22:55	II231120-3	.50045		.517	mg/L	103	85	115			
WG579340CCV1	CCV	11/27/23 23:27	II231012-1	1		.98	mg/L	98	90	110			
WG579340CCB1	CCB	11/27/23 23:30				U	mg/L		-0.06	0.06			
L84611-02AS	AS	11/28/23 0:03	II231120-3	.50045	.038	.555	mg/L	104	85	115			
WG579340CCV2	CCV	11/28/23 0:06	II231012-1	1		1.006	mg/L	101	90	110			
WG579340CCB2	CCB	11/28/23 0:09				U	mg/L		-0.06	0.06			
L84611-02ASD	ASD	11/28/23 0:13	II231120-3	.50045	.038	.561	mg/L	105	85	115	1	20	
WG579340CCV3	CCV	11/28/23 0:29	II231012-1	1		.968	mg/L	97	90	110			
WG579340CCB3	CCB	11/28/23 0:32				U	mg/L		-0.06	0.06			

GCC Rio Grande ACZ Project ID: ***L84605***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L84605-01	WG579235	Aluminum, dissolved	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG580126	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG579235	Copper, dissolved	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG580510	Fluoride	SM4500F-C	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
	WG578910	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	M353.2 - Automated Cadmium Reduction	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG579134	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			SM2540C	Z5	Oven temperature observed out of range. Sample and Quality Control attained a consistent weight and all Quality controls were within limits. Reanalyze at client request
	WG580123	Selenium, dissolved	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG579235	Sodium, dissolved	M200.7 ICP	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
L84605-02	WG579235	Aluminum, dissolved	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG580126	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG579235	Copper, dissolved	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG580510	Fluoride	SM4500F-C	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
	WG578910	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	M353.2 - Automated Cadmium Reduction	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG579134	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			SM2540C	Z5	Oven temperature observed out of range. Sample and Quality Control attained a consistent weight and all Quality controls were within limits. Reanalyze at client request
	WG580801	Selenium, dissolved	M200.8 ICP-MS	DB	Sample required dilution due to low bias result.
	WG579235	Sodium, dissolved	M200.7 ICP	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.

GCC Rio Grande ACZ Project ID: ***L84605***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L84605-03	WG580126	Chloride	SM4500Cl-E	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG580510	Fluoride	SM4500F-C	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
	WG578910	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	M353.2 - Automated Cadmium Reduction	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG579850	Residue, Filterable (TDS) @180C	SM2540C	H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG579426	Sodium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L84605-04	WG580126	Chloride	SM4500Cl-E	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG580510	Fluoride	SM4500F-C	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
	WG578910	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	M353.2 - Automated Cadmium Reduction	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG579134	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			SM2540C	Z5	Oven temperature observed out of range. Sample and Quality Control attained a consistent weight and all Quality controls were within limits. Reanalyze at client request
	WG579426	Sodium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG580234	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.

GCC Rio Grande ACZ Project ID: ***L84605***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L84605-05	WG580126	Chloride	SM4500Cl-E	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG580510	Fluoride	SM4500F-C	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
	WG578910	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	M353.2 - Automated Cadmium Reduction	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG579134	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			SM2540C	Z5	Oven temperature observed out of range. Sample and Quality Control attained a consistent weight and all Quality controls were within limits. Reanalyze at client request
	WG580123	Selenium, dissolved	M200.8 ICP-MS	BE	Target analyte in continuing calibration blank (CCB) at or above the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG579426	Sodium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG580234	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
L84605-06	WG580126	Chloride	SM4500Cl-E	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG579939	Fluoride	SM4500F-C	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			SM4500F-C	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500F-C	VC	CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [< MDL].
	WG578910	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	M353.2 - Automated Cadmium Reduction	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG579134	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			SM2540C	Z3	Sample volume yielded a residue less than 2.5 mg
			SM2540C	Z5	Oven temperature observed out of range. Sample and Quality Control attained a consistent weight and all Quality controls were within limits. Reanalyze at client request
	WG579426	Sodium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG580234	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.

No certification qualifiers associated with this analysis

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

GCC Rio Grande
183230

ACZ Project ID: L84605
Date Received: 11/16/2023 10:57
Received By:
Date Printed: 11/17/2023

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]	X		
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?			X
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
NA40600	3.9	<=6.0	15	N/A

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

GCC Rio Grande
183230

ACZ Project ID: L84605
Date Received: 11/16/2023 10:57
Received By:
Date Printed: 11/17/2023

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L84605

CHAIN of CUSTODY

Report to:

Name: Amy Rodrigues
Company: GCC Rio Grande Inc
E-mail: aveek@gcc.com
Address: 3372 Lime Road, Pueblo CO 81004
Telephone: 719-647-6861

Copy of Report to:

Name: Landon Beck
Company: Resource Hydrogeologic
E-mail: lbeck@resourcehydrogeologic.com
Telephone: (970) 459-4865

Invoice to:

Name: Amy Rodrigues
Company: GCC Rio Grande Inc
E-mail: aveek@gcc.com
Address: 3372 Lime Road, Pueblo CO 81004
Telephone: 719-647-6861

Copy of Invoice to:

Name:
Company:
E-mail:
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes No ✓

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Amy Rodrigues **Sampler's Site Information** State CO Zip code 81004 Time Zone MST

***Sampler's Signature:** Amy Rodrigues

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: GW-COMPLIANCE
PO#: 183230
Reporting state for compliance testing:
Check box if samples include NRC licensed material?

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	GW-COMpliance							
MW-11	11/15/2023 09:58	GW	3	✓							
MW-12	11/15/2023 11:42	GW	3	✓							
MW-9	11/15/2023 11:30	GW	3	✓							
MW-10	11/15/2023 12:02	GW	3	✓							
MW-2B	11/15/2023 12:00	GW	3	✓							
Method Blank	11/15/2023 13:23	GW	3	✓							

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
Amy Rodrigues	11/15/23 14:35		11/16/23 10:35

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

L84605 Chain of Custod

ATTACHMENT 3 - GCC Groundwater Sampling Lab Data Validation Report

DIANE SHORT & ASSOCIATES, INC.
2634 S. Deframe Circle
Lakewood CO 80228
303:271-9642
dsa7cbc@eazyqaqc.com

