

STATE OF
COLORADO

Carter - DNR, Jocelyn <jocelyn.carter@state.co.us>

GCC M2002004 2Q 2024 Groundwater Report

1 message

Amy Rodrigues <aveek@gcc.com>
To: "Carter - DNR, Jocelyn" <jocelyn.carter@state.co.us>
Cc: Landon Beck <lbeck@slrconsulting.com>

Wed, Jul 31, 2024 at 4:06 PM

Hi Jocelyn,

Attached is the 2024 2Q groundwater data report for GCC's Pueblo Plant, M2002004. This submittal includes a letter reviewing the sampling methodology including time series graphs as requested by DRMS. Please let me know if you have any questions concerning this.

Thanks,

Amy



Amy Rodrigues

Environmental Manager – North Region

O: 719-647-6861

C: 928-308-8838

GCC.com

4 attachments

SLR Letter - GCC Pueblo 2024Q2 Quarterly GW Report 31JUL2024.pdf
582K



GCC_Rio-Qtr2_2024.pdf

317K



GCC Pueblo 2024Q2 Lab Reports.zip

2519K



GCC Pueblo 2024Q2 Field Forms.zip

3467K

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

SDG	L87775, L87864, L88256, L88296, L88585	
PROJECT	GCC Rio Grande – Second Quarter 2024, Resource Hydrogeologic Services and GCC, Pueblo CO	
LABORATORY	ACZ Laboratories, Steamboat Springs, CO	
SAMPLE MATRIX	Water	SAMPLING DATE:
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), SM 2320 B-2011 (Alkalinity)	
SAMPLE NUMBER	MW-13, MW-14, MW-6, MW-7, MW-8, MW-2B, METHOD BLANK, MW-11, MW-12, MW-9, MW-10, MW-21, MW-23, MW-24, MW-3B, MW-19, MW-20, MW-18, MW-22	

DATA REVIEWER: John Huntington _____

QA REVIEWER: Diane Short & Associates, Inc. INITIALS/DATE: DL 7/30/2024

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 ☒ 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), SM 2320 B-2011 (Alkalinity). 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).

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 ☒ No ☐

B. Holding Times

1. The contract holding times were met for all analyses (time of sample receipt to date of analysis).

Yes ☒ 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 ☒

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.

Sample MW-9 in L87864 had to be diluted after the initial analysis for TDS. The reanalysis was out of the 7-day holding time. The TDS 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.

Qualifiers added are shown below and in the qualified EDD.

CLIENTID	LABID	ANALYTE	RESULT	QUAL	UNITS	MDL	PQL	DSA	EPA
MW-9	L87864-03	Residue, Filterable (TDS) @180C	4780	H	mg/L	40	80	JH6	J

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

Yes ☒ 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 ☒ No ☐

All sample analyses were sent under a COC to ACZ Labs, Steamboat Springs, CO. Temperatures on receipt were all in control. SDG L88296 was received at 6.9 degrees C, which is 0.6 degrees above the EPA acceptance limit.

However, validation guidance does not require qualification for this small outlier and many of the parameters analyzed (such as metals) are not covered by that requirement. No qualifiers are added.

Clarification: Per the GCC project manager, “the sample called “METHOD BLANK” on the COC associated with SDG L87775 is essentially a field blank with DI water and a spare well pump. It is a requirement begun in 4th quarter 2023 to have one of these per quarterly sample event. The validator recommends that this field blank be called something else to avoid confusion with laboratory method blanks.

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 ☒ 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 ☒ 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 ☒ No ☐

B. Instrument Performance and Calibration Standards

1. The Initial Calibration Verification (ICV) standard was within the required control limits of $\pm 10\%$ of the established value for all analytes. (80 – 120% for mercury, 85 – 115% for Se species)

Yes ☒ No ☐

2. The Continuing Calibration Verification (CCV) standards were analyzed at the required frequency following every 10 analyses.

Yes ☒ 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 since 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. The alkalinity method blank has low detections in all SDGS. In SDG L87775, the METHOD BLANK sample (a field blank) has a detection very similar to the associated method blank levels and

is qualified as UMB30, indicating that it should be regarded as a non-detect. In all other samples, the alkalinity results are greater than 5 times the laboratory preparation blank and no qualifiers are required.

CLIENTID	LABID	ANALYTE	RESULT	QUAL	UNITS	MDL	PQL	DSA	EPA
METHOD BLANK	L87775-07	Total Alkalinity	22.5		mg/L	2	20	UMB30	UB

No other analytes require qualification for preparation blank contamination. Note that that in metals analysis, a formal preparation blank is only used for mercury. The other metals are direct injection of sample and preparation is not performed ICBs and CCBs serve the same function. This is acceptable per method.

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 X No _____ 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 $10 \times$ blank for metals and $5 \times$ blank for other analyte are qualified.

For metals analysis, ICBs and/or CCBs have some detections of selenium beryllium, cobalt, lead, and vanadium. Qualifiers are added as shown in the table below.

CLIENTID	LABID	ANALYTE	RESULT	QUAL	UNITS	MDL	PQL	DSA	EPA
MW-6	L87775-03	Selenium, dissolved	0.00020	B	mg/L	0.0001	0.00025	UCB0.00011	UB
MW-2B	L87775-06	Selenium, dissolved	0.00017	B	mg/L	0.0001	0.00025	UCB0.00011	UB
MW-11	L87864-01	Cobalt, dissolved	0.000505		mg/L	0.00005	0.00025	UCB0.000052	UB
MW-18	L88296-01	Beryllium, dissolved	0.011	B	mg/L	0.01	0.05	UCB0.012	UB
MW-22	L88585-01	Cobalt, dissolved	0.000110	B	mg/L	0.00005	0.00025	UCB0.000077	UB
MW-22	L88585-01	Selenium, dissolved	0.00119		mg/L	0.0001	0.00025	UCB0.00013	UB

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

Yes X No N/A

The METHOD BLANK field sample is a field blank. The results for the field blank are used to evaluate associated samples (those taken on the same day) after qualification of the field blank for associated method blank contamination.

D. The reported results for the Field Blanks are less than the CRDL or less than the MDL, whichever is lower.

Yes X No N/A

The only detection in the METHOD BLANK field blank sample was alkalinity, at too low a level to impact any associated sample. In addition, the result is qualified as UMB30 due to the associated method blank detection.

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 (note that for most metals on this project these are post-spikes since analysis is by direct injection with no separate preparation step). For wet chemistry, a matrix spike and a matrix duplicate are analyzed. 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 per method would be required per year.

Spiked Sample -L87775	Methods
MW-8	EPA 200.8 (Se)
METHOD BLANK (field blank, not meaningful for spiking)	245.1 (mercury), SM4500F-C (Fluoride)

Spiked Sample - L87864	
MW-11	SM4500Cl-E (Chloride), SM4500F-C (Fluoride)
Spiked Sample - L88256	
MW-23	EPA 200.7, EPA 200.8
Spiked Sample – L88296	
MW-18	SM4500F-C (Fluoride)
Spiked Sample – L88585	
	EPA 200.7

B. The MS/MSD percent recoveries were within the required control limits of 75 – 125%.

Yes ☒ No ☐ 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. The laboratory 'flags' data as M1 whether they are > 4x spike or within the qualifying limits. The laboratory flags are not recommended for use in evaluating the data as MS/MSD recoveries are not used for qualification of data if the result in the parent sample is > 4x the spike. Non-detected data are not qualified for high spikes. Only those MS/MSDs with parent samples in these projects are considered.

For some methods, such as Method 300.0 and 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.

C. A Post Digestion Spike was prepared and analyzed if required.

Yes ☐ No ☐ N/A ☒

Not required in this case.

D. The MS/MSD samples were client samples.

Yes ☒ No ☐

Except for mercury and fluoride spikes on METHOD BLANK in SDG L87775.

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 ☒ No ☐

Lab duplicates are present for Nitrate, nitrite, chloride, alkalinity, TDS, and sulfate. Some of these are associated with other SDGs and are not evaluated here. Matrix duplicates and MS/MSD RPDS are in control.

Parent Sample SDG L87775	Methods
MW-13	SM4500F-C (Fluoride), SM2540C (total dissolved solids)
Parent Sample SDG L87864	
MW-12	SM4500F-C (Fluoride)
Parent Sample SDG L88256	
MW-23	M353.2 (nitrate + nitrite as nitrogen, nitrite as nitrogen, nitrate as nitrogen)
MW-19	SM 2320 B-2011 (Alkalinity) (Alkalinity)

B. The MS/MSD or MD relative percent difference (RPD) values were within the required control limit of ≤ 20 RPD for water samples or $\leq 35\%$ 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 ($\pm 1x$ RL for water samples or $\pm 2x$ 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

Sample MW-2B is a blind duplicate of sample MW-6.

Sample MW-3B is a blind duplicate of MW-21.

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 $\pm 1x$ RL or the soil limit is $\pm 2x$ RL.

Yes X No N/A

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 dilutions.

B. The percent difference (% D) criteria of $\pm 10\%$ 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. The cation-anion balance and calculated TDS are performed and are in control. These parameters are not evaluated for the METHOD BLANK field blank, since the levels of cations, anions, and TDS are too low to give meaningful comparisons.

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), SM 2320 B-2011 (Alkalinity). 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).

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.

Chain of Custody and Sample Preservation

All sample analyses were sent under a COC to ACZ Labs, Steamboat Springs, CO. Temperatures on receipt were all in control. SDG L88296 was received at 6.9 degrees C, which is 0.6 degrees above the EPA acceptance limit.

However, validation guidance does not require qualification for this small outlier and many of the parameters analyzed (such as metals) are not covered by that requirement. No qualifiers are added.

Clarification: Per the GCC project manager, “the sample called “METHOD BLANK” on the COC associated with SDG L87775 is essentially a field blank with DI water and a spare well pump. It is a requirement begun in 4th quarter 2023 to have one of these per quarterly sample event. The validator recommends that this field blank be called something else to avoid confusion with laboratory method blanks.

Holding Times

The method holding times were met for all analyses, with the following clarifications and exceptions. Results reported by the lab are qualified as JH#, where # is the number of days since sampling. An outlier that is greater than 4x the hold time is rejected. Qualified results not rejected. should be considered as estimates due to time and temperature changes in the samples.

Sample MW-9 in L87864 had to be diluted after the initial analysis for TDS. The reanalysis was out of the 7-day holding time. The TDS 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.

Qualifiers added are shown in the qualified EDD and in the holding time section of this report.

Method Blanks

The ICB is used as the method blank for metals. This is acceptable since 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. The alkalinity method blank has low detections in all SDGS. In SDG L87775, the METHOD BLANK sample (a field blank) has a detection very similar to the associated method blank levels and is qualified as UMB30, indicating that it should be regarded as a non-detect. In all other samples, the alkalinity results are greater than 5 times the laboratory preparation blank and no qualifiers are required.

No other analytes require qualification for preparation blank contamination. Note that that in metals analysis, a formal preparation blank is only used for mercury. The other metals are direct injection of sample and preparation is not performed. ICBs and CCBs serve the same function. This is acceptable per method.

Initial and Continuing Calibration Blanks

Analytes reported as contaminants in the Calibration Blanks are qualified with the DSA qualifier “UCB#,” where # is the value of the blank. Such data are fully usable as non-detected values at the reported concentration or elevated reporting limit. Only detected data less than $10 \times$ blank for metals and $5 \times$ blank for other analyses are qualified.

For metals analysis, ICBs and/or CCBs have some detections of selenium beryllium, cobalt, lead, and vanadium. Qualifiers are added as shown in the table in the continuing calibration section of this report and in the qualified EDDs.

Field Blanks

The METHOD BLANK field sample is a field blank. The results for the field blank are used to evaluate associated samples (those taken on the same day) after qualification of the field blank for associated method blank contamination.

The only detection in the METHOD BLANK field blank sample was alkalinity, at too low a level to impact any associated sample. In addition, the result is qualified as UMB30 due to the associated method blank detection. No qualifiers are required due to field blanks.

Matrix Spikes, Matrix Spike Duplicates, and Matrix Duplicates

Matrix spikes, duplicates, and matrix spike duplicates were present (note that for most metals on this project these are post-spikes since analysis is by direct injection with no separate preparation step). For wet chemistry, a matrix spike and a matrix duplicate are analyzed. 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 per method would be required per year.

Spiked Sample -L87775	Methods
MW-8	EPA 200.8 (Se)
METHOD BLANK (field blank, not meaningful for spiking)	245.1 (mercury), SM4500F-C (Fluoride)
Spiked Sample - L87864	
MW-11	SM4500Cl-E (Chloride), SM4500F-C (Fluoride)
Spiked Sample - L88256	
MW-23	EPA 200.7, EPA 200.8
Spiked Sample – L88296	
MW-18	SM4500F-C (Fluoride)
Spiked Sample – L88585	
	EPA 200.7

MS/MSDs met recovery criteria.

