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INORGANIC DATA QUALITY REVIEW REPORT
METALS BY ICPMS, ICP, CVAA, WET CHEMISTRY AND SPECIAL METHODS

SDG	L84579, L84605
PROJECT	GCC Rio Grande – Fourth Quarter 2023, Resource Hydrogeologic Services and GCC
LABORATORY	ACZ Laboratories, Steamboat Springs, CO
SAMPLE MATRIX	Water SAMPLING DATE: 11/14 and 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 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.

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

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 report and in the qualified EDD.

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-

3. Samples were properly preserved to pH < 2 for metals, and applicable preservative was used for other methods.

Yes X No _____ N/A _____

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 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. In this instance only the field blank (which the client has put on the COC as a Method blank) is impacted.

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

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. One sample for cobalt required qualification.

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

C. Field, decon rinse or other Field Blanks are contained and identified in the package.

Yes __X__ No _____ N/A _____

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. 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 this set of data 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.

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

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. Results requiring qualifiers 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-

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.

Parent Sample SDG L84579	Methods
MW-12	SM2540C (TDS)
MW-10	SM2540C (TDS)
MW-6	SM2540C (TDS)
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 _____
For fourth quarter samples, 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 X No _____ N/A _____
Field duplicates for the fourth quarter sampling were in control..

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.

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.

<u>Holding Times</u>

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.

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 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.

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 within the body of this report and in the qualified EDD.

Method and Calibration 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. In this instance only the field blank is impacted.
For 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. Sequencing was required to verify association with client samples.

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 analytes are qualified. One sample for cobalt required qualification.

Matrix Spikes, Matrix Spike Duplicates, and Matrix Duplicates

Matrix spikes, duplicates, and matrix spike duplicates were present. 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 this set of data 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 QC sample would be required per year.

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. Results requiring qualifiers are shown in the matrix spike section 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

For fourth quarter samples, sample MW-2B is a blind duplicate of sample MW-12. It is in control and no qualifiers are required.

TABLE OF QUALIFIED DATA

CLIENTID	LABID	ANALYTE	RESULT mg/L	Lab Flag	MDL	PQL	DSA	EPA
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-
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

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.

Certification Qualifiers

GCC Rio Grande ACZ Project ID: ***L84605***

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

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.

Certification Qualifiers

GCC Rio Grande ACZ Project ID: ***L84579***

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 1216

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

L84579 Chain of Custod

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
MW-8 (duplicate)	11/18/2021	----	----	----	----	----	1130	1130	<2	<2	288	1920	0.89	0.078	0.107	0.029	<0.05	0.00084	<0.01	0.81	<0.0001
MW-8 (duplicate)	8/15/2022	----	----	----	----	3,730	1100	1100	<2	<2	290	1560	1.07	<0.02	<0.02	<0.01	<0.1	0.00788	<0.02	0.80	<0.00005
MW-8 (duplicate)	11/7/2022	----	----	----	----	3,770	1110	1110	<2	<2	289	1460	0.93	0.26	0.26	<0.01	<0.1	0.00533	<0.02	0.87	<0.0001
MW-8 (duplicate)	8/8/2023	----	----	----	----	3,800	1250	1250	<2	<2	295	1350	0.95	<0.02	<0.02	<0.01	<0.05	0.00096	0.012	0.90	<0.0001
MW-11 (duplicate)	5/31/2023	----	----	----	----	1,700	902	898	3.3	<2	142	423	0.86	<0.02	<0.02	<0.01	<0.05	0.00022	<0.01	0.48	<0.00005
MW-12 (duplicate)	11/15/2023	----	----	----	----	3,660	639	613	26	<2	923	314	1.77	0.04	0.04	<0.01	<0.05	0.00293	<0.01	0.93	<0.00025
CDPHE Regulation 41 Table 3 Groundwater Quality Reference Standards (Agricultural Use)[1]			*6.5 -8.5*	----	----	*10,000*	----	----	----	----	----	----	*2*	----	*100*	*10*	*5.0*	*0.10*	*0.10*	*5.0*	*0.01*

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.

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	9/19/2019	<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	<0.04	----
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.

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-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-20231116-1314032001-18342745878	**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-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-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-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

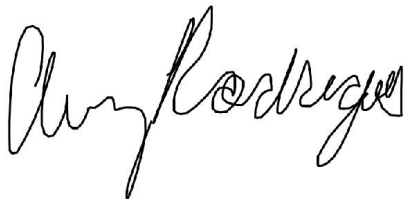
Purge and Sampling

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-20231116-1314032001-18342751235	**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

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