INORGANIC DATA QUALITY REVIEW REPORT
METALS BY ICPMS, ICP, CVAA, WET CHEMISTRY AND SPECIAL METHODS

SDG	L79100, L79125, L80783, L80818, L82345, L82382, L84579, L84605		
PROJECT	GCC Rio Grande – First through Fourth Quarter 2023, Resource Hydrogeologic Services and GCC		
LABORATORY	ACZ Laboratories, Steamboat Springs, CO		
SAMPLE MATRIX	Water	SAMPLING DATE:	3/6, 3/7/, 5/30, 5/31, 8/8, 8/9 11/14/ 11/15 2023
ANALYSES REQUESTED	EPA 200.7 (metals by ICP, dissolved), EPA 200.8 (metals by ICPMS, dissolved), EPA 245.1 (mercury, dissolved), SM4500F-C (Fluoride), M353.2 (nitrate + nitrite as nitrogen, nitrite as nitrogen, nitrate as nitrogen); SM2540C (total dissolved solids); D516-02/-07/-11 -Sulfate by turbidimetry; SM4500Cl-E (Chloride)		
SAMPLE NUMBER	MW-14, MW-13, MW-8, MW-7, MW-6, MW-11, MW-12, MW-9, MW-10, MW-2B, METHOD BLANK		

DATA REVIEWER: John Huntington

QA REVIEWER: Diane Short & Associates, Inc. INITIALS/DATE: ___ DLS ___01/08/2024

Telephone Logs included Yes____ No __X_
Contractual Violations Yes____ No __X_

The Contract Laboratory Program National Functional Guidelines for Inorganic Data Review 2016 (NFG) and the requested EPA Methods, Methods of Chemical Analysis of Water and Wastes (MCAWW) and Standard Methods (SM, current updates) have been referenced by the reviewer to perform this data validation review. The review includes evaluation of calibration, holding times and Quality Control (QC) for all samples; and 10% review of transcription and calculation algorithms from the raw data. Determining the exact analytical sequence was performed to verify that the frequencies of QC sample analyses were met, where applicable, on 10% of the data. General comments regarding the data/analytical quality are part of the review when raw data are submitted. The reports use Diane Short & Associates (DSA) validation qualifiers in the text and tables that include the compilation of the reasons for qualification and the associated values, as defined in each section for QC outliers. The United States Environmental Protection Agency (EPA) qualifiers have been provided. The DSA qualifiers, EPA qualifiers, and validation codes are included in the Electronic Data Deliverable (EDD). Note: those items in this report which have an asterisk (*) are specific to inductively coupled plasma-mass spectrometry (ICP-MS) and may include inductively coupled plasma-atomic emission spectroscopy (ICP-AES) as applicable.

I. DELIVERABLES

All deliverables were present as specified in the Statement of Work (SOW), SW-846, or in the project contract. This includes the Case Narrative.

Yes X No _____

Data were submitted for EPA 200.7 (16 metals by ICP, dissolved), EPA 200.8 (4 metals by ICPMS, dissolved), EPA 245.1 (mercury, dissolved), SM4500F-C (Fluoride), M353.2 (nitrate + nitrite as nitrogen, nitrite as nitrogen, nitrate as nitrogen); SM2540C (total dissolved solids); D516-02/-07/-11 -Sulfate by turbidimetry; SM4500Cl-E (Chloride). Note that for these SDGS, pH was not requested.

The data were validated at EPA Level III (EPA Stage 2B) with a minimum of 10% validated as EPA raw data review. Both second quarter SDGs are provided as level IV data packages.

The laboratory has reported detections to the MDL and has flagged results between the MDL and the PQL with a "B". This is noted because many laboratories use "J" instead of "B" for this purpose, so the meaning of this flag needs to be kept in mind when reviewing the data. The definition of lab flags is provided in the laboratory report in the Inorganic Reference section.

II. ANALYTICAL REPORT FORMS

A. The Analytical Report or Data Sheets are present and complete for all requested analyses.

Yes X No _____

B. Holding Times

1. The contract holding times were met for all analyses (time of sample receipt to date of analysis).

Yes X No _____ N/A _____

Data are qualified from date of collection to analysis, as presented in the next section.

2. The method holding times were met for all analyses (time of sample collection to date of analysis per the holding times in the project QAPP).

Yes _____ No X

The method holding times were met for all analyses, with the following clarifications and exceptions. Results reported by the lab are qualified as JH#, where # is the number of days since sampling. An outlier that is greater than 4x the hold time is rejected. Qualified results not rejected. should be considered as estimates due to time and temperature changes in the samples.

First Quarter: Two samples for TDS in L79100 and one in L79125 had to be diluted after the initial analysis to meet method criteria. The reanalysis was out of the 7-day holding time in each case. The results for these samples are qualified as JH#, where # is the number of days outside of holding time. These results could possibly be biased due to chemical changes between analyses. Any bias should be minor in this case.

Second Quarter: Two samples for TDS in L80783 and one in L80818 had to be diluted after the initial analysis to meet method criteria. The reanalysis was out of the 7-day holding time in each case. The results for these samples are qualified as JH#, where # is the number of days outside of holding time. These results could possibly be biased due to chemical changes between analyses. Any bias should be minor in this case.

Third Quarter: One sample for TDS in L82382 had to be diluted after the initial analysis to meet method criteria. The reanalysis was out of the 7-day holding time. The result for this sample is qualified as JH#, where # is the number of days outside of holding time. These results could possibly be biased due to chemical changes between analyses. Any bias should be minor in this case.

Fourth Quarter: Two samples for TDS in L84579 and one for TDS in L84605 had to be diluted after the initial analysis to meet method criteria. The reanalysis was out of the 7-day holding time. The results for these samples are qualified as JH#, where # is the number of days outside of holding time. These results could possibly be biased due to chemical changes between analyses. Any bias should be minor in this case.

Also for Quarter 4, all samples for Fluoride in L84605 were initially run within holding time but had high CCV recoveries (according to the laboratory notes in the raw data). The laboratory reanalyzed these on 12/14/2023 just over 0.5 days out of the 28-day hold time for fluoride. Results are qualified as JH1 to indicate that they are minimally outside of holding time. Although qualified, these results are not likely to be significantly biased.

Qualifiers added are shown in the table below in this report and in the qualified EDDs.

CLIENTID	LABID	ANALYTE	RESULT mg/L	Lab Flag	MDL	PQL	DSA	EPA
MW-11	L84605-01	Fluoride	0.85	H	0.15	0.35	JH1	J-
MW-12	L84605-02	Fluoride	1.79	H	0.15	0.35	JH1	J-
MW-9	L84605-03	Fluoride	0.42	H	0.15	0.35	JH1	J-
MW-10	L84605-04	Fluoride	1.26	H	0.15	0.35	JH1	J-
MW-2B	L84605-05	Fluoride	1.77	H	0.15	0.35	JH1	J-
MW-9	L84605-03	Residue, Filterable (TDS) @180C	4530	H	40	80	JH12	J-
MW-7	L84579-04	Residue, Filterable (TDS) @180C	5630	H	100	200	JH13	J-
MW-6	L84579-05	Residue, Filterable (TDS) @180C	5200	H	100	200	JH13	J-
MW-9	L79125-01	Residue, Filterable (TDS) @180C	4600	H	40	80	JH7	J-
MW-14	L79100-01	Residue, Filterable (TDS) @180C	4690	H	40	80	JH16	J-
MW-2B	L79100-06	Residue, Filterable (TDS) @180C	5870	H	100	200	JH8	J-
MW-7	L80783-04	Residue, Filterable (TDS) @180C	5560	H	40	80	JH7	J-
MW-6	L80783-05	Residue, Filterable (TDS) @180C	5380	H	40	80	JH7	J-
MW-9	L80818-04	Residue, Filterable (TDS) @180C	4740	H	40	80	JH12	J-
L82382-01	MW-09	Residue, Filterable (TDS) 180C	4640	H	40	80	JH7	J-

3. Samples were properly preserved to pH < 2 for metals, and applicable preservative was used for other methods.

Yes _____ No __X__ N/A _____

In the Second quarter sampling, samples in L80818 were received at 9.2 deg C, which is above the 40CFR upper limit of 6 deg C for non-metals analysis. For preserved metals there is no specification for temperature. There is no indication that the samples were subjected to elevated temperatures during transit or storage. The most likely impact is on unpreserved samples, such as those used for nitrate analysis.