Lab duplicates are present for Nitrate, nitrite, chloride, alkalinity, TDS, and sulfate. Some of these are associated with other SDGs and are not evaluated here. Matrix duplicates and MS/MSD RPDS are in control.

Parent Sample SDG L87775	Methods
MW-13	SM4500F-C (Fluoride), SM2540C (total dissolved solids)
Parent Sample SDG L87864	
MW-12	SM4500F-C (Fluoride)
Parent Sample SDG L88256	
MW-23	M353.2 (nitrate + nitrite as nitrogen, nitrite as nitrogen, nitrate as nitrogen)
MW-19	SM 2320 B-2011 (Alkalinity) (Alkalinity)

Field QC

Sample MW-2B is a blind duplicate of sample MW-6.

Sample MW-3B is a blind duplicate of MW-21.

Both field duplicates meet criteria and no qualifiers are required.

Cation-Anion Balance and Calculated TDS

Total metals were not requested, so the total vs dissolved check cannot be performed. The cation-anion balance and calculated TDS are performed and are in control. These parameters are not evaluated for the METHOD BLANK field blank, since the levels of cations, anions, and TDS are too low to give meaningful comparisons.

TABLE OF QUALIFIED DATA

CLIENTID	LABID	ANALYTE	RESULT	Lab Flag	UNITS	MDL	PQL	DSA	EPA
MW-18	L88296-01	Beryllium, dissolved	0.011	B	mg/L	0.01	0.05	UCB0.012	UB
MW-11	L87864-01	Cobalt, dissolved	0.000505		mg/L	5E-05	0.0003	UCB0.000052	UB
MW-22	L88585-01	Cobalt, dissolved	0.00011	B	mg/L	5E-05	0.0003	UCB0.000077	UB

CLIENTID	LABID	ANALYTE	RESULT	Lab Flag	UNITS	MDL	PQL	DSA	EPA
MW-9	L87864-03	Residue, Filterable (TDS) @180C	4780	H	mg/L	40	80	JH6	J
MW-6	L87775-03	Selenium, dissolved	0.0002	B	mg/L	0.0001	0.0003	UCB0.00011	UB
MW-2B	L87775-06	Selenium, dissolved	0.00017	B	mg/L	0.0001	0.0003	UCB0.00011	UB
MW-22	L88585-01	Selenium, dissolved	0.00119		mg/L	0.0001	0.0003	UCB0.00013	UB
METHOD BLANK	L87775-07	Total Alkalinity	22.5		mg/L	2	20	UMB30	UB

July 31, 2024

Ms. Amy Rodrigues
GCC Rio Grande, Inc.
3372 Lime Road
Pueblo, CO 81004
aveek@gcc.com

RE: 2024 Q2 Quarterly Groundwater Report; Pueblo Plant, Permit #M-2002-004

Dear Ms. Rodrigues,

This letter addresses the 2024, quarter 2 groundwater compliance monitoring field activities and results, as a summary to be included with the quarterly data submittal of all field data sheets and laboratory results, as well as the updated groundwater monitoring data summary table, per DRMS requirements as stated in their letter dated February 28, 2024, RE: Adequacy Review of Quarterly Hydrology Reports. 2023, 2nd Quarter, 3rd Quarter, 4th Quarter, Permit #M-2002-004.

During 2024 Q2 monitoring the following wells exceeded the 0.33-foot EPA low-flow methodology target for maximum drawdown for low-flow/low-stress purging and sample collection, as indicated in bold in the following Table 1. The subject wells are completed in a classic arid west fractured sedimentary bedrock, resulting in very low-yield well conditions. As shown in the Table 1, drawdowns in excess of 0.33 feet occurred at MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-14, MW-18, MW-20, MW-22, MW-23, and MW-24 despite keeping purge and sample flow rates within the target 0.03 to 0.10 gpm and the total purge and sample production time to a minimum. Regardless, as there is a historical data set of at least 10 quarters for all of the pre-TR-12 wells, time-series plots for several constituents shown in Figures 1, 2, and 3 below indicate a data consistency to support that the current sample collection method, despite drawdown exceeding EPA methodology, does produce representative groundwater chemistry results. The ten new TR-12 monitoring wells, each now with one monitoring event, are also plotted.

It is noted that in 2024 Q2, for all wells the total purge volumes at sample collection time were aligned with the respective sample pump full tubing volumes, whereby stabilization parameter documentation began at the time the full target tubing volume was produced. Per the TR-11 SAP Appendix 1 GCC Rio Grande Pueblo Plant Groundwater Monitoring Well Compliance Sampling Procedure, step 7(i) "Once the given target tubing purge volume has been discharged, monitor the individual water quality field parameters utilizing the VuSitu app for stabilization over 3 consecutive measurements...". During 2024Q2 compliance monitoring at each well, the three sets of recorded stabilization parameters were recorded, each three minutes apart, including the final (third) set of sample parameters, which was not recorded until the initial prescribed tubing volume was produced.

The following Table 1 shows what the actual tubing purge volume totals are, based on the given measured flow rates and static depths to water prior to sampling. The use of the full length of sample pump tubing to calculate the tubing purge volume was meant to be conservative as they all represent overestimations due to relatively deep static depths to water. In 2024 Q2 all wells were purged based on these calculations, so all stagnant water from the tubing was purged prior to sample collection by 0.05 gallons or more. The last column in Table 1 shows what is effectively a corrected purge difference value for each well, demonstrating all wells in 2024Q2 were purged beyond the minimum required to obtain representative samples.

Table 1 – 2024 Q2 Sampling Purge Rates, Volumes, & Drawdowns

Monitoring Well ID	2024Q2 Purge & Sample Flow Rate as Measured in Graduated Beaker (gpm)	Sample Pump Tubing Volume - Fixed Length on Dedicated Pump (gal)	2024Q2 Purge & Sample Flow Volume as Measured in Bucket at Sample Collection (gal)	2024Q2 Target Total Purge Volume Based on Measured Purge Flow Rate (gal)	2024Q2 Total Purge Volume Difference Target vs Actual (gal)	2024Q2 Static Water Level (ft TOC)	2024Q2 Pumping Water Level at Sample Collection (ft TOC)	2024Q2 Purge & Sample Drawdown (ft)	Pump Set Depth (ft TOC)	Actual Tubing Volume to Displace Factoring Tubing Water Column Length (gal)	2024Q2 Total Purge Volume Difference Target Corrected for Tubing Water Column vs Actual (gal)
MW-5	Dry										
MW-6	0.05	0.3	1.25	0.60	0.65	32.14	32.38	0.24	55.7	0.13	0.82
MW-7	0.05	0.3	0.75	0.60	0.15	30.46	31.97	1.51	55.0	0.13	0.32
MW-8	0.06	0.4	0.75	0.76	-0.01	31.12	36.72	5.60	62.5	0.15	0.24
MW-9	0.03	0.2	0.45	0.38	0.07	26.92	28.06	1.14	38.6	0.06	0.21
MW-10	0.05	0.5	0.75	0.80	-0.05	26.04	31.76	5.72	79.0	0.27	0.18
MW-11	0.06	0.4	1.00	0.76	0.24	53.34	54.50	1.16	68.5	0.08	0.56
MW-12	0.05	0.5	0.75	0.80	-0.05	58.90	64.58	5.68	85.4	0.12	0.33
MW-13	0.04	1.0	1.50	1.24	0.26	107.82	115.95	8.13	167.5	0.30	0.96
MW-14	0.05	0.6	1.50	0.90	0.60	98.34	110.39	12.05	203.6	0.60	0.60
MW-15	Dry										
MW-16	Dry										
MW-17	Dry										
MW-18	0.03	0.3	1.25	0.51	0.74	38.69	39.9	1.21	58.0	0.10	0.97
MW-19	0.03	0.4	0.6	0.62	-0.02	12.42	12.67	0.25	76.7	0.37	0.05
MW-20	0.03	0.6	0.75	0.75	0.00	48.08	54.72	6.64	99.5	0.26	0.31
MW-21	0.05	0.7	1.3	1.03	0.27	44.68	44.70	0.02	127.0	0.47	0.53
MW-22	0.05	0.9	1.25	1.20	0.05	149.03	150.63	1.60	156.3	0.03	0.92
MW-23	0.05	0.5	0.75	0.77	-0.02	71.41	73.83	2.42	81.8	0.05	0.40
MW-24	0.05	0.7	1.25	0.96	0.29	103.26	106.12	2.86	115.3	0.05	0.90

Notes:

Purge volume negative values indicate less than target; positive values indicate greater than target

Time series plots for concentrations of sulfate, total dissolved solids (TDS), and total alkalinity are provided as Figures 1, 2, and 3, respectively, to demonstrate consistency of the 2024 Q2 data with respect to conservative constituent concentrations and trends through time within the Fort Hayes Limestone, Codell Sandstone, and Blue Hills Shale lithologic units. Further discussion of major ion and trace element chemistry is provided in the annual groundwater report submitted in January of each year.

Groundwater quality at monitoring locations completed in the Ft. Hayes Limestone (MW-6, MW-7, MW-11, MW-13, MW-19, MW-21, and MW-23) during the 2024 Q2 sampling event was consistent with concentrations and trends through time for sulfate, TDS, and total alkalinity (Figures 1 through 3). Concentrations of sulfate, TDS, and total alkalinity at newly installed wells MW-19, MW-21, and MW-23 were consistent with other wells completed in the Ft. Hayes Limestone and will continue to be monitored for trends through time.

Similarly, groundwater quality at monitoring locations completed in the underlying Codell Sandstone (MW-8, MW-9, MW-12, MW-14, MW-18, MW-20, MW-22, and MW-24) during the 2024 Q2 sampling event was consistent with concentrations and trends through time (Figures 1 through 3). Concentrations of TDS have increased through time and appear to have stabilized in the downgradient MW-14 location. Concentrations of alkalinity at MW-14 have decreased since 2023 Q3. Concentrations of sulfate, TDS, and total alkalinity at newly installed wells MW-18, MW-20, MW-22, and MW-24 appear to be lower than observed in the other Codell Sandstone wells, however, trends for these locations have not been established.



Monitoring location MW-10 is located upgradient of mine panel four and completed in the Blue Hills Shale. Concentrations of sulfate and TDS have been declining and alkalinity increasing, with the 2024 Q2 sampling results trending in line with previous sampling events (Figures 1 through 3).

Finally, as already discussed in the previous response "SLR Letter - GCC Pueblo DRMS Response 2024Q2 Exceedances 26JUL2024", submitted to DRMS on July 27, 2024, in 2024 Q2 there were exceedances of fluoride concentrations and field pH measurements. In the future, as long as GCC Pueblo is required to submit these quarterly groundwater compliance reports, it would be helpful to respond to any exceedance comments from DRMS in the quarterly groundwater compliance reports, rather than separate responses.

Regards,

SLR International Corporation



Landon Beck
Principal Hydrogeologist
lbeck@slrconsulting.com

Attachments: 2024 Q2 GW Monitoring field forms, lab reports and updated summary table

CC: None



Figure 1. Concentrations of Sulfate in the Ft. Hayes Limestone, Codell Sandstone, and Blue Hills Shale.

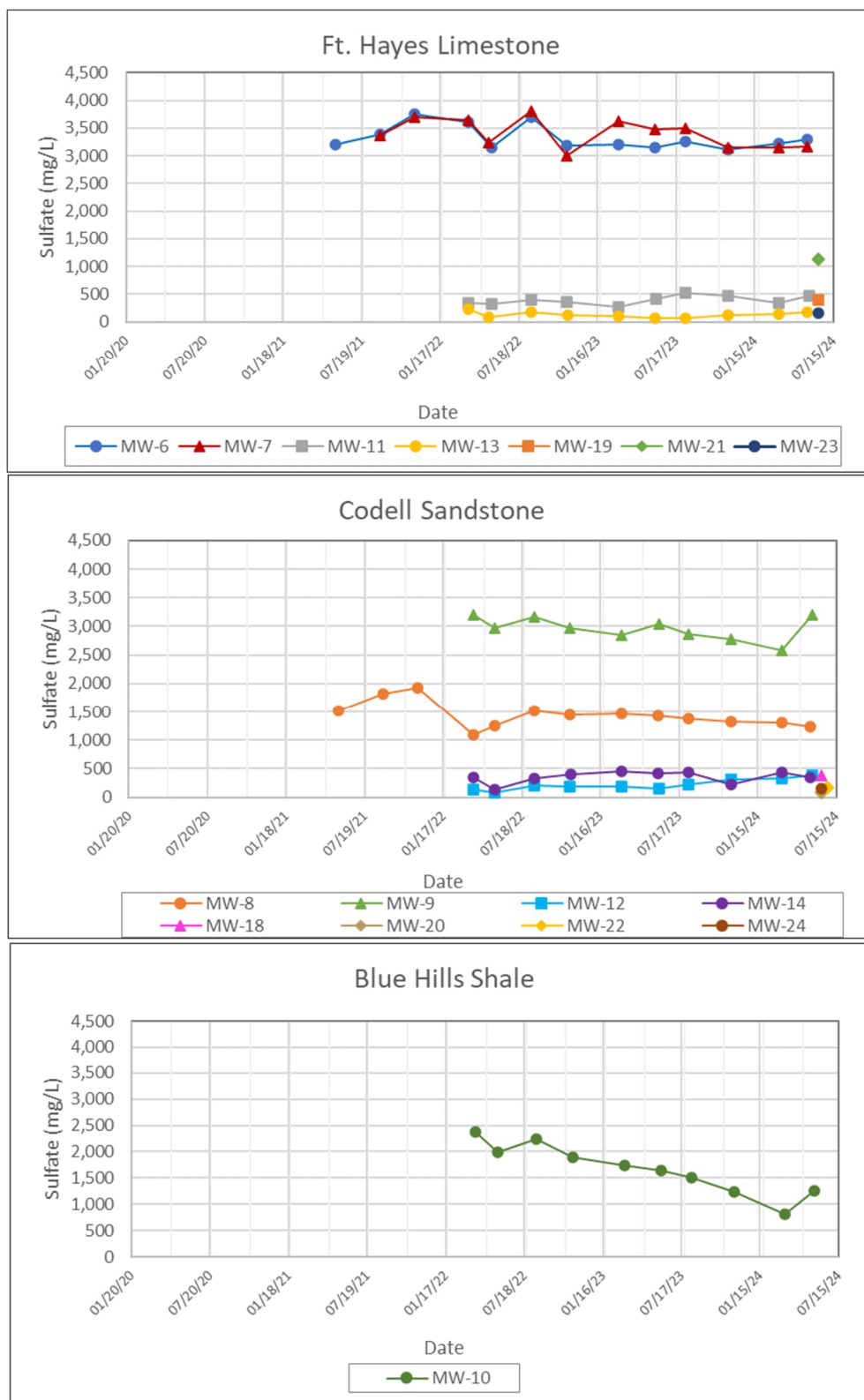


Figure 2. Concentrations of Total Dissolved Solids in the Ft. Hayes Limestone, Codell Sandstone, and Blue Hills Shale.

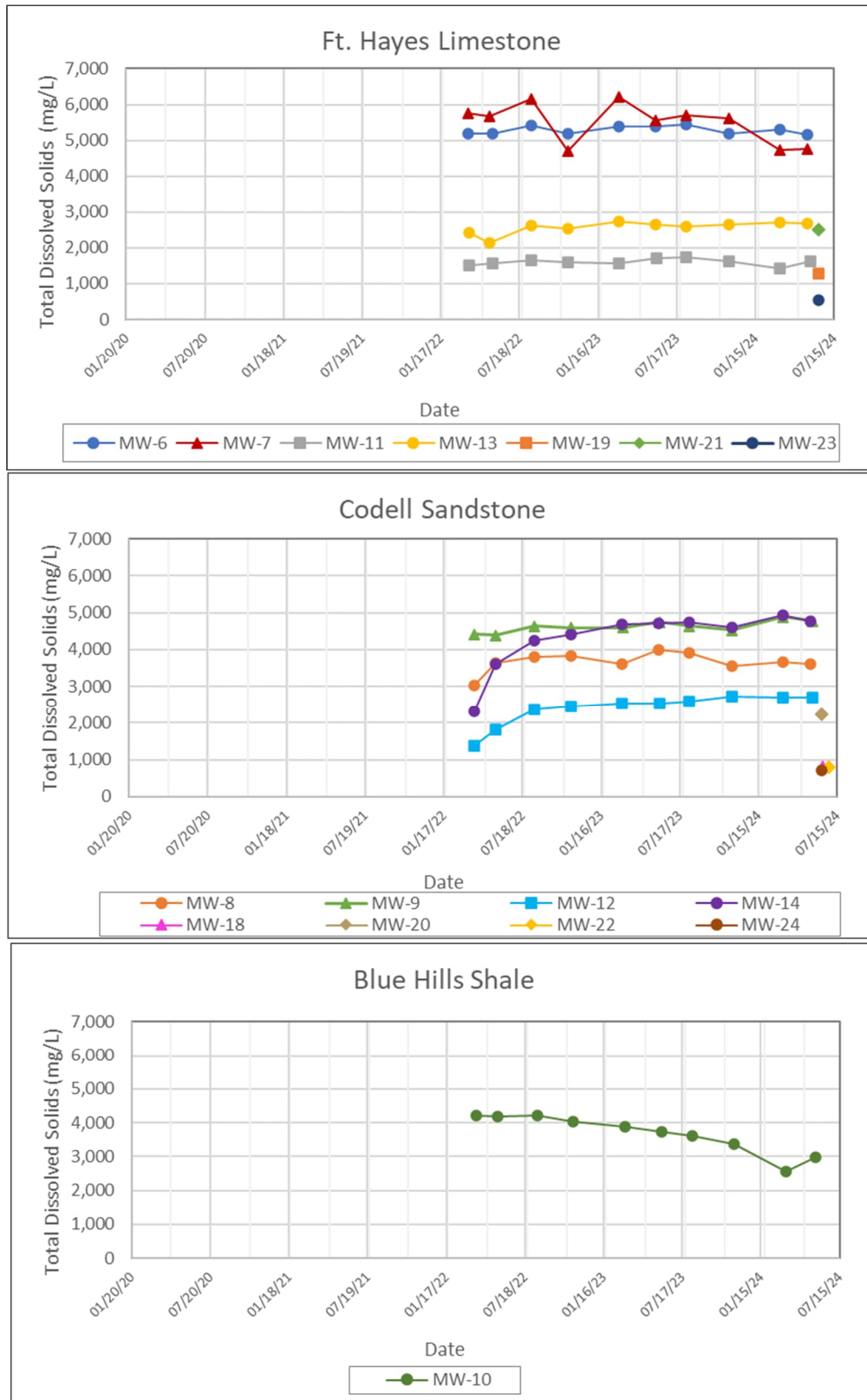
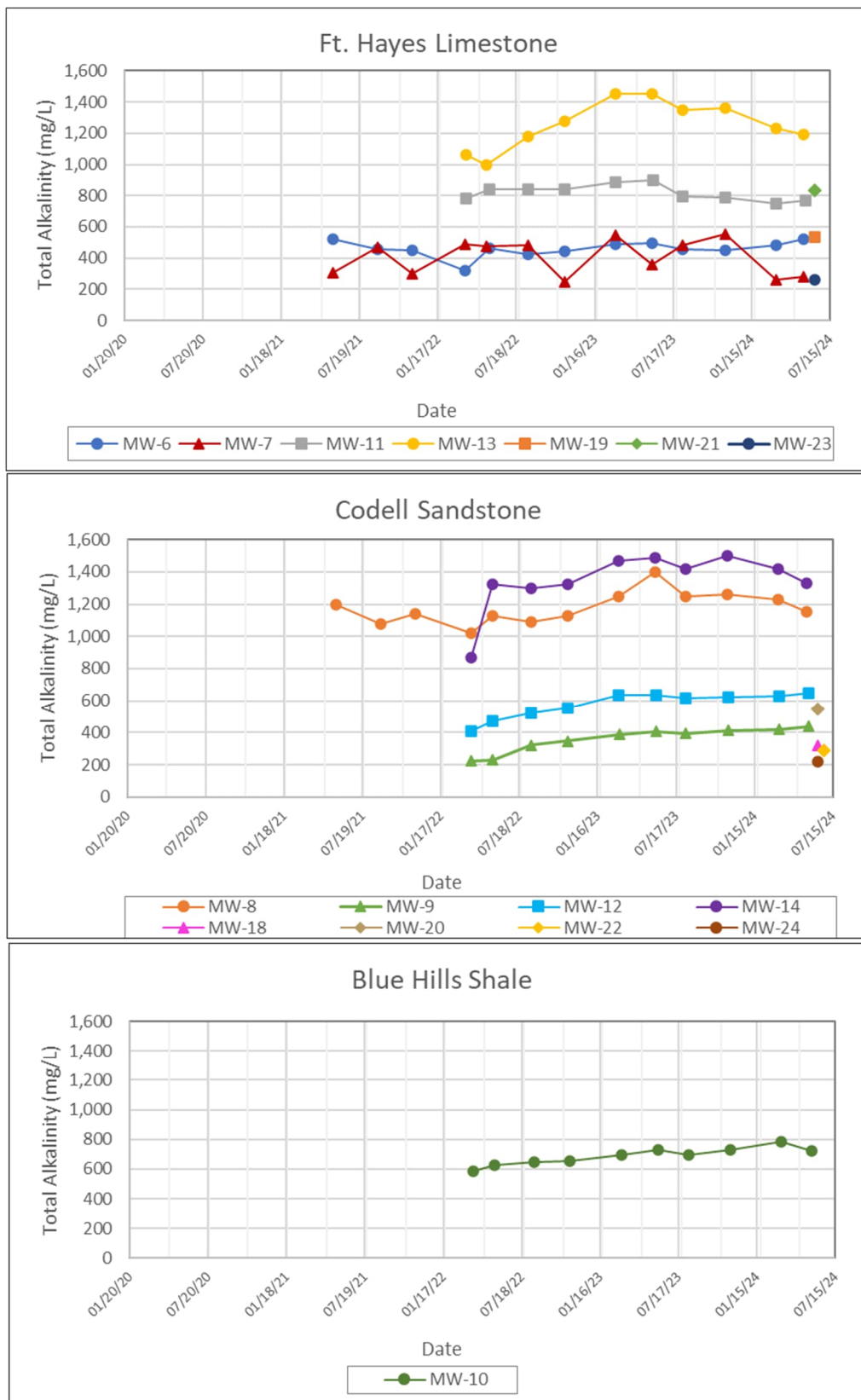


Figure 3. Total Alkalinity in the Ft. Hayes Limestone, Codell Sandstone, and Blue Hills Shale.



	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)
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-5		5/15/2024	DRY														
MW-6		1/3/2018	48.24	6.95	4720	14	---	---	---	---	---	---	---	---	---	<0.020	---
MW-6		4/27/2018	41.31	7.20	6200	16.3	5,030	---	---	---	---	---	---	<1.0	<0.10	<0.020	<0.040
MW-6		9/26/2018	DRY														
MW-6		12/12/2018	42.91	7.39	6500	14.9	---	---	---	---	---	---	---	<1.0	---	<0.020	<0.040
MW-6		3/7/2019	56.03 Inadequate volume for representative field parameters or lab sample submittal														
MW-6		6/12/2019	43.92	7.14	5975	17.8	5,620	---	---	---	---	---	---	0.60	12	12.1	0.030
MW-6		9/19/2019	28.15	---	---	---	5,860	---	---	---	---	---	---	0.60	11	11.1	0.080
MW-6		12/9/2019	30.44	---	---	---	5,460	---	---	---	---	---	---	0.80	8.1	8.12	0.020
MW-6		3/9/2020	32.30	7.22	5591	16.5	5,780	---	---	---	---	---	---	0.70	2.02	2.58	0.560
MW-6		9/16/2020	29.78	7.20	5405	16.7	5,480	---	---	---	---	---	---	0.50	0.05	0.05	<0.01
MW-6		11/23/2020	30.92	7.25	5425	14.3	5,300	---	---	---	---	---	---	0.57	1.62	1.63	0.012
MW-6		2/22/2021	36.61	7.55	5684	15.8	5,780	---	---	---	---	---	---	0.62	0.07	0.067	<0.01
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
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
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
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
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
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
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
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
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
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
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
MW-6		3/11/2024	34.16	6.93	5147	14.5	5,310	480	480	<2	<2	83	3230	0.53	<0.02	<0.02	<0.01
MW-6		5/15/2024	32.14	6.89	4960	16.3	5150	524	524	<2	<2	83.1	3300	0.52	<0.02	<0.02	<0.01
MW-7		1/3/2018	42.91	6.86	4765	15	5,510	---	---	---	---	---	---	0.42	---	<0.020	<1.00
MW-7		4/27/2018	39.09	6.85	5820	15	5,270	---	---	---	---	---	---	<0.50	<0.050	<0.100	<0.020
MW-7		9/26/2018	DRY														
MW-7		12/12/2018	37.84	6.90	6093	14	---	---	---	---	---	---	---	<1.0	---	<0.020	<0.040
MW-7		3/7/2019	40.79	6.95	6020	13.7	5,640	---	---	---	---	---	---	---	---	0.014	
MW-7		6/12/2019	31.25	6.95	5997	18	5,700	---	---	---	---	---	---	0.50	1.73	1.74	0.010
MW-7		9/18/2019	27.89	---	---	---	6,740	---	---	---	---	---	---	0.50	10	10.1	0.020
MW-7		12/9/2019	29.51	---	---	---	5,320	---	---	---	---	---	---	0.50	14	14.3	0.080
MW-7		3/9/2020	32.46	7.01	6459	15.8	6,540	---	---	---	---	---	---	0.40	15	14.9	0.060
MW-7		9/16/2020	29.65	7.17	4772	15.2	4,950	---	---	---	---	---	---	0.40	11	11.0	0.030
MW-7		11/23/2020	30.40	7.16	4999	14.3	5,070	---	---	---	---	---	---	0.47	11	11.2	0.039
MW-7		2/22/2021	32.87	7.55	6077	14.4	6,500	---	---	---	---	---	---	0.49	9.9	9.98	0.068
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
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
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
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
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
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
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
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
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
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
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
MW-7		3/11/2024	34.06	7.09	4728	14.5	4,740	260	260	<2	<2	4					