The Functional Guidelines recommend qualifying samples received > 10 deg C, and professional judgement otherwise. In this case, no qualifiers are added.

C. Chains of Custody (COC)

Chains of Custody (COC) were reviewed and all fields were complete, signatures were present, and cross outs were clean and initialed.

Yes __X__ No _____

All sample analyses were sent under a COC to ACZ Labs, Steamboat Springs, CO.

Clarification: Per the GCC project manager, "the method blank on the COC associated with SDG L84605 is essentially a field blank with DI water and a spare well pump. It is new requirement to have one of these per quarterly sample event."

III. CALIBRATION AND STANDARDIZATION

1. Initial calibration, mass calibration, and resolution checks for both low and high mass isotopes were within 0.1 atomic mass unit (amu) of the true value. (*)

Yes X No _____

All requisite instrument tuning or performance measures were done according to the method requirements. (*).

US EPA Tune Check Sample reports were provided in the raw data and reports indicated the tunes passed in all cases.

2. Mass calibration and resolution checks for both low and high mass isotopes produced a peak width of approximately 0.6 to 0.9 amu at 10% peak height. (*)

Yes X No _____

3. Instrument Stability

A tuning solution was analyzed a minimum of four times, and the relative standard deviation (RSD) of absolute signals for all analytes was less than 5%. (*)

Yes X No _____

B. Instrument Performance and Calibration Standards

1. The Initial Calibration Verification (ICV) standard was within the required control limits of ± 10% of the established value for all analytes. (80 – 120% for mercury, 85 – 115% for Se species)

Yes X No _____

2. The Continuing Calibration Verification (CCV) standards were analyzed at the required frequency following every 10 analyses.

Yes X No _____

Sequencing was performed to verify that the frequencies were met for client samples and for proper application of the qualifiers.

3. The CCV standard percent recovery results were within the required control limits of 90 – 110% (80 – 120 % for mercury, 75 – 125% for Se species)

Yes X No _____

All CCVs were within criteria.

4. The correlation coefficients met the ≥ 0.995 criterion, as applicable to the method for mercury.

Yes X No _____

IV. CONTRACT REQUIRED DETECTION LIMIT (CRDL) STANDARDS

1. The 2x CRDL standards were analyzed for metals as required in the QAPP.

Yes X No _____ N/A _____

A CRDL check is not required for Method 200.8. However, the laboratory initial calibration run each day has a low-level standard that is very near the reporting limit. This meets method requirements. The 200.7 method does

include an RL Check standard that meets criteria.

2. The 2x CRDL standards were within the required control limits of 70 – 130% (ICP: 50 – 150% for Lead, Antimony, and Thallium; ICPMS: 50 – 150% for Cobalt, Manganese, and Zinc).

Yes X No _____
All CRDLs were within criteria.

V. INTERFERENCES

Isobaric Elemental and Molecular Interferences (* for ICP-MS)
The isotope selected was free of isobaric elemental and elemental interferences as measured by the Interference Check Sample Solutions A and AB (ICSA/ICSAB) for ICP-AES and ICP-MS.

Yes X No _____
Data are only qualified if the interfering analyte is present in the sample and at levels near the high end of the linear range of the instrument. For Method 200.7, the recovery of the spectral interference check standard (SIC) is reported in the QC as a recovery for each element analyzed. All are in control. Method 200.8 does not specify the use of interference check standards. The laboratory has used collision deactivation and accepted reagent gas technology to minimize interference for ICP/MS.

VI. LABORATORY REAGENT BLANK (LRB) OR PREPARATION BLANK

A. Blanks were prepared and analyzed at the required frequency of at least one per each set of samples.

Yes X No _____
The ICB is used as the method blank for metals. This is acceptable as samples are directly aspirated into the instrument and no digestion was performed on the samples prior to analysis.

B. All analytes in the blank were less than the MDL.

Yes _____ No X
Analytes reported as contaminants in the Preparation Blank are qualified with the DSA qualifier "UMB#," where # is the value of the associated blank. Only detected data less than 10x the blank for metals or 5x the blank for other analyses are qualified. Such data are fully usable as non-detected values at the reported concentration or elevated reporting limit.

First Quarter: In SDG L79125 the alkalinity blank has low-level detections. However, levels of alkalinity are much greater than these detections and no qualifiers are required. L79100, magnesium is detected in the ICB. Levels of magnesium in samples are much higher than the blank and no qualifiers are required.

Second Quarter: In SDG L80783, the selenium ICB has a low-level detection. In addition, several of the CCBs within the run show similar low-level detections. One sample detected result has a level of selenium such as to require qualification. The result is qualified as UMB# from the ICB (method blank).

In SDG L80818, one ICB had a low-level detection of vanadium. The associated samples did not have detected levels of vanadium, so no qualifiers are required.

Wet chemistry methods have specific preparation blanks. These are either in control or so low relative to sample levels (such as for alkalinity) that they do not require qualification.

Third Quarter: Analytes reported as contaminants in the Preparation Blank are qualified with the DSA qualifier "UMB#," where # is the value of the associated blank. Only detected data less than 10x the blank for metals or

5x the blank for other analyses are qualified. Such data are fully usable as non-detected values at the reported concentration or elevated reporting limit.

In SDG L82345, qualifiers for ICBs and/or CCBs were required for beryllium, manganese, copper, and selenium. Wet chemistry methods have specific preparation blanks. These are either in control or so low relative to sample levels (such as for alkalinity) that they do not require qualification. See the CCB section for qualifiers added.

Fourth Quarter: Only the field blank (which the client has put on the COC as a Method blank) is impacted. Qualifiers are added for bicarbonate and total alkalinity.

CLIENTID	LABID	ANALYTE	RESULT mg/L	Lab Flag	MDL	PQL	DSA	EPA
METHOD BLANK	L84605-06	Bicarbonate as CaCO3	2.9	B	2	20	UMB14.8	UB
METHOD BLANK	L84605-06	Total Alkalinity	3.5	B	2	20	UMB14.8	UB
MW-8	L80783-03	Selenium, dissolved	0.00090	B	0.0005	0.00125	UMB0.00012	UB

C. The source of contamination was corrected, and the samples were reanalyzed.

Yes _____ No _____ N/A __X__

VII. CALIBRATION BLANKS

The highest blank associated with any particular analyte is used for the qualification process and is the value entered after the DSA "B" blank-qualifier descriptor.

A. Calibration Blanks were prepared and analyzed at the required frequency after each set of 10 samples as required by the method.

Yes __X__ No _____
Sequencing was required to verify association with client samples.

B. The Calibration Blank results were within the required control limits or did not require data qualification.

Yes _____ No __X__ N/A _____
Analytes reported as contaminants in the Calibration Blanks are qualified with the DSA qualifier "UCB#," where # is the value of the blank. Such data are fully usable as non-detected values at the reported concentration or elevated reporting limit. Only detected data less than 10 × blank for metals and 5 × blank for other analyse are qualified.

First Quarter: CCB/ICB detections include cadmium, cobalt, lead, magnesium, and selenium. However, these are all associated with non-detects in samples or else with sample results > 10x the CCB level, with two exceptions. One sample (MW-10) in SDG L79125 required qualification for lead and cobalt for detections in an associated CCB.

Second Quarter: CCB/ICB detections include selenium, magnesium, manganese, lead, potassium, and sodium. However, these are all associated with non-detects in samples or else with sample results > 10x the CCB level, with one exception. The sample shown below required qualification of lead for the associated CCB detection..

Third Quarter: In SDG L82345, qualifiers for ICBs and/or CCBs were required for beryllium, manganese, copper,

and selenium. Wet chemistry methods have specific preparation blanks. These are either in control or so low relative to sample levels (such as for alkalinity) that they do not require qualification.

Fourth Quarter: MW-11 for cobalt required qualification in SDG L84605.

CLIENTID	LABID	ANALYTE	RESULT mg/L	Lab Flag	MDL	PQL	DSA	EPA
MW-11	L84605-01	Cobalt, dissolved	0.000536		0.00005	0.00025	UCB0.000056	UB
MW-14	L82345-01	Beryllium, dissolved	0.012	B	0.01	0.05	UCB0.013	UB
MW-13	L82345-02	Beryllium, dissolved	0.012	B	0.01	0.05	UCB0.013	UB
MW-6	L82345-03	Beryllium, dissolved	0.012	B	0.01	0.05	UCB0.013	UB
MW-7	L82345-04	Beryllium, dissolved	0.012	B	0.01	0.05	UCB0.013	UB
MW-8	L82345-05	Beryllium, dissolved	0.012	B	0.01	0.05	UCB0.013	UB
MW-2B	L82345-06	Beryllium, dissolved	0.012	B	0.01	0.05	UCB0.013	UB
MW-11	L82345-07	Beryllium, dissolved	0.012	B	0.01	0.05	UCB0.013	UB
MW-12	L82345-08	Beryllium, dissolved	0.012	B	0.01	0.05	UCB0.013	UB
MW-7	L82345-04	Copper, dissolved	0.011	B	0.01	0.05	UCB0.01	UB
MW-2B	L82345-06	Copper, dissolved	0.01	B	0.01	0.05	UCB0.01	UB
MW-11	L82345-07	Copper, dissolved	0.01	B	0.01	0.05	UCB0.01	UB
MW-12	L82345-08	Copper, dissolved	0.013	B	0.01	0.05	UCB0.01	UB
MW-14	L82345-01	Manganese, dissolved	0.058		0.01	0.05	UCB0.011	UB
MW-13	L82345-02	Manganese, dissolved	0.014	B	0.01	0.05	UCB0.011	UB
MW-7	L82345-04	Manganese, dissolved	0.077		0.01	0.05	UCB0.011	UB
MW-12	L82345-08	Manganese, dissolved	0.107		0.01	0.05	UCB0.011	UB
MW-11	L82345-07	Selenium, dissolved	0.00072		0.0002	0.0005	UCB0.00017	UB
MW-12	L80818-01	Lead, dissolved	0.00028	B	0.0002	0.001	UCB0.00011	UB
L79125-02	MW-10	Cobalt, dissolved	0.000165	B	0.00005	0.00025	UCB0.000054	UB
L79125-02	MW-10	Lead, dissolved	0.00028	B	0.0001	0.0005	UCB0.00012	UB

C. Field, decon rinse or other Field Blanks are contained and identified in the package.

Yes X No _____ N/A _____

Fourth Quarter: As noted in the COC section, the sample called "METHOD BLANK" was submitted as part of SDG L84605. The client has indicated that this is DI water pumped into sample containers in the same manner as samples of groundwater are taken. It is a field blank associated with other samples taken on the same day (all the other samples in this SDG).

D. The reported results for the Field Blanks are less than the CRDL or less than the MDL, whichever is lower.

Yes _____ No X N/A _____

TDS, alkalinity, sulfate, and sodium were detected at low levels in the field blank. No qualifiers are required except for sulfate in sample MW-12, as shown in the table below. This occurs because a large dilution factor was used for MW-12, and that is considered in assigning the qualifiers. Although the MW-12 result would normally

be qualified as 'U', professional judgement (as specified by the EPA National Functional Guidelines) is that it should not be considered a non-detect in this case, but rather an estimate value for sulfate.

CLIENTID	LABID	ANALYTE	RESULT mg/L	Lab Flag	MDL	PQL	DSA	EPA
MW-12	L84605-02	Sulfate	315		40	200	JFB84	JFB

VIII. INTERNAL STANDARD RESPONSES (*)

A. A minimum of three internal standards were present in all standards and blanks at identical levels.

Yes X No _____

B. The absolute response of each internal standard (IS) was within the required EPA control limits of 60 – 125%.

Yes X No _____
For the analytes reported.

C. Dilutions were performed as required by the method to minimize errors if the internal standard analyte is naturally present in a sample.

Yes _____ No _____ N/A X

D. If not, the appropriate test procedures were performed, and the required corrections made.

Yes _____ No _____ N/A X

IX. MATRIX SPIKES

A. Matrix Spike and Matrix Spike Duplicate (MS/MSD) samples were prepared and analyzed at one per every 20 or fewer samples for each matrix and each sampling event per day as required.

Yes X No _____
Matrix spikes, duplicates, and matrix spike duplicates were present in data from all four quarters. For wet chemistry, a matrix spike and a matrix duplicate are analyzed. These were not requested on the COC and the samples spiked were chosen by the laboratory. The project manager will determine if the project frequency is met for these methods.

Matrix spikes associated with these data sets are shown in the table below. It is recommended that the client collect Representative samples for each method and designate them to the laboratory to be used for the MS/MSDs. As these samples are collected quarterly, only 1 or 2 QC samples would be required per year.