Location ID	Sample Date	Aluminum (mg/L)	Arsenic (mg/L)	Beryllium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	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-5	5/15/2024																						
MW-6	1/3/2018	0.64	<0.03	<0.005	0.63	<0.005	<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	<0.2	<0.03	<0.005	0.65	<0.005	<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	<0.2	<0.03	<0.005	0.62	<0.005	<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																		DRY
MW-6	6/12/2019	0.5	<0.001	<0.05	0.50	0.0003	<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	<0.3	0.0004	<0.05	0.30	0.00026	<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	<0.3	<0.001	<0.05	0.30	<0.0003	<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	<0.3	0.0005	<0.05	0.30	0.00016	<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	0.19	0.0009	<0.01	0.31	0.00011	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	<0.25	<0.001	<0.05	0.33	<0.00025	<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	<0.25	<0.001	<0.05	0.33	<0.00025	<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	<0.05	0.00237	<0.01	0.38	0.000058	<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	<0.05	<0.001	<0.01	0.24	<0.00025	<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	<0.05	<0.001	<0.01	0.25	<0.00025	<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	<0.25	<0.001	<0.05	0.21	<0.00025	<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	<0.25	<0.0002	<0.05	0.32	<0.00005	<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	<0.25	0.00040	<0.05	0.19	0.000131	<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	<0.25	<0.001	<0.05	0.28	<0.00025	<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	<0.05	0.00109	<0.01	0.25	<0.00025	<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	<0.05	<0.001	<0.01	0.24	<0.00025	<0.02	0.054	<0.02	398	1.12	<0.0005	0.46	421	0.66	<0.0002	0.090	10.5	0.0032	566	<0.01	0.029	----
MW-6	8/8/2023	0.057	0.00076	0.012	0.27	<0.0001	<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	<0.25	<0.001	<0.05	0.24	<0.00025	<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-6	3/11/2024	<0.25	0.00120	<0.01	0.26	<0.00025	<0.02	0.036	<0.01	386	1.35	<0.0005	0.4	398	0.42	<0.0002	0.068	9.9	<0.0005	543	<0.01	0.095	----
MW-6	5/15/2024	<0.25 (U)	0.00146	<0.05	0.287	0.000153	<0.1	0.0298	<0.05	402	0.784	<0.0001	0.383	389	0.444	<0.0002	0.0745	10.5	0.00020	605	<0.05	<0.1	----
MW-7	1/3/2018	1.35	0.00949	<0.005	0.46	<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	<0.2	<0.03	<0.005	0.44	<0.005	<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	<0.2	<0.03	<0.005	0.45	<0.005	<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	<0.2	<0.03	<0.005	0.43	<0.005	0.00020	<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	<0.3	<0.001	<0.05	0.40	<0.0003	<0.05	<0.05	<0.05	----	<0.2	<0.0005	0.62	----	0.14	<0.0002	<0.04	----	0.0087	----	<0.03	<0.05	----
MW-7	9/18/2019	0.40	0.0003	<0.05	0.30	0.00015	<0.05	<0.05	<0.05	----	0.80	0.01	0.48	----	0.10	<0.0002	<0.04	----	0.0762	----	<0.03	<0.05	----
MW-7	12/9/2019	<0.3	<0.001	<0.05	0.20	<0.0003	<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	<0.3	<0.0002	<0.05	0.20	0.00011	<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	0.16	<0.0002	<0.01	0.14	0.00007	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	<0.25	<0.001	<0.05	0.15	<0.00025	<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	<0.25	<0.001	<0.05	0.20	<0.00025	<0.05	<0.05	<0.05	----	<0.3	<0.0005	0.634	----	<0.05	<0.02	<0.04	----	0.0348	----	<0.05	<0.1	----
MW-7	5/19/2021	<0.05	<0.0002	<0.01	0.14	0.000057	<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	<0.05	<0.001	<0.01	0.31	<0.00025	<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	<0.05	<0.001	<0.01	0.19	<0.00025	<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	<0.25	<0.001	<0.05	0.39	<0.00025	<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	<0.25	<0.001	<0.05	0.37	<0.00025	<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	<0.25	0.0004	<0.05	0.29	0.000067	<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	<0.25	<0.001	<0.05	0.16	<0.00025	<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	<0.25	<0.002	<0.05	0.32	<0.0005	<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	<0.05	<0.001	<0.01	0.17	<0.00025	<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	0.057	<0.0004	0.012	0.33	<0.0001	<0.04																

June 05, 2024

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:
ACZ Project ID: L87775

Amy Rodrigues:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on May 16, 2024. This project has been assigned to ACZ's project number, L87775. 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 L87775. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

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

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

All samples and sub-samples associated with this project will be disposed of after June 05, 2025. 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:

Sample ID: MW-13

ACZ Sample ID: **L87775-01**

Date Sampled: 05/15/24 10:57

Date Received: 05/16/24

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	2	<0.1	U		mg/L	0.1	0.5	05/30/24 18:41	msp/ae h
Arsenic, dissolved	EPA 200.8	1	0.00044	B		mg/L	0.0002	0.001	05/20/24 14:45	gjl
Beryllium, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	05/30/24 18:41	msp/ae h
Boron, dissolved	EPA 200.7	2	1.12			mg/L	0.06	0.2	05/30/24 18:41	msp/ae h
Cadmium, dissolved	EPA 200.8	1	<0.00005	U		mg/L	0.00005	0.00025	05/20/24 14:45	gjl
Calcium, dissolved	EPA 200.7	2	7.82			mg/L	0.2	1	05/30/24 18:41	msp/ae h
Chromium, dissolved	EPA 200.7	2	<0.04	U		mg/L	0.04	0.1	05/30/24 18:41	msp/ae h
Cobalt, dissolved	EPA 200.8	1	0.000087	B		mg/L	0.00005	0.00025	05/20/24 14:45	gjl
Copper, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	05/30/24 18:41	msp/ae h
Iron, dissolved	EPA 200.7	2	<0.12	U		mg/L	0.12	0.3	05/30/24 18:41	msp/ae h
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	05/20/24 14:45	gjl
Lithium, dissolved	EPA 200.7	2	0.218			mg/L	0.016	0.08	05/30/24 18:41	msp/ae h
Magnesium, dissolved	EPA 200.7	2	1.98	B		mg/L	0.4	2	05/30/24 18:41	msp/ae h
Manganese, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	05/30/24 18:41	msp/ae h
Mercury, dissolved	EPA 245.1	1	<0.0002	U		mg/L	0.0002	0.001	05/30/24 11:34	ae h
Nickel, dissolved	EPA 200.7	2	<0.016	U		mg/L	0.016	0.08	05/30/24 18:41	msp/ae h
Potassium, dissolved	EPA 200.7	2	3.09			mg/L	1	2	05/30/24 18:41	msp/ae h
Selenium, dissolved	EPA 200.8	2	<0.0002	U	*	mg/L	0.0002	0.0005	05/30/24 11:32	gjl
Sodium, dissolved	EPA 200.7	2	1100			mg/L	0.4	2	05/30/24 18:41	msp/ae h
Vanadium, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.05	05/30/24 18:41	msp/ae h
Zinc, dissolved	EPA 200.7	2	<0.04	U		mg/L	0.04	0.1	05/30/24 18:41	msp/ae h

GCC Rio Grande

Project ID:

Sample ID: MW-13

ACZ Sample ID: **L87775-01**

Date Sampled: 05/15/24 10:57

Date Received: 05/16/24

Sample Matrix: Groundwater

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM 2320 B-2011									
Bicarbonate as CaCO ₃		1	1190			mg/L	2	20	05/28/24 0:00	asn
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	05/28/24 0:00	asn
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	05/28/24 0:00	asn
Total Alkalinity		1	1190		*	mg/L	2	20	05/28/24 0:00	asn
Cation-Anion Balance	Calculation									
Cation-Anion Balance			3.2			%			06/05/24 0:00	calc
Sum of Anions			46			meq/L			06/05/24 0:00	calc
Sum of Cations			49.0			meq/L			06/05/24 0:00	calc
Chloride	SM 4500-Cl E-2011	20	643			mg/L	20	40	05/23/24 13:21	ems
Fluoride	SM 4500-F C-2011	1	6.22			mg/L	0.15	0.35	06/03/24 13:29	emk
Hardness as CaCO ₃ (dissolved)	Calculation (SM 2340 B-2011)		28			mg/L	0.5	10	06/05/24 0:00	calc
Nitrate as N	Calculation (NO ₃ NO ₂ -NO ₂)		<0.02	U		mg/L	0.02	0.1	06/05/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	<0.02	U		mg/L	0.02	0.1	05/17/24 1:22	pjb
Nitrite as N	EPA 353.2	1	0.017	B	*	mg/L	0.01	0.05	05/17/24 1:22	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	2	2670			mg/L	40	80	05/21/24 13:45	rsc
Sulfate	ASTM D516-07/-11/-16	5	187		*	mg/L	5	25	05/20/24 12:30	jqr
TDS (calculated)	Calculation		2680			mg/L			06/05/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.00						06/05/24 0:00	calc

GCC Rio Grande

Project ID:

Sample ID: MW-14

ACZ Sample ID: **L87775-02**

Date Sampled: 05/15/24 11:43

Date Received: 05/16/24

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	5	<0.25	U		mg/L	0.25	1.25	05/30/24 18:44	msp/ae h
Arsenic, dissolved	EPA 200.8	1	0.00435			mg/L	0.0002	0.001	05/20/24 14:48	gjl
Beryllium, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.25	05/30/24 18:44	msp/ae h
Boron, dissolved	EPA 200.7	5	1.28			mg/L	0.15	0.5	05/30/24 18:44	msp/ae h
Cadmium, dissolved	EPA 200.8	1	0.000178	B		mg/L	0.00005	0.00025	05/20/24 14:48	gjl
Calcium, dissolved	EPA 200.7	5	17.7			mg/L	0.5	2.5	05/30/24 18:44	msp/ae h
Chromium, dissolved	EPA 200.7	5	<0.1	U		mg/L	0.1	0.25	05/30/24 18:44	msp/ae h
Cobalt, dissolved	EPA 200.8	1	0.000192	B		mg/L	0.00005	0.00025	05/20/24 14:48	gjl
Copper, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.25	05/30/24 18:44	msp/ae h
Iron, dissolved	EPA 200.7	5	0.923			mg/L	0.3	0.75	05/30/24 18:44	msp/ae h
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	05/20/24 14:48	gjl
Lithium, dissolved	EPA 200.7	5	0.399			mg/L	0.04	0.2	05/30/24 18:44	msp/ae h
Magnesium, dissolved	EPA 200.7	5	5.43			mg/L	1	5	05/30/24 18:44	msp/ae h
Manganese, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.25	05/30/24 18:44	msp/ae h
Mercury, dissolved	EPA 245.1	1	<0.0002	U		mg/L	0.0002	0.001	05/30/24 11:35	ae h
Nickel, dissolved	EPA 200.7	5	<0.04	U		mg/L	0.04	0.2	05/30/24 18:44	msp/ae h
Potassium, dissolved	EPA 200.7	5	5.61			mg/L	2.5	5	05/30/24 18:44	msp/ae h
Selenium, dissolved	EPA 200.8	2	<0.0002	U	*	mg/L	0.0002	0.0005	05/30/24 11:34	gjl
Sodium, dissolved	EPA 200.7	5	1900			mg/L	1	5	05/30/24 18:44	msp/ae h
Vanadium, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.125	05/30/24 18:44	msp/ae h
Zinc, dissolved	EPA 200.7	5	<0.1	U		mg/L	0.1	0.25	05/30/24 18:44	msp/ae h

GCC Rio Grande

Project ID:

Sample ID: MW-14

ACZ Sample ID: **L87775-02**

Date Sampled: 05/15/24 11:43

Date Received: 05/16/24

Sample Matrix: Groundwater

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM 2320 B-2011									
Bicarbonate as CaCO ₃		1	1330			mg/L	2	20	05/28/24 0:00	asn
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	05/28/24 0:00	asn
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	05/28/24 0:00	asn
Total Alkalinity		1	1330		*	mg/L	2	20	05/28/24 0:00	asn
Cation-Anion Balance	Calculation									
Cation-Anion Balance			1.2			%			06/05/24 0:00	calc
Sum of Anions			83			meq/L			06/05/24 0:00	calc
Sum of Cations			85			meq/L			06/05/24 0:00	calc
Chloride	SM 4500-Cl E-2011	50	1730		*	mg/L	50	100	05/23/24 13:31	ems
Fluoride	SM 4500-F C-2011	1	2.87			mg/L	0.15	0.35	06/03/24 13:45	emk
Hardness as CaCO ₃ (dissolved)	Calculation (SM 2340 B-2011)		67			mg/L	1	30	06/05/24 0:00	calc
Nitrate as N	Calculation (NO ₃ NO ₂ -NO ₂)		<0.02	U		mg/L	0.02	0.1	06/05/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	<0.02	U		mg/L	0.02	0.1	05/17/24 1:23	pjb
Nitrite as N	EPA 353.2	1	<0.01	U	*	mg/L	0.01	0.05	05/17/24 1:23	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	2	4780			mg/L	40	80	05/21/24 13:48	rsc
Sulfate	ASTM D516-07/-11/-16	25	352		*	mg/L	25	125	05/20/24 12:39	jqr
TDS (calculated)	Calculation		4830			mg/L			06/05/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.99						06/05/24 0:00	calc

GCC Rio Grande

Project ID:

Sample ID: MW-6

ACZ Sample ID: **L87775-03**

Date Sampled: 05/15/24 13:05

Date Received: 05/16/24

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	5	<0.25	U		mg/L	0.25	1.25	05/30/24 18:48	msp/ae h
Arsenic, dissolved	EPA 200.8	1	0.00146			mg/L	0.0002	0.001	05/20/24 14:55	gjl
Beryllium, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.25	05/30/24 18:48	msp/ae h
Boron, dissolved	EPA 200.7	5	0.287	B		mg/L	0.15	0.5	05/30/24 18:48	msp/ae h
Cadmium, dissolved	EPA 200.8	1	0.000153	B		mg/L	0.00005	0.00025	05/20/24 14:55	gjl
Calcium, dissolved	EPA 200.7	5	402			mg/L	0.5	2.5	05/30/24 18:48	msp/ae h
Chromium, dissolved	EPA 200.7	5	<0.1	U		mg/L	0.1	0.25	05/30/24 18:48	msp/ae h
Cobalt, dissolved	EPA 200.8	1	0.0298			mg/L	0.00005	0.00025	05/20/24 14:55	gjl
Copper, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.25	05/30/24 18:48	msp/ae h
Iron, dissolved	EPA 200.7	5	0.784			mg/L	0.3	0.75	05/30/24 18:48	msp/ae h
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	05/20/24 14:55	gjl
Lithium, dissolved	EPA 200.7	5	0.383			mg/L	0.04	0.2	05/30/24 18:48	msp/ae h
Magnesium, dissolved	EPA 200.7	5	389			mg/L	1	5	05/30/24 18:48	msp/ae h
Manganese, dissolved	EPA 200.7	5	0.444			mg/L	0.05	0.25	05/30/24 18:48	msp/ae h
Mercury, dissolved	EPA 245.1	1	<0.0002	U		mg/L	0.0002	0.001	05/30/24 11:36	ae h
Nickel, dissolved	EPA 200.7	5	0.0745	B		mg/L	0.04	0.2	05/30/24 18:48	msp/ae h
Potassium, dissolved	EPA 200.7	5	10.5			mg/L	2.5	5	05/30/24 18:48	msp/ae h
Selenium, dissolved	EPA 200.8	1	0.00020	B		mg/L	0.0001	0.00025	05/20/24 14:55	gjl
Sodium, dissolved	EPA 200.7	5	605			mg/L	1	5	05/30/24 18:48	msp/ae h
Vanadium, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.125	05/30/24 18:48	msp/ae h
Zinc, dissolved	EPA 200.7	5	<0.1	U		mg/L	0.1	0.25	05/30/24 18:48	msp/ae h

GCC Rio Grande

Project ID:

Sample ID: MW-6

ACZ Sample ID: **L87775-03**

Date Sampled: 05/15/24 13:05

Date Received: 05/16/24

Sample Matrix: Groundwater

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM 2320 B-2011									
Bicarbonate as CaCO ₃		1	524			mg/L	2	20	05/28/24 0:00	asn
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	05/28/24 0:00	asn
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	05/28/24 0:00	asn
Total Alkalinity		1	524		*	mg/L	2	20	05/28/24 0:00	asn
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-1.9			%			06/05/24 0:00	calc
Sum of Anions			82			meq/L			06/05/24 0:00	calc
Sum of Cations			79.0			meq/L			06/05/24 0:00	calc
Chloride	SM 4500-Cl E-2011	5	83.1		*	mg/L	5	10	05/23/24 13:46	ems
Fluoride	SM 4500-F C-2011	1	0.52			mg/L	0.15	0.35	06/03/24 13:48	emk
Hardness as CaCO ₃ (dissolved)	Calculation (SM 2340 B-2011)		2610			mg/L	1	30	06/05/24 0:00	calc
Nitrate as N	Calculation (NO ₃ NO ₂ -NO ₂)		<0.02	U		mg/L	0.02	0.1	06/05/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	<0.02	U		mg/L	0.02	0.1	05/17/24 1:24	pjb
Nitrite as N	EPA 353.2	1	<0.01	U	*	mg/L	0.01	0.05	05/17/24 1:24	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	2	5150			mg/L	40	80	05/21/24 13:50	rsc
Sulfate	ASTM D516-07/-11/-16	100	3300		*	mg/L	100	500	05/20/24 12:46	jqr
TDS (calculated)	Calculation		5110			mg/L			06/05/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.01						06/05/24 0:00	calc

GCC Rio Grande

Project ID:

Sample ID: MW-7

ACZ Sample ID: **L87775-04**

Date Sampled: 05/15/24 13:38

Date Received: 05/16/24

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	5	<0.25	U		mg/L	0.25	1.25	05/30/24 18:51	msp/ae h
Arsenic, dissolved	EPA 200.8	1	<0.0002	U		mg/L	0.0002	0.001	05/20/24 14:57	gjl
Beryllium, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.25	05/30/24 18:51	msp/ae h
Boron, dissolved	EPA 200.7	5	0.161	B		mg/L	0.15	0.5	05/30/24 18:51	msp/ae h
Cadmium, dissolved	EPA 200.8	1	0.000125	B		mg/L	0.00005	0.00025	05/20/24 14:57	gjl
Calcium, dissolved	EPA 200.7	5	475			mg/L	0.5	2.5	05/30/24 18:51	msp/ae h
Chromium, dissolved	EPA 200.7	5	<0.1	U		mg/L	0.1	0.25	05/30/24 18:51	msp/ae h
Cobalt, dissolved	EPA 200.8	1	0.00367			mg/L	0.00005	0.00025	05/20/24 14:57	gjl
Copper, dissolved	EPA 200.7	5	0.174	B		mg/L	0.05	0.25	05/30/24 18:51	msp/ae h
Iron, dissolved	EPA 200.7	5	<0.3	U		mg/L	0.3	0.75	05/30/24 18:51	msp/ae h
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	05/20/24 14:57	gjl
Lithium, dissolved	EPA 200.7	5	0.308			mg/L	0.04	0.2	05/30/24 18:51	msp/ae h
Magnesium, dissolved	EPA 200.7	5	369			mg/L	1	5	05/30/24 18:51	msp/ae h
Manganese, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.25	05/30/24 18:51	msp/ae h
Mercury, dissolved	EPA 245.1	1	<0.0002	U		mg/L	0.0002	0.001	05/30/24 11:37	ae h
Nickel, dissolved	EPA 200.7	5	<0.04	U		mg/L	0.04	0.2	05/30/24 18:51	msp/ae h
Potassium, dissolved	EPA 200.7	5	12.5			mg/L	2.5	5	05/30/24 18:51	msp/ae h
Selenium, dissolved	EPA 200.8	1	0.0386			mg/L	0.0001	0.00025	05/20/24 14:57	gjl
Sodium, dissolved	EPA 200.7	5	399			mg/L	1	5	05/30/24 18:51	msp/ae h
Vanadium, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.125	05/30/24 18:51	msp/ae h
Zinc, dissolved	EPA 200.7	5	<0.1	U		mg/L	0.1	0.25	05/30/24 18:51	msp/ae h

GCC Rio Grande

Project ID:

Sample ID: MW-7

ACZ Sample ID: **L87775-04**

Date Sampled: 05/15/24 13:38

Date Received: 05/16/24

Sample Matrix: Groundwater

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM 2320 B-2011									
Bicarbonate as CaCO ₃		1	283			mg/L	2	20	05/28/24 0:00	asn
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	05/28/24 0:00	asn
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	05/28/24 0:00	asn
Total Alkalinity		1	283		*	mg/L	2	20	05/28/24 0:00	asn
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-0.7			%			06/05/24 0:00	calc
Sum of Anions			73			meq/L			06/05/24 0:00	calc
Sum of Cations			72			meq/L			06/05/24 0:00	calc
Chloride	SM 4500-Cl E-2011	1	46.1		*	mg/L	1	2	05/23/24 13:46	ems
Fluoride	SM 4500-F C-2011	1	0.55			mg/L	0.15	0.35	06/03/24 13:56	emk
Hardness as CaCO ₃ (dissolved)	Calculation (SM 2340 B-2011)		2710			mg/L	1	30	06/05/24 0:00	calc
Nitrate as N	Calculation (NO ₃ NO ₂ -NO ₂)		4.87			mg/L	0.06	0.3	06/05/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	3	4.92			mg/L	0.06	0.3	05/17/24 1:36	pjb
Nitrite as N	EPA 353.2	1	0.048	B	*	mg/L	0.01	0.05	05/17/24 1:30	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	2	4760			mg/L	40	80	05/21/24 13:53	rsc
Sulfate	ASTM D516-07/-11/-16	100	3160		*	mg/L	100	500	05/20/24 12:47	jqr
TDS (calculated)	Calculation		4630			mg/L			06/05/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.03						06/05/24 0:00	calc

GCC Rio Grande

Project ID:

Sample ID: MW-8

ACZ Sample ID: **L87775-05**

Date Sampled: 05/15/24 14:16

Date Received: 05/16/24

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	2	<0.1	U		mg/L	0.1	0.5	05/30/24 18:54	msp/ae h
Arsenic, dissolved	EPA 200.8	1	0.00058	B		mg/L	0.0002	0.001	05/20/24 14:59	gjl
Beryllium, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	05/30/24 18:54	msp/ae h
Boron, dissolved	EPA 200.7	2	0.904			mg/L	0.06	0.2	05/30/24 18:54	msp/ae h
Cadmium, dissolved	EPA 200.8	1	0.000084	B		mg/L	0.00005	0.00025	05/20/24 14:59	gjl
Calcium, dissolved	EPA 200.7	2	58.4			mg/L	0.2	1	05/30/24 18:54	msp/ae h
Chromium, dissolved	EPA 200.7	2	<0.04	U		mg/L	0.04	0.1	05/30/24 18:54	msp/ae h
Cobalt, dissolved	EPA 200.8	1	0.000421			mg/L	0.00005	0.00025	05/20/24 14:59	gjl
Copper, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	05/30/24 18:54	msp/ae h
Iron, dissolved	EPA 200.7	2	0.627			mg/L	0.12	0.3	05/30/24 18:54	msp/ae h
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	05/20/24 14:59	gjl
Lithium, dissolved	EPA 200.7	2	0.333			mg/L	0.016	0.08	05/30/24 18:54	msp/ae h
Magnesium, dissolved	EPA 200.7	2	25.0			mg/L	0.4	2	05/30/24 18:54	msp/ae h
Manganese, dissolved	EPA 200.7	2	0.179			mg/L	0.02	0.1	05/30/24 18:54	msp/ae h
Mercury, dissolved	EPA 245.1	1	<0.0002	U		mg/L	0.0002	0.001	05/30/24 11:38	ae h
Nickel, dissolved	EPA 200.7	2	<0.016	U		mg/L	0.016	0.08	05/30/24 18:54	msp/ae h
Potassium, dissolved	EPA 200.7	2	5.43			mg/L	1	2	05/30/24 18:54	msp/ae h
Selenium, dissolved	EPA 200.8	2	<0.0002	U	*	mg/L	0.0002	0.0005	05/30/24 11:37	gjl
Sodium, dissolved	EPA 200.7	2	1260			mg/L	0.4	2	05/30/24 18:54	msp/ae h
Vanadium, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.05	05/30/24 18:54	msp/ae h
Zinc, dissolved	EPA 200.7	2	<0.04	U		mg/L	0.04	0.1	05/30/24 18:54	msp/ae h