Q 1 Spiked Sample – L79100	Methods
MW-6	M200.8 ICP-MS, SM4500F-C -Fluoride
MW-7	M353.2 - Automated Cadmium Reduction
MW-11	M200.8 ICP-MS, D516-02/-07/-11 - TURBIDIMETRIC
MW-13	D516-02/-07/-11 - TURBIDIMETRIC
MW-14	M245.1 CVAA, SM4500Cl-E – Cl
Q1 Spiked Sample – L79125	
MW-9	M200.8 ICP-MS, M245.1 CVAA, M353.2 - Automated

	Cadmium Reduction
Q2 Spiked Sample – L80783	Methods
MW-7	200.7 ICP, SM4500F-C, D516-02/-07/-11 - TURBIDIMETRIC
MW-13	200.8 ICPMS
Q2 Spiked Sample – L80818	
MW-9	SM4500F-C, 245.1 CVAA
MW-10	SM4500F-C
Q3 Spiked Sample – L82345	Methods
MW-08	D516-02/-07/-11 -Sulfate by turbidimetry; SM4500Cl-E (Chloride)
MW-14	SM4500F-C (Fluoride), M353.2 (Nitrate-Nitrite), EPA 200.7
MW-11	EPA 200.7
Q3 Spiked Sample – L82382	
MW-09	EPA 200.7, M353.2 (Nitrate-Nitrite)
Q4 Spiked Sample – L84579	Methods
MW-14	M200.7 ICP, SM4500F-C
MW-13	M200.8 ICP-MS
MW-8	D516-02/-07/-11 – TURBIDIMETRIC Sulfate
Q4 Spiked Sample – L84605	
MW-11	M200.7 ICP, SM4500Cl-E (Cl), M353.2 - Automated Cadmium Reduction
MW-10	SM4500F-C
MW-2B	M200.8 ICP-MS
METHOD BLANK	D516-02/-07/-11 – TURBIDIMETRIC Sulfate (not considered since the sample is a field blank)

B. The MS/MSD percent recoveries were within the required control limits of 75 – 125%.

Yes _____ No __X__ N/A _____

When matrix spikes are present, associated data are qualified with the DSA qualifier JMS#, where # is the value of the %R for the associated MS or MSD. Data may be biased high or low proportional to the spike recovery. Non-detected data are not qualified for high spikes. Only those MS/MSDs with parent samples in these projects are considered. A recovery of zero results in rejection for non-detected data. The laboratory flags matrix spike results with "M1" when the recovery is high, with "M2" when the recovery is low, and "M3" when the sample is >4x spike. Matrix spikes where the sample result is >4x the spike amount are not qualified since the recovery is less than expected analytical variation in such cases.

For some methods, such as Method 353.2, the laboratory uses a recovery window of 90-110%. Results are only qualified if the recoveries are outside the window specified above.

First Quarter: In SDG L79100, the recovery of mercury in the spike of MW-14 was 31% in the MS and 32% in the MSD. All other MS/MSD recoveries for ICP and ICP-MS metals in this SDG are acceptable. The results for the parent sample are qualified as JMS31 to indicate a likely low bias for mercury in the sample.

Second Quarter: All matrix spike recoveries are in control.

Third Quarter: Qualifiers were required for lithium, iron, manganese, and zinc.

Fourth Quarter: Qualifiers were required for lithium, aluminum , copper, and chloride. Results requiring qualifiers in Q3 and Q4 samples are shown below.

CLIENTID	LABID	ANALYTE	RESULT mg/L	Lab Flag	MDL	PQL	DSA	EPA
MW-14	L84579-01	Lithium, dissolved	0.557		0.008	0.04	JMS130	J+
MW-11	L84605-01	Aluminum, dissolved	0.526		0.05	0.25	JMS52	J-
MW-11	L84605-01	Copper, dissolved		U	0.01	0.05	UJMS34	UJ-
MW-11	L84605-01	Chloride	99.7		5	10	JMS65	J-
MW-14	L82345-01	Lithium, dissolved	0.516		0.008	0.04	JMS127	J+
MW-09	L82382-01	Iron, dissolved	1.69		0.06	0.15	JMS53	J-
MW-09	L82382-01	Manganese, dissolved	0.501		0.01	0.05	JMS73	J-
MW-09	L82382-01	Zinc, dissolved	0.738		0.02	0.05	JMS0	J-

C. A Post Digestion Spike was prepared and analyzed if required.

Yes _____ No _____ N/A __X__
These are not specified for the methods used.

D. The MS/MSD samples were client samples.

Yes __X__ No _____
MS/MSD analyses were also performed on client samples from other SDGs but are not pertinent for qualification.

X. MATRIX DUPLICATE

A. Matrix Duplicate samples were prepared and analyzed per every 20 samples for each matrix.

Yes __X__ No _____
Lab duplicates are present from these SDGs for Nitrate, nitrite, chloride, and TDS. Other matrix duplicates are reported but are associated with other SDGs and are not evaluated here. Matrix duplicates and MS/MSD RPDS are in control. In the case of the sample METHOD BLANK, the TDS duplicate is not evaluated because the sample is a field blank, not a field sample.

Q1 Parent Sample SDG L79100	Methods
MW-13	SM4500Cl-E
MW-14	D516-02/-07/-11 – TURBIDIMETRIC
MW-6	M353.2 - Automated Cadmium Reduction
Q1 Parent Sample SDG L79125	
MW-9	SM2320B - alkalinity
MW-10	M353.2 - Automated Cadmium Reduction
Q2 Parent Sample SDG L80783	Methods

MW-14	SM4500Cl-E
Q2 Parent Sample SDG L80818	
MW-9	SM2320B - alkalinity
MW-10	SM2540C
Q3 Parent Sample SDG L82345	Methods
MW-13	SM2320B - alkalinity
MW-2B	D516-02/-07/-11 -Sulfate by turbidimetry; SM4500Cl-E (Chloride), M353.2 (Nitrate-Nitrite)
Q3 Parent Sample SDG L82382	
MW-10	M353.2 (Nitrate-Nitrite)
Q4 Parent Sample SDG L84579	Methods
MW-12	SM2540C (TDS)
MW-10	SM2540C (TDS)
MW-6	SM2540C (TDS)
Q4 Parent Sample SDG L84605	
MW-12	SM4500Cl-E (Chloride), M353.2 (Nitrate-Nitrite)
METHOD BLANK	SM2540C (TDS)

B. The MS/MSD or MD relative percent difference (RPD) values were within the required control limit of ≤ 20 RPD for water samples or ≤ 35% RPD for soil samples. If either of the MD results is less than 5x RL, the RPD is not used. In that case the difference between the results is evaluated and the QC limit is the difference between the original and the duplicate results (± 1x RL for water samples or ± 2x RL for soil samples). If the parent sample result is greater than 4 x the spike concentration, the MS/MSD is not evaluated. Only detected results are qualified for MS/MSD RPD outliers. Only those MS/MSDs with parent samples in these projects are considered.

Yes X No _____
Data are qualified with the DSA qualifier JD#, where # is the value of the RPD for the associated MD or MS/MSD analyses, when there are outliers. In this case there are no qualifiers.

XI. LABORATORY CONTROL SAMPLE

A. Laboratory Control Samples (LCS) were prepared and analyzed per every 20 samples for each matrix.

Yes X No _____

B. The LCS recoveries were within the required control limits of 80 – 120% for metals and for wet chemistry analyses 85 – 115% .

Yes X No _____
All LCS analyses were within criteria.

XII. FIELD QC

A. Field QC samples were identified.

Yes X No _____
First Quarter: Sample MW-2B is a blind duplicate of sample MW-7 .
Second Quarter: Sample MW-2B is a blind duplicate of sample MW-11.

Third Quarter: sample MW-2B is a blind duplicate of sample MW-08.
Fourth Quarter: Sample MW-2B is a blind duplicate of sample MW-12.

B. Field duplicates were within the guidance limit of < 30% RPD for water samples or < 50% RPD for soil samples. If values are less than 5x RL, the water limit is ± 1x RL or the soil limit is ± 2x RL.

Yes _____ No X N/A _____

Field duplicates for all four quarters were in control except for dissolved selenium in the second quarter data. Results are qualified as JFD#, where # is the observed RPD. As the RPD increases, the precision decreases.

CLIENTID	LABID	ANALYTE	RESULT mg/L	Lab flag	MDL	PQL	DSA	EPA
MW-11	L80818-02	Selenium, dissolved	0.0386		0.0002	0.0005	JFD181	J
MW-2B	L80818-03	Selenium, dissolved	0.00188		0.0002	0.0005	JFD181	J

XIII. SERIAL DILUTION

A. Serial Dilutions were analyzed for every 20 samples if the analyte concentrations were greater than 50x IDL.

Yes X No _____ N/A _____
Analyte concentrations are too low to require serial dilution.

B. The percent difference (% D) criteria of ± 10% were met.

Yes _____ No _____ N/A X
When outliers are present, data are qualified with the DSA qualifier JE#, where # is the %D. Data could be biased, usually high, due to non-linear matrix or chemical effects.

XIV. CALCULATIONS

A. Data calculations were checked when required, and significant figures were correctly reported.

Yes X No _____
Over 25% of the data were checked from the raw data to the EDD values for each method and each SDG.

As part of this review for the second quarter, the raw data for selenium by ICPMS in samples MW-11 and MW-2B (field duplicate of MW-11) was examined. These samples were both analyzed initially on 6/14, and subsequently reanalyzed on 6/16 and 6/20. Sample MW-2B was analyzed again on 6/21.

The initial run of these two samples gave results of 0.048 mg/L and 0.037 mg/L, which if used would have met field duplicate criteria. There was a detection of selenium in the ending CCB, which presumably is the reason for the reanalysis. Bracketing CCVs are in control. The closing CCB is too low to have required qualification of either sample. However, the internal standard recovery for Se was out of limits, which is likely the main reason that the samples were reanalyzed.

The samples were then reanalyzed on 6/16 again with similar results, but the closing CCB also had a selenium detection which would have required qualification. The samples were again analyzed on 6/20.

The 6/20 analysis gave usable results for sample MW-11 and that is the result used. However, the run for sample MW-2B gave an RSD for the selenium result that was out of limits (replicate measurements), and so it was reanalyzed on 6/21, with that result being reported.

It appears that the laboratory had considerable difficulty getting data for selenium that met criteria in these samples. This is likely due to some matrix interference that limits the reproducibility and accuracy of the selenium responses. Selenium results are likely biased to some degree in these samples, probably high. No qualifier is added since reported results do meet method criteria and the laboratory has taken all appropriate action.

B. Appropriate dilution factors were applied to the calculated sample concentrations.

Yes __X__ No _____

C. Data were acceptable for the total versus dissolved and the cation/ anion balance.
Yes _X__ No ___NA_____
Total metals were not requested, so the total vs dissolved check cannot be performed.
For the fourth quarter data set, the laboratory reported the cation-anion balance. It is in control for all samples.

XV. OVERALL ASSESSMENT OF THE CASE

The laboratory has complied with the requested methods and the data is considered fully useable for project purposes with consideration of the following qualifications or comments.

Data were submitted for EPA 200.7 (16 metals by ICP, dissolved), EPA 200.8 (4 metals by ICPMS, dissolved), EPA 245.1 (mercury, dissolved), SM4500F-C (Fluoride), M353.2 (nitrate + nitrite as nitrogen, nitrite as nitrogen, nitrate as nitrogen); SM2540C (total dissolved solids); D516-02/-07/-11 -Sulfate by turbidimetry; SM4500Cl-E (Chloride). Note that for these SDGS, pH was not requested. Note 12 ICP metals for 3rd quarter.

The data were validated at EPA Level III (EPA Stage 2B) with a minimum of 10% validated as EPA raw data review. Both second quarter SDGs are provided as level IV data packages.

The laboratory has reported detections to the MDL and has flagged results between the MDL and the PQL with a "B". This is noted because many laboratories use "J" instead of "B" for this purpose, so the meaning of this flag needs to be kept in mind when reviewing the data. The definition of lab flags are provided in the laboratory report in the Inorganic Reference section.

Holding Times

The method holding times were met for all analyses, with the following clarifications and exceptions. Results reported by the lab are qualified as JH#, where # is the number of days since sampling. An outlier that is greater than 4x the hold time is rejected. Qualified results not rejected. should be considered as estimates due to time and temperature changes in the samples.

First Quarter: Two samples for TDS in L79100 and one in L79125 had to be diluted after the initial analysis to meet method criteria. The reanalysis was out of the 7-day holding time in each case. The results for these samples are qualified as JH#, where # is the number of days outside of holding time. These results could possibly be biased due to chemical changes between analyses. Any bias should be minor in this case.

Second Quarter: Two samples for TDS in L80783 and one in L80818 had to be diluted after the initial analysis to meet method criteria. The reanalysis was out of the 7-day holding time in each case. The results for these samples are qualified as JH#, where # is the number of days outside of holding time. These results could possibly be biased due to chemical changes between analyses. Any bias should be minor in this case.

Third Quarter: One sample for TDS in L82382 had to be diluted after the initial analysis to meet method criteria. The reanalysis was out of the 7-day holding time. The result for this sample is qualified as JH#, where # is the number of days outside of holding time. These results could possibly be biased due to chemical changes between analyses. Any bias should be minor in this case.
Fourth Quarter: Two samples for TDS in L84579 and one for TDS in L84605 had to be diluted after the initial analysis to meet method criteria. The reanalysis was out of the 7-day holding time. The results for these samples are qualified as JH#, where # is the number of days outside of holding time. These results could possibly be biased due to chemical changes between analyses. Any bias should be minor in this case.