GCC Rio Grande

Project ID:

Sample ID: MW-8

ACZ Sample ID: **L87775-05**

Date Sampled: 05/15/24 14:16

Date Received: 05/16/24

Sample Matrix: Groundwater

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM 2320 B-2011									
Bicarbonate as CaCO ₃		1	1150			mg/L	2	20	05/28/24 0:00	asn
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	05/28/24 0:00	asn
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	05/28/24 0:00	asn
Total Alkalinity		1	1150		*	mg/L	2	20	05/28/24 0:00	asn
Cation-Anion Balance	Calculation									
Cation-Anion Balance			2.5			%			06/05/24 0:00	calc
Sum of Anions			58			meq/L			06/05/24 0:00	calc
Sum of Cations			61			meq/L			06/05/24 0:00	calc
Chloride	SM 4500-Cl E-2011	20	314		*	mg/L	20	40	05/23/24 13:23	ems
Fluoride	SM 4500-F C-2011	1	0.96			mg/L	0.15	0.35	06/03/24 13:59	emk
Hardness as CaCO ₃ (dissolved)	Calculation (SM 2340 B-2011)		249			mg/L	0.5	10	06/05/24 0:00	calc
Nitrate as N	Calculation (NO ₃ NO ₂ -NO ₂)		0.098	B		mg/L	0.02	0.1	06/05/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	0.098	B		mg/L	0.02	0.1	05/17/24 1:31	pjb
Nitrite as N	EPA 353.2	1	<0.01	U	*	mg/L	0.01	0.05	05/17/24 1:31	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	5	3600			mg/L	100	200	05/21/24 13:56	rsc
Sulfate	ASTM D516-07/-11/-16	100	1230		*	mg/L	100	500	05/20/24 12:48	jqr
TDS (calculated)	Calculation		3600			mg/L			06/05/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.00						06/05/24 0:00	calc

GCC Rio Grande

Project ID:

Sample ID: MW-2B

ACZ Sample ID: **L87775-06**

Date Sampled: 05/15/24 12:00

Date Received: 05/16/24

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	5	<0.25	U		mg/L	0.25	1.25	05/30/24 18:57	msp/ae h
Arsenic, dissolved	EPA 200.8	1	0.00130			mg/L	0.0002	0.001	05/20/24 15:02	gjl
Beryllium, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.25	05/30/24 18:57	msp/ae h
Boron, dissolved	EPA 200.7	5	0.261	B		mg/L	0.15	0.5	05/30/24 18:57	msp/ae h
Cadmium, dissolved	EPA 200.8	1	0.000133	B		mg/L	0.00005	0.00025	05/20/24 15:02	gjl
Calcium, dissolved	EPA 200.7	5	400			mg/L	0.5	2.5	05/30/24 18:57	msp/ae h
Chromium, dissolved	EPA 200.7	5	<0.1	U		mg/L	0.1	0.25	05/30/24 18:57	msp/ae h
Cobalt, dissolved	EPA 200.8	1	0.0303			mg/L	0.00005	0.00025	05/20/24 15:02	gjl
Copper, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.25	05/30/24 18:57	msp/ae h
Iron, dissolved	EPA 200.7	5	0.690	B		mg/L	0.3	0.75	05/30/24 18:57	msp/ae h
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	05/20/24 15:02	gjl
Lithium, dissolved	EPA 200.7	5	0.384			mg/L	0.04	0.2	05/30/24 18:57	msp/ae h
Magnesium, dissolved	EPA 200.7	5	386			mg/L	1	5	05/30/24 18:57	msp/ae h
Manganese, dissolved	EPA 200.7	5	0.437			mg/L	0.05	0.25	05/30/24 18:57	msp/ae h
Mercury, dissolved	EPA 245.1	1	<0.0002	U		mg/L	0.0002	0.001	05/30/24 11:38	ae
Nickel, dissolved	EPA 200.7	5	0.0700	B		mg/L	0.04	0.2	05/30/24 18:57	msp/ae h
Potassium, dissolved	EPA 200.7	5	10.3			mg/L	2.5	5	05/30/24 18:57	msp/ae h
Selenium, dissolved	EPA 200.8	1	0.00017	B		mg/L	0.0001	0.00025	05/20/24 15:02	gjl
Sodium, dissolved	EPA 200.7	5	589			mg/L	1	5	05/30/24 18:57	msp/ae h
Vanadium, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.125	05/30/24 18:57	msp/ae h
Zinc, dissolved	EPA 200.7	5	<0.1	U		mg/L	0.1	0.25	05/30/24 18:57	msp/ae h

GCC Rio Grande

Project ID:

Sample ID: MW-2B

ACZ Sample ID: **L87775-06**

Date Sampled: 05/15/24 12:00

Date Received: 05/16/24

Sample Matrix: Groundwater

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM 2320 B-2011									
Bicarbonate as CaCO ₃		1	525			mg/L	2	20	05/28/24 0:00	asn
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	05/28/24 0:00	asn
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	05/28/24 0:00	asn
Total Alkalinity		1	525		*	mg/L	2	20	05/28/24 0:00	asn
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-5.5			%			06/05/24 0:00	calc
Sum of Anions			87			meq/L			06/05/24 0:00	calc
Sum of Cations			78			meq/L			06/05/24 0:00	calc
Chloride	SM 4500-Cl E-2011	5	82.4		*	mg/L	5	10	05/23/24 13:46	ems
Fluoride	SM 4500-F C-2011	1	0.53			mg/L	0.15	0.35	06/03/24 14:02	emk
Hardness as CaCO ₃ (dissolved)	Calculation (SM 2340 B-2011)		2590			mg/L	1	30	06/05/24 0:00	calc
Nitrate as N	Calculation (NO ₃ NO ₂ -NO ₂)		<0.02	U		mg/L	0.02	0.1	06/05/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	<0.02	U		mg/L	0.02	0.1	05/17/24 1:32	pjb
Nitrite as N	EPA 353.2	1	<0.01	U	*	mg/L	0.01	0.05	05/17/24 1:32	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	10	5060			mg/L	200	400	05/21/24 13:58	rsc
Sulfate	ASTM D516-07/-11/-16	100	3510		*	mg/L	100	500	05/20/24 12:48	jqr
TDS (calculated)	Calculation		5300			mg/L			06/05/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.95						06/05/24 0:00	calc

GCC Rio Grande

Project ID:

Sample ID: METHOD BLANK

ACZ Sample ID: **L87775-07**

Date Sampled: 05/15/24 15:00

Date Received: 05/16/24

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	1	<0.05	U		mg/L	0.05	0.25	06/01/24 1:45	msp/wt c
Arsenic, dissolved	EPA 200.8	1	<0.0002	U		mg/L	0.0002	0.001	05/20/24 15:04	gjl
Beryllium, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.05	06/01/24 1:45	msp/wt c
Boron, dissolved	EPA 200.7	1	<0.03	U		mg/L	0.03	0.1	06/01/24 1:45	msp/wt c
Cadmium, dissolved	EPA 200.8	1	<0.00005	U		mg/L	0.00005	0.00025	05/20/24 15:04	gjl
Calcium, dissolved	EPA 200.7	1	<0.1	U	*	mg/L	0.1	0.5	06/01/24 1:45	msp/wt c
Chromium, dissolved	EPA 200.7	1	<0.02	U		mg/L	0.02	0.05	06/01/24 17:54	msp/wt c
Cobalt, dissolved	EPA 200.8	1	<0.00005	U		mg/L	0.00005	0.00025	05/20/24 15:04	gjl
Copper, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.05	06/01/24 1:45	msp/wt c
Iron, dissolved	EPA 200.7	1	<0.06	U		mg/L	0.06	0.15	06/01/24 1:45	msp/wt c
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	05/20/24 15:04	gjl
Lithium, dissolved	EPA 200.7	1	<0.008	U		mg/L	0.008	0.04	06/01/24 1:45	msp/wt c
Magnesium, dissolved	EPA 200.7	1	<0.2	U		mg/L	0.2	1	06/01/24 1:45	msp/wt c
Manganese, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.05	06/01/24 1:45	msp/wt c
Mercury, dissolved	EPA 245.1	1	<0.0002	U		mg/L	0.0002	0.001	05/30/24 11:41	aeH
Nickel, dissolved	EPA 200.7	1	<0.008	U		mg/L	0.008	0.04	06/01/24 17:54	msp/wt c
Potassium, dissolved	EPA 200.7	1	<0.5	U		mg/L	0.5	1	06/01/24 1:45	msp/wt c
Selenium, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.00025	05/20/24 15:04	gjl
Sodium, dissolved	EPA 200.7	1	<0.2	U		mg/L	0.2	1	06/01/24 1:45	msp/wt c
Vanadium, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.025	06/01/24 1:45	msp/wt c
Zinc, dissolved	EPA 200.7	1	<0.02	U		mg/L	0.02	0.05	06/01/24 1:45	msp/wt c

GCC Rio Grande

Project ID:

Sample ID: METHOD BLANK

ACZ Sample ID: **L87775-07**

Date Sampled: 05/15/24 15:00

Date Received: 05/16/24

Sample Matrix: Groundwater

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM 2320 B-2011									
Bicarbonate as CaCO ₃		1	22.5			mg/L	2	20	05/28/24 0:00	asn
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	05/28/24 0:00	asn
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	05/28/24 0:00	asn
Total Alkalinity		1	22.5		*	mg/L	2	20	05/28/24 0:00	asn
Cation-Anion Balance	Calculation									
Cation-Anion Balance			n/a			%			06/05/24 0:00	calc
Sum of Anions			0.5			meq/L			06/05/24 0:00	calc
Sum of Cations			<	U		meq/L			06/05/24 0:00	calc
Chloride	SM 4500-Cl E-2011	1	<1	U	*	mg/L	1	2	06/04/24 12:24	ems
Fluoride	SM 4500-F C-2011	1	<0.15	U		mg/L	0.15	0.35	06/03/24 14:13	emk
Hardness as CaCO ₃ (dissolved)	Calculation (SM 2340 B-2011)		<0.2	U		mg/L	0.2	5	06/05/24 0:00	calc
Nitrate as N	Calculation (NO ₃ NO ₂ -NO ₂)		<0.02	U		mg/L	0.02	0.1	06/05/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	<0.02	U		mg/L	0.02	0.1	05/17/24 1:34	pjb
Nitrite as N	EPA 353.2	1	<0.01	U	*	mg/L	0.01	0.05	05/17/24 1:34	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	1	<20	U	*	mg/L	20	40	05/21/24 14:04	rsc
Sulfate	ASTM D516-07/-11/-16	1	<1	U	*	mg/L	1	5	05/20/24 12:22	jqr
TDS (calculated)	Calculation		13.7			mg/L			06/05/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		n/a						06/05/24 0:00	calc



Report Header Explanations

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

QC Sample Types

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

QC Sample Type Explanations

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

ACZ Qualifiers (Qual)

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

Method References

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

Comments

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

For a complete list of ACZ's Extended Qualifiers, please click:

<https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf>

GCC

ACZ Project ID: **L87775**

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
WG589912													
WG589912PBW1	PBW	05/28/24 17:59				14.7	mg/L		-20	20			
WG589912LCSW3	LCSW	05/28/24 18:13	WC240522-1	820.0001		753.5	mg/L	92	90	110			
WG589912LCSW6	LCSW	05/28/24 20:05	WC240522-1	820.0001		756.3	mg/L	92	90	110			
WG589912PBW2	PBW	05/28/24 20:12				30.2	mg/L		-20	20			B4 B7
L87777-01DUP	DUP	05/28/24 22:15			184	184.2	mg/L				0	20	
WG589912LCSW9	LCSW	05/28/24 22:29	WC240522-1	820.0001		764.9	mg/L	93	90	110			
WG589912PBW3	PBW	05/28/24 22:36				69.6	mg/L		-20	20			B4
WG589912LCSW12	LCSW	05/29/24 1:03	WC240522-1	820.0001		765.2	mg/L	93	90	110			
WG589912PBW4	PBW	05/29/24 1:10				21.9	mg/L		-20	20			B4
WG589912LCSW15	LCSW	05/29/24 3:35	WC240522-1	820.0001		771.7	mg/L	94	90	110			

Aluminum, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589991													
WG589991ICV	ICV	05/30/24 17:41	II240515-3	2		1.946	mg/L	97	95	105			
WG589991ICB	ICB	05/30/24 17:47				U	mg/L		-0.15	0.15			
WG589991PQV	PQV	05/30/24 17:51	II240521-5	.25025		.204	mg/L	82	70	130			
WG589991SIC	SIC	05/30/24 17:54	II240521-3	200.45025		205.5	mg/L	103	1	200			
WG589991LFB	LFB	05/30/24 18:00	II240515-1	1.001		1.022	mg/L	102	85	115			
L87654-01AS	AS	05/30/24 18:22	II240515-1	1.001	U	1.033	mg/L	103	85	115			
L87654-01ASD	ASD	05/30/24 18:25	II240515-1	1.001	U	1.038	mg/L	104	85	115	0	20	
WG589991CCV1	CCV	05/30/24 18:32	II240529-2	1		.972	mg/L	97	90	110			
WG589991CCB1	CCB	05/30/24 18:35				U	mg/L		-0.15	0.15			
WG589991CCV2	CCV	05/30/24 19:10	II240529-2	1		.951	mg/L	95	90	110			
WG589991CCB2	CCB	05/30/24 19:13				U	mg/L		-0.15	0.15			
L87804-06AS	AS	05/30/24 19:25	II240515-1	1.001	U	1.051	mg/L	105	85	115			
L87804-06ASD	ASD	05/30/24 19:28	II240515-1	1.001	U	1.047	mg/L	105	85	115	0	20	
WG589991CCV3	CCV	05/30/24 19:32	II240529-2	1		.964	mg/L	96	90	110			
WG589991CCB3	CCB	05/30/24 19:35				U	mg/L		-0.15	0.15			
WG590084													
WG590084ICV	ICV	06/01/24 1:07	II240515-3	2		1.943	mg/L	97	95	105			
WG590084ICB	ICB	06/01/24 1:13				U	mg/L		-0.15	0.15			
WG590084PQV	PQV	06/01/24 1:16	II240521-5	.25025		.228	mg/L	91	70	130			
WG590084SIC	SIC	06/01/24 1:20	II240521-3	200.45025		200.1	mg/L	100	1	200			
WG590084LFB	LFB	06/01/24 1:26	II240515-1	1.001		.978	mg/L	98	85	115			
WG590084CCV1	CCV	06/01/24 1:58	II240529-2	1		.942	mg/L	94	90	110			
WG590084CCB1	CCB	06/01/24 2:01				U	mg/L		-0.15	0.15			
L87778-05AS	AS	06/01/24 2:07	II240515-1	1.001	U	1.055	mg/L	105	85	115			
L87778-05ASD	ASD	06/01/24 2:10	II240515-1	1.001	U	1.07	mg/L	107	85	115	1	20	
WG590084CCV2	CCV	06/01/24 2:36	II240529-2	1		.936	mg/L	94	90	110			
WG590084CCB2	CCB	06/01/24 2:39				U	mg/L		-0.15	0.15			
WG590084CCV3	CCV	06/01/24 2:58	II240529-2	1		.935	mg/L	94	90	110			
WG590084CCB3	CCB	06/01/24 3:01				U	mg/L		-0.15	0.15			

GCC

ACZ Project ID: **L87775**

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

EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589422													
WG589422ICV	ICV	05/20/24 13:54	MS240404-4	.05		.05011	mg/L	100	90	110			
WG589422ICB	ICB	05/20/24 13:57				U	mg/L		-0.00044	0.00044			
WG589422LFB	LFB	05/20/24 13:59	MS240514-1	.0501		.0498	mg/L	99	85	115			
WG589422CCV1	CCV	05/20/24 14:22	MS240421-5	.1002		.09931	mg/L	99	90	110			
WG589422CCB1	CCB	05/20/24 14:24				U	mg/L		-0.0006	0.0006			
L87751-01AS	AS	05/20/24 14:36	MS240514-1	.0501	.00032	.0515	mg/L	102	70	130			
L87751-01ASD	ASD	05/20/24 14:38	MS240514-1	.0501	.00032	.05025	mg/L	100	70	130	2	20	
WG589422CCV2	CCV	05/20/24 14:50	MS240421-5	.1002		.09989	mg/L	100	90	110			
WG589422CCB2	CCB	05/20/24 14:52				U	mg/L		-0.0006	0.0006			
WG589422CCV3	CCV	05/20/24 15:06	MS240421-5	.1002		.09932	mg/L	99	90	110			
WG589422CCB3	CCB	05/20/24 15:09				U	mg/L		-0.0006	0.0006			

Beryllium, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589991													
WG589991ICV	ICV	05/30/24 17:41	II240515-3	2		1.925	mg/L	96	95	105			
WG589991ICB	ICB	05/30/24 17:47				U	mg/L		-0.03	0.03			
WG589991PQV	PQV	05/30/24 17:51	II240521-5	.0501		.048	mg/L	96	70	130			
WG589991SIC	SIC	05/30/24 17:54	II240521-3	.1002		.096	mg/L	96	80	120			
WG589991LFB	LFB	05/30/24 18:00	II240515-1	.501		.519	mg/L	104	85	115			
L87654-01AS	AS	05/30/24 18:22	II240515-1	.501	U	.5	mg/L	100	85	115			
L87654-01ASD	ASD	05/30/24 18:25	II240515-1	.501	U	.506	mg/L	101	85	115	1	20	
WG589991CCV1	CCV	05/30/24 18:32	II240529-2	1		.973	mg/L	97	90	110			
WG589991CCB1	CCB	05/30/24 18:35				U	mg/L		-0.03	0.03			
WG589991CCV2	CCV	05/30/24 19:10	II240529-2	1		.966	mg/L	97	90	110			
WG589991CCB2	CCB	05/30/24 19:13				U	mg/L		-0.03	0.03			
L87804-06AS	AS	05/30/24 19:25	II240515-1	.501	U	.523	mg/L	104	85	115			
L87804-06ASD	ASD	05/30/24 19:28	II240515-1	.501	U	.518	mg/L	103	85	115	1	20	
WG589991CCV3	CCV	05/30/24 19:32	II240529-2	1		.973	mg/L	97	90	110			
WG589991CCB3	CCB	05/30/24 19:35				U	mg/L		-0.03	0.03			

WG590084

WG590084ICV	ICV	06/01/24 1:07	II240515-3	2		1.916	mg/L	96	95	105			
WG590084ICB	ICB	06/01/24 1:13				U	mg/L		-0.03	0.03			
WG590084PQV	PQV	06/01/24 1:16	II240521-5	.0501		.046	mg/L	92	70	130			
WG590084SIC	SIC	06/01/24 1:20	II240521-3	.1002		.093	mg/L	93	80	120			
WG590084LFB	LFB	06/01/24 1:26	II240515-1	.501		.495	mg/L	99	85	115			
WG590084CCV1	CCV	06/01/24 1:58	II240529-2	1		.942	mg/L	94	90	110			
WG590084CCB1	CCB	06/01/24 2:01				U	mg/L		-0.03	0.03			
L87778-05AS	AS	06/01/24 2:07	II240515-1	.501	U	.503	mg/L	100	85	115			
L87778-05ASD	ASD	06/01/24 2:10	II240515-1	.501	U	.495	mg/L	99	85	115	2	20	
WG590084CCV2	CCV	06/01/24 2:36	II240529-2	1		.94	mg/L	94	90	110			
WG590084CCB2	CCB	06/01/24 2:39				U	mg/L		-0.03	0.03			
WG590084CCV3	CCV	06/01/24 2:58	II240529-2	1		.944	mg/L	94	90	110			
WG590084CCB3	CCB	06/01/24 3:01				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: **L87775**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589991													
WG589991ICV	ICV	05/30/24 17:41	II240515-3	2		2.1	mg/L	105	95	105			
WG589991ICB	ICB	05/30/24 17:47				U	mg/L		-0.09	0.09			
WG589991PQV	PQV	05/30/24 17:51	II240521-5	.1001		.107	mg/L	107	70	130			
WG589991SIC	SIC	05/30/24 17:54	II240521-3	.1001		.098	mg/L	98	80	120			
WG589991LFB	LFB	05/30/24 18:00	II240515-1	.5005		.539	mg/L	108	85	115			
L87654-01AS	AS	05/30/24 18:22	II240515-1	.5005	.181	.717	mg/L	107	85	115			
L87654-01ASD	ASD	05/30/24 18:25	II240515-1	.5005	.181	.716	mg/L	107	85	115	0	20	
WG589991CCV1	CCV	05/30/24 18:32	II240529-2	1		1.062	mg/L	106	90	110			
WG589991CCB1	CCB	05/30/24 18:35				U	mg/L		-0.09	0.09			
WG589991CCV2	CCV	05/30/24 19:10	II240529-2	1		1.063	mg/L	106	90	110			
WG589991CCB2	CCB	05/30/24 19:13				U	mg/L		-0.09	0.09			
L87804-06AS	AS	05/30/24 19:25	II240515-1	.5005	U	.575	mg/L	115	85	115			
L87804-06ASD	ASD	05/30/24 19:28	II240515-1	.5005	U	.573	mg/L	114	85	115	0	20	
WG589991CCV3	CCV	05/30/24 19:32	II240529-2	1		1.06	mg/L	106	90	110			
WG589991CCB3	CCB	05/30/24 19:35				U	mg/L		-0.09	0.09			
WG590084													
WG590084ICV	ICV	06/01/24 1:07	II240515-3	2		2.079	mg/L	104	95	105			
WG590084ICB	ICB	06/01/24 1:13				U	mg/L		-0.09	0.09			
WG590084PQV	PQV	06/01/24 1:16	II240521-5	.1001		.098	mg/L	98	70	130			
WG590084SIC	SIC	06/01/24 1:20	II240521-3	.1001		.091	mg/L	91	80	120			
WG590084LFB	LFB	06/01/24 1:26	II240515-1	.5005		.504	mg/L	101	85	115			
WG590084CCV1	CCV	06/01/24 1:58	II240529-2	1		1.013	mg/L	101	90	110			
WG590084CCB1	CCB	06/01/24 2:01				U	mg/L		-0.09	0.09			
L87778-05AS	AS	06/01/24 2:07	II240515-1	.5005	.058	.599	mg/L	108	85	115			
L87778-05ASD	ASD	06/01/24 2:10	II240515-1	.5005	.058	.575	mg/L	103	85	115	4	20	
WG590084CCV2	CCV	06/01/24 2:36	II240529-2	1		1.022	mg/L	102	90	110			
WG590084CCB2	CCB	06/01/24 2:39				U	mg/L		-0.09	0.09			
WG590084CCV3	CCV	06/01/24 2:58	II240529-2	1		1.014	mg/L	101	90	110			
WG590084CCB3	CCB	06/01/24 3:01				U	mg/L		-0.09	0.09			

Cadmium, dissolved

EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589422													
WG589422ICV	ICV	05/20/24 13:54	MS240404-4	.05		.053461	mg/L	107	90	110			
WG589422ICB	ICB	05/20/24 13:57				U	mg/L		-0.00011	0.00011			
WG589422LFB	LFB	05/20/24 13:59	MS240514-1	.05005		.051816	mg/L	104	85	115			
WG589422CCV1	CCV	05/20/24 14:22	MS240421-5	.1001		.100427	mg/L	100	90	110			
WG589422CCB1	CCB	05/20/24 14:24				U	mg/L		-0.00015	0.00015			
L87751-01AS	AS	05/20/24 14:36	MS240514-1	.05005	U	.054911	mg/L	110	70	130			
L87751-01ASD	ASD	05/20/24 14:38	MS240514-1	.05005	U	.053629	mg/L	107	70	130	2	20	
WG589422CCV2	CCV	05/20/24 14:50	MS240421-5	.1001		.100982	mg/L	101	90	110			
WG589422CCB2	CCB	05/20/24 14:52				U	mg/L		-0.00015	0.00015			
WG589422CCV3	CCV	05/20/24 15:06	MS240421-5	.1001		.099536	mg/L	99	90	110			
WG589422CCB3	CCB	05/20/24 15:09				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: **L87775**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589991													
WG589991ICV	ICV	05/30/24 17:41	II240515-3	100		99.02	mg/L	99	95	105			
WG589991ICB	ICB	05/30/24 17:47				U	mg/L		-0.3	0.3			
WG589991PQV	PQV	05/30/24 17:51	II240521-5	.5025		.5	mg/L	100	70	130			
WG589991SIC	SIC	05/30/24 17:54	II240521-3	201.5025		200.4	mg/L	99	1	200			
WG589991LFB	LFB	05/30/24 18:00	II240515-1	67.93628		70.45	mg/L	104	85	115			
L87654-01AS	AS	05/30/24 18:22	II240515-1	67.93628	197	256.5	mg/L	88	85	115			
L87654-01ASD	ASD	05/30/24 18:25	II240515-1	67.93628	197	261.5	mg/L	95	85	115	2	20	
WG589991CCV1	CCV	05/30/24 18:32	II240529-2	50		50.06	mg/L	100	90	110			
WG589991CCB1	CCB	05/30/24 18:35				U	mg/L		-0.3	0.3			
WG589991CCV2	CCV	05/30/24 19:10	II240529-2	50		49.51	mg/L	99	90	110			
WG589991CCB2	CCB	05/30/24 19:13				U	mg/L		-0.3	0.3			
L87804-06AS	AS	05/30/24 19:25	II240515-1	67.93628	98.6	169.6	mg/L	105	85	115			
L87804-06ASD	ASD	05/30/24 19:28	II240515-1	67.93628	98.6	168	mg/L	102	85	115	1	20	
WG589991CCV3	CCV	05/30/24 19:32	II240529-2	50		50.04	mg/L	100	90	110			
WG589991CCB3	CCB	05/30/24 19:35				U	mg/L		-0.3	0.3			
WG590084													
WG590084ICV	ICV	06/01/24 1:07	II240515-3	100		98.2	mg/L	98	95	105			
WG590084ICB	ICB	06/01/24 1:13				U	mg/L		-0.3	0.3			
WG590084PQV	PQV	06/01/24 1:16	II240521-5	.5025		.54	mg/L	107	70	130			
WG590084SIC	SIC	06/01/24 1:20	II240521-3	201.5025		200	mg/L	99	1	200			
WG590084LFB	LFB	06/01/24 1:26	II240515-1	67.93628		68.14	mg/L	100	85	115			
WG590084CCV1	CCV	06/01/24 1:58	II240529-2	50		48.94	mg/L	98	90	110			
WG590084CCB1	CCB	06/01/24 2:01				U	mg/L		-0.3	0.3			
L87778-05AS	AS	06/01/24 2:07	II240515-1	67.93628	222	281.4	mg/L	87	85	115			
L87778-05ASD	ASD	06/01/24 2:10	II240515-1	67.93628	222	276.9	mg/L	81	85	115	2	20	M3
WG590084CCV2	CCV	06/01/24 2:36	II240529-2	50		48.44	mg/L	97	90	110			
WG590084CCB2	CCB	06/01/24 2:39				U	mg/L		-0.3	0.3			
WG590084CCV3	CCV	06/01/24 2:58	II240529-2	50		48.85	mg/L	98	90	110			
WG590084CCB3	CCB	06/01/24 3:01				U	mg/L		-0.3	0.3			

GCC

ACZ Project ID: L87775

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

SM 4500-CI E-2011

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589687													
WG589687ICV	ICV	05/23/24 12:17	WI231211-1	39.96		40.34	mg/L	101	90	110			
WG589687ICB	ICB	05/23/24 12:18				U	mg/L						
WG589687CCV1	CCV	05/23/24 12:54	WI240111-9	25.025		25.45	mg/L	102	90	110			
WG589687CCB1	CCB	05/23/24 12:54				U	mg/L						
WG589687PQV	PQV	05/23/24 12:54	WI240502-1	2.002		1.96	mg/L	98	50	150			
WG589687LFB	LFB	05/23/24 12:55	WI231211-4	20.02		21.17	mg/L	106	90	110			
WG589687CCV2	CCV	05/23/24 12:57	WI240111-9	25.025		26.42	mg/L	106	90	110			
WG589687CCB2	CCB	05/23/24 12:58				U	mg/L						
L87721-10AS	AS	05/23/24 12:58	WI231211-4	20.02	U	21.16	mg/L	106	90	110			
WG589687CCV3	CCV	05/23/24 13:05	WI240111-9	25.025		26.53	mg/L	106	90	110			
WG589687CCB3	CCB	05/23/24 13:05				U	mg/L						
L87790-03AS	AS	05/23/24 13:07	WI231211-4	100.1	82.7	114.22	mg/L	31	90	110			M3
WG589687CCV4	CCV	05/23/24 13:14	WI240111-9	25.025		26.64	mg/L	106	90	110			
WG589687CCB4	CCB	05/23/24 13:14				U	mg/L						
L87790-04DUP	DUP	05/23/24 13:15			85.5	85.15	mg/L				0	20	
WG589687CCV5	CCV	05/23/24 13:16	WI240111-9	25.025		26.5	mg/L	106	90	110			
WG589687CCB5	CCB	05/23/24 13:16				U	mg/L						
WG589687CCV6	CCV	05/23/24 13:21	WI240111-9	25.025		26.43	mg/L	106	90	110			
WG589687CCB6	CCB	05/23/24 13:21				U	mg/L						
L87775-01DUP	DUP	05/23/24 13:22			643	649.25	mg/L				1	20	
WG589687CCV7	CCV	05/23/24 13:22	WI240111-9	25.025		26.53	mg/L	106	90	110			
WG589687CCB7	CCB	05/23/24 13:23				U	mg/L						
WG589687CCV8	CCV	05/23/24 13:23	WI240111-9	25.025		26.51	mg/L	106	90	110			
WG589687CCB8	CCB	05/23/24 13:24				U	mg/L						
WG589687CCV9	CCV	05/23/24 13:31	WI240111-9	25.025		26.47	mg/L	106	90	110			
WG589687CCB9	CCB	05/23/24 13:31				U	mg/L						
WG589687CCV10	CCV	05/23/24 13:45	WI240111-9	25.025		25.71	mg/L	103	90	110			
WG589687CCB10	CCB	05/23/24 13:45				U	mg/L						
WG589687CCV11	CCV	05/23/24 13:47	WI240111-9	25.025		26.42	mg/L	106	90	110			
WG589687CCB11	CCB	05/23/24 13:47				U	mg/L						
WG590345													
WG590345ICV	ICV	06/04/24 11:24	WI231211-1	39.96		40.31	mg/L	101	90	110			
WG590345ICB	ICB	06/04/24 11:24				U	mg/L						
WG590345CCV1	CCV	06/04/24 12:13	WI240111-9	25.025		25.4	mg/L	101	90	110			
WG590345CCB1	CCB	06/04/24 12:14				U	mg/L						
WG590345PQV	PQV	06/04/24 12:14	WI240502-1	2.002		1.77	mg/L	88	50	150			
WG590345LFB	LFB	06/04/24 12:14	WI231211-4	20.02		20.95	mg/L	105	90	110			
WG590345CCV2	CCV	06/04/24 12:17	WI240111-9	25.025		26.53	mg/L	106	90	110			
WG590345CCB2	CCB	06/04/24 12:17				U	mg/L						
WG590345CCV3	CCV	06/04/24 12:25	WI240111-9	25.025		26.46	mg/L	106	90	110			
WG590345CCB3	CCB	06/04/24 12:25				U	mg/L						
L87792-04AS	AS	06/04/24 12:26	WI231211-4	20.02	16.8	35.86	mg/L	95	90	110			
WG590345CCV4	CCV	06/04/24 12:33	WI240111-9	25.025		26.54	mg/L	106	90	110			
WG590345CCB4	CCB	06/04/24 12:34				U	mg/L						
L87815-01DUP	DUP	06/04/24 12:34			6.64	6.68	mg/L				1	20	RA
WG590345CCV5	CCV	06/04/24 12:35	WI240111-9	25.025		26.54	mg/L	106	90	110			
WG590345CCB5	CCB	06/04/24 12:35				U	mg/L						
WG590345CCV8	CCV	06/04/24 12:44	WI240111-9	25.025		26.61	mg/L	106	90	110			
WG590345CCB8	CCB	06/04/24 12:44				U	mg/L						

GCC

ACZ Project ID: **L87775**

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.

WG590345CCV9	CCV	06/04/24 12:51	WI240111-9	25.025	26.54	mg/L	106	90	110
WG590345CCB9	CCB	06/04/24 12:51			U	mg/L			
WG590345CCV10	CCV	06/04/24 12:51	WI240111-9	25.025	26.59	mg/L	106	90	110
WG590345CCB10	CCB	06/04/24 12:52			U	mg/L			
WG590345CCV12	CCV	06/04/24 12:53	WI240111-9	25.025	26.59	mg/L	106	90	110
WG590345CCB12	CCB	06/04/24 12:53			U	mg/L			
WG590345CCV13	CCV	06/04/24 13:01	WI240111-9	25.025	26.42	mg/L	106	90	110
WG590345CCB13	CCB	06/04/24 13:02			U	mg/L			
WG590345CCV14	CCV	06/04/24 13:03	WI240111-9	25.025	26.6	mg/L	106	90	110
WG590345CCB14	CCB	06/04/24 13:03			U	mg/L			

Chromium, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589991													
WG589991ICV	ICV	05/30/24 17:41	II240515-3	2		1.959	mg/L	98	95	105			
WG589991ICB	ICB	05/30/24 17:47				U	mg/L		-0.06	0.06			
WG589991PQV	PQV	05/30/24 17:51	II240521-5	.05005		.047	mg/L	94	70	130			
WG589991SIC	SIC	05/30/24 17:54	II240521-3	.1001		.088	mg/L	88	80	120			
WG589991LFB	LFB	05/30/24 18:00	II240515-1	.5005		.517	mg/L	103	85	115			
L87654-01AS	AS	05/30/24 18:22	II240515-1	.5005	U	.506	mg/L	101	85	115			
L87654-01ASD	ASD	05/30/24 18:25	II240515-1	.5005	U	.506	mg/L	101	85	115	0	20	
WG589991CCV1	CCV	05/30/24 18:32	II240529-2	1		.988	mg/L	99	90	110			
WG589991CCB1	CCB	05/30/24 18:35				U	mg/L		-0.06	0.06			
WG589991CCV2	CCV	05/30/24 19:10	II240529-2	1		.979	mg/L	98	90	110			
WG589991CCB2	CCB	05/30/24 19:13				U	mg/L		-0.06	0.06			
L87804-06AS	AS	05/30/24 19:25	II240515-1	.5005	U	.512	mg/L	102	85	115			
L87804-06ASD	ASD	05/30/24 19:28	II240515-1	.5005	U	.514	mg/L	103	85	115	0	20	
WG589991CCV3	CCV	05/30/24 19:32	II240529-2	1		.982	mg/L	98	90	110			
WG589991CCB3	CCB	05/30/24 19:35				U	mg/L		-0.06	0.06			
WG590218													
WG590218ICV	ICV	06/01/24 17:26	II240515-3	2		1.952	mg/L	98	95	105			
WG590218ICB	ICB	06/01/24 17:32				U	mg/L		-0.06	0.06			
WG590218PQV	PQV	06/01/24 17:35	II240521-5	.05005		.053	mg/L	106	70	130			
WG590218SIC	SIC	06/01/24 17:38	II240521-3	.1001		.094	mg/L	94	80	120			
WG590218LFB	LFB	06/01/24 17:44	II240515-1	.5005		.513	mg/L	102	85	115			
WG590218CCV1	CCV	06/01/24 18:16	II240529-2	1		.958	mg/L	96	90	110			
WG590218CCB1	CCB	06/01/24 18:19				U	mg/L		-0.06	0.06			
L87802-01AS	AS	06/01/24 18:25	II240515-1	.5005	U	.512	mg/L	102	85	115			
L87802-01ASD	ASD	06/01/24 18:28	II240515-1	.5005	U	.468	mg/L	94	85	115	9	20	
WG590218CCV2	CCV	06/01/24 18:54	II240529-2	1		.958	mg/L	96	90	110			
WG590218CCB2	CCB	06/01/24 18:57				U	mg/L		-0.06	0.06			
WG590218CCV3	CCV	06/01/24 19:06	II240529-2	1		.974	mg/L	97	90	110			
WG590218CCB3	CCB	06/01/24 19:09				U	mg/L		-0.06	0.06			

GCC

ACZ Project ID: **L87775**

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.

Cobalt, dissolved

EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589422													
WG589422ICV	ICV	05/20/24 13:54	MS240404-4	.05		.05085	mg/L	102	90	110			
WG589422ICB	ICB	05/20/24 13:57				U	mg/L		-0.00011	0.00011			
WG589422LFB	LFB	05/20/24 13:59	MS240514-1	.05005		.049574	mg/L	99	85	115			
WG589422CCV1	CCV	05/20/24 14:22	MS240421-5	.1001		.098414	mg/L	98	90	110			
WG589422CCB1	CCB	05/20/24 14:24				U	mg/L		-0.00015	0.00015			
L87751-01AS	AS	05/20/24 14:36	MS240514-1	.05005	.0001	.05259	mg/L	105	70	130			
L87751-01ASD	ASD	05/20/24 14:38	MS240514-1	.05005	.0001	.050632	mg/L	101	70	130	4	20	
WG589422CCV2	CCV	05/20/24 14:50	MS240421-5	.1001		.096273	mg/L	96	90	110			
WG589422CCB2	CCB	05/20/24 14:52				U	mg/L		-0.00015	0.00015			
WG589422CCV3	CCV	05/20/24 15:06	MS240421-5	.1001		.096421	mg/