Also for Quarter 4, all samples for Fluoride in L84605 were initially run within holding time but had high CCV recoveries (according to the laboratory notes in the raw data). The laboratory reanalyzed these on 12/14/2023 just over 0.5 days out of the 28-day hold time for fluoride. Results are qualified as JH1 to indicate that they are minimally outside of holding time. Although qualified, these results are not likely to be significantly biased.

Qualifiers added are shown in the holding time section of this report.

Sample Preservation

In the Second quarter sampling, samples in L80818 were received at 9.2 deg C, which is above the 40CFR upper limit of 6 deg C for non-metals analysis. For preserved metals there is no specification for temperature. There is no indication that the samples were subjected to elevated temperatures during transit or storage. The most likely impact is on unpreserved samples, such as those used for nitrate analysis.

The Functional Guidelines recommend qualifying samples received > 10 deg C, and professional judgement otherwise. In this case, no qualifiers are added.

Chain of Custody

All sample analyses were sent under a COC to ACZ Labs, Steamboat Springs, CO.

Clarification: Per the GCC project manager, “the method blank on the COC associated with SDG L84605 is essentially a field blank with DI water and a spare well pump. It is new requirement to have one of these per quarterly sample event.”

Method Blanks

The ICB is used as the method blank for metals. This is acceptable as samples are directly aspirated into the instrument and no digestion was performed on the samples prior to analysis.

Analytes reported as contaminants in the Preparation Blank are qualified with the DSA qualifier “UMB#,” where # is the value of the associated blank. Only detected data less than 10x the blank for metals or 5x the blank for other analyses are qualified. Such data are fully usable as non-detected values at the reported concentration or elevated reporting limit.

First Quarter: In SDG L79125 the alkalinity blank has low-level detections. However, levels of alkalinity are much greater than these detections and no qualifiers are required. L79100, magnesium is detected in the ICB. Levels of magnesium in samples are much higher than the blank and no qualifiers are required.

Second Quarter: In SDG L80783, the selenium ICB has a low-level detection. In addition, several of the CCBs within the run show similar low-level detections. One sample detected result has a level of selenium such as to require qualification. The result is qualified as UMB# from the ICB (method blank).

In SDG L80818, one ICB had a low-level detection of vanadium. The associated samples did not have detected

levels of vanadium, so no qualifiers are required.

Wet chemistry methods have specific preparation blanks. These are either in control or so low relative to sample levels (such as for alkalinity) that they do not require qualification.

Third Quarter: Analytes reported as contaminants in the Preparation Blank are qualified with the DSA qualifier "UMB#," where # is the value of the associated blank. Only detected data less than 10x the blank for metals or 5x the blank for other analyses are qualified. Such data are fully usable as non-detected values at the reported concentration or elevated reporting limit.

In SDG L82345, qualifiers for ICBs and/or CCBs were required for beryllium, manganese, copper, and selenium. Wet chemistry methods have specific preparation blanks. These are either in control or so low relative to sample levels (such as for alkalinity) that they do not require qualification. See the CCB section for qualifiers added.

Fourth Quarter: Only the field blank (which the client has put on the COC as a Method blank) is impacted. Qualifiers are added for bicarbonate and total alkalinity.

Calibration Blanks

Analytes reported as contaminants in the Calibration Blanks are qualified with the DSA qualifier "UCB#," where # is the value of the blank. Such data are fully usable as non-detected values at the reported concentration or elevated reporting limit. Only detected data less than 10 × blank for metals and 5 × blank for other analyse are qualified.

First Quarter: CCB/ICB detections include cadmium, cobalt, lead, magnesium, and selenium. However, these are all associated with non-detects in samples or else with sample results > 10x the CCB level, with two exceptions. One sample (MW-10) in SDG L79125 required qualification for lead and cobalt for detections in an associated CCB.

Second Quarter: CCB/ICB detections include selenium, magnesium, manganese, lead, potassium, and sodium. However, these are all associated with non-detects in samples or else with sample results > 10x the CCB level, with one exception. The sample shown below required qualification of lead for the associated CCB detection..

Third Quarter: In SDG L82345, qualifiers for ICBs and/or CCBs were required for beryllium, manganese, copper, and selenium. Wet chemistry methods have specific preparation blanks. These are either in control or so low relative to sample levels (such as for alkalinity) that they do not require qualification.

Fourth Quarter: MW-11 for cobalt required qualification in SDG L84605.

Matrix Spikes, Matrix Spike Duplicates, and Matrix Duplicates

Matrix spikes, duplicates, and matrix spike duplicates were present in data from all four quarters. For wet chemistry, a matrix spike and a matrix duplicate are analyzed. These were not requested on the COC and the samples spiked were chosen by the laboratory. The project manager will determine if the project frequency is met for these methods.

First Quarter: In SDG L79100, the recovery of mercury in the spike of MW-14 was 31% in the MS and 32% in the MSD. All other MS/MSD recoveries for ICP and ICP-MS metals in this SDG are acceptable. The results for the parent sample are qualified as JMS31 to indicate a likely low bias for mercury in the sample.

Second Quarter: All matrix spike recoveries are in control.

Third Quarter: Qualifiers were required for lithium, iron, manganese, and zinc.

Fourth Quarter: Qualifiers were required for lithium, aluminum , copper, and chloride. Results requiring qualifiers in Q3 and Q4 samples are in the body of this report.

Lab duplicates are present from these SDGs for Nitrate, nitrite, chloride, and TDS. Other matrix duplicates are reported but are associated with other SDGs and are not evaluated here. Matrix duplicates and MS/MSD RPDS are in control. In the case of the sample METHOD BLANK, the TDS duplicate is not evaluated because the sample is a field blank, not a field sample.

Field QC

First Quarter: Sample MW-2B is a blind duplicate of sample MW-7 .

Second Quarter: Sample MW-2B is a blind duplicate of sample MW-11.

Third Quarter: sample MW-2B is a blind duplicate of sample MW-08.

Fourth Quarter: Sample MW-2B is a blind duplicate of sample MW-12.

Field duplicates for all four quarters were in control except for dissolved selenium in the second quarter data. Results are qualified as JFD#, where # is the observed RPD. As the RPD increases, the precision decreases.

Calculations

Over 25% of the data were checked from the raw data to the EDD values for each method and each SDG.

As part of this review for the second quarter, the raw data for selenium by ICPMS in samples MW-11 and MW-2B (field duplicate of MW-11) was examined. These samples were both analyzed initially on 6/14, and subsequently reanalyzed on 6/16 and 6/20. Sample MW-2B was analyzed again on 6/21.

The initial run of these two samples gave results of 0.048 mg/L and 0.037 mg/L, which if used would have met field duplicate criteria. There was a detection of selenium in the ending CCB, which presumably is the reason for the reanalysis. Bracketing CCVs are in control. The closing CCB is too low to have required qualification of either sample. However, the internal standard recovery for Se was out of limits, which is likely the main reason that the samples were reanalyzed.

The samples were then reanalyzed on 6/16 again with similar results, but the closing CCB also had a selenium detection which would have required qualification. The samples were again analyzed on 6/20.

The 6/20 analysis gave usable results for sample MW-11 and that is the result used. However, the run for sample MW-2B gave an RSD for the selenium result that was out of limits (replicate measurements), and so it was reanalyzed on 6/21, with that result being reported.

It appears that the laboratory had considerable difficulty getting data for selenium that met criteria in these samples. This is likely due to some matrix interference that limits the reproducibility and accuracy of the selenium responses. Selenium results are likely biased to some degree in these samples, probably high. No qualifier is added since reported results do meet method criteria and the laboratory has taken all appropriate action.

Anion/Cation Balance

The laboratory performed an anion/cation balance check for samples in Q2-Q4. The balance met validation criteria in all cases. For Quarter 1, a manual check was made of the cation/anion balance, and it was in control.

TABLE OF QUALIFIED DATA

CLIENTID	LABID	ANALYTE	RESULT	Lab Flag	MDL	PQL	DSA	EPA
MW-9	L79125-01	Residue, Filterable (TDS) @180C	4600	H	40	80	JH7	J-
MW-10	L79125-02	Cobalt, dissolved	0.000165	B	0.00005	0.00025	UCB0.000054	UB
MW-10	L79125-02	Lead, dissolved	0.00028	B	0.0001	0.0005	UCB0.00012	UB
MW-14	L79100-01	Mercury, dissolved		U	0.0002	0.001	UJMS31	UJ
MW-14	L79100-01	Residue, Filterable (TDS) @180C	4690	H	40	80	JH16	J-
MW-2B	L79100-06	Residue, Filterable (TDS) @180C	5870	H	100	200	JH8	J-
MW-7	L80783-04	Residue, Filterable (TDS) @180C	5560	H	40	80	JH7	J-
MW-6	L80783-05	Residue, Filterable (TDS) @180C	5380	H	40	80	JH7	J-
MW-9	L80818-04	Residue, Filterable (TDS) @180C	4740	H	40	80	JH12	J-
MW-8	L80783-03	Selenium, dissolved	0.00090	B	0.0005	0.00125	UMB0.00012	UB
MW-12	L80818-01	Lead, dissolved	0.00028	B	0.0002	0.001	UCB0.00011	UB
MW-11	L80818-02	Selenium, dissolved	0.0386		0.0002	0.0005	JFD181	J
MW-2B	L80818-03	Selenium, dissolved	0.00188		0.0002	0.0005	JFD181	J
MW-14	L82345-01	Beryllium, dissolved	0.012	B	0.01	0.05	UCB0.013	UB
MW-13	L82345-02	Beryllium, dissolved	0.012	B	0.01	0.05	UCB0.013	UB
MW-6	L82345-03	Beryllium, dissolved	0.012	B	0.01	0.05	UCB0.013	UB
MW-7	L82345-04	Beryllium, dissolved	0.012	B	0.01	0.05	UCB0.013	UB
MW-8	L82345-05	Beryllium, dissolved	0.012	B	0.01	0.05	UCB0.013	UB
MW-2B	L82345-06	Beryllium, dissolved	0.012	B	0.01	0.05	UCB0.013	UB
MW-11	L82345-07	Beryllium, dissolved	0.012	B	0.01	0.05	UCB0.013	UB
MW-12	L82345-08	Beryllium, dissolved	0.012	B	0.01	0.05	UCB0.013	UB
MW-7	L82345-04	Copper, dissolved	0.011	B	0.01	0.05	UCB0.01	UB
MW-2B	L82345-06	Copper, dissolved	0.01	B	0.01	0.05	UCB0.01	UB
MW-11	L82345-07	Copper, dissolved	0.01	B	0.01	0.05	UCB0.01	UB
MW-12	L82345-08	Copper, dissolved	0.013	B	0.01	0.05	UCB0.01	UB
MW-09	L82382-01	Iron, dissolved	1.69		0.06	0.15	JMS53	J-
MW-14	L82345-01	Lithium, dissolved	0.516		0.008	0.04	JMS127	J+
MW-14	L82345-01	Manganese, dissolved	0.058		0.01	0.05	UCB0.011	UB
MW-13	L82345-02	Manganese, dissolved	0.014	B	0.01	0.05	UCB0.011	UB
MW-7	L82345-04	Manganese, dissolved	0.077		0.01	0.05	UCB0.011	UB
MW-12	L82345-08	Manganese, dissolved	0.107		0.01	0.05	UCB0.011	UB
MW-09	L82382-01	Manganese, dissolved	0.501		0.01	0.05	JMS73	J-
L82382-01	MW-09	Residue, Filterable (TDS) 180C	4640	H	40	80	JH7	J-
MW-11	L82345-07	Selenium, dissolved	0.00072		0.0002	0.0005	UCB0.00017	UB
MW-09	L82382-01	Zinc, dissolved	0.738		0.02	0.05	JMS0	J-
MW-11	L84605-01	Aluminum, dissolved	0.526		0.05	0.25	JMS52	J-
METHOD BLANK	L84605-06	Bicarbonate as CaCO3	2.9	B	2	20	UMB14.8	UB
MW-11	L84605-01	Chloride	99.7		5	10	JMS65	J-
MW-11	L84605-01	Cobalt, dissolved	0.000536		0.00005	0.00025	UCB0.000056	UB
MW-11	L84605-01	Copper, dissolved		U	0.01	0.05	UJMS34	UJ-
MW-11	L84605-01	Fluoride	0.85	H	0.15	0.35	JH1	J-
MW-12	L84605-02	Fluoride	1.79	H	0.15	0.35	JH1	J-
MW-2B	L84605-05	Fluoride	1.77	H	0.15	0.35	JH1	J-
MW-9	L84605-03	Fluoride	0.42	H	0.15	0.35	JH1	J-
MW-10	L84605-04	Fluoride	1.26	H	0.15	0.35	JH1	J-
MW-14	L84579-01	Lithium, dissolved	0.557		0.008	0.04	JMS130	J+
MW-7	L84579-04	Residue, Filterable (TDS) @180C	5630	H	100	200	JH13	J-

CLIENTID	LABID	ANALYTE	RESULT	Lab Flag	MDL	PQL	DSA	EPA
MW-6	L84579-05	Residue, Filterable (TDS) @180C	5200	H	100	200	JH13	J-
MW-9	L84605-03	Residue, Filterable (TDS) @180C	4530	H	40	80	JH12	J-
MW-12	L84605-02	Sulfate	315		40	200	JFB84	JFB
METHOD BLANK	L84605-06	Total Alkalinity	3.5	B	2	20	UMB14.8	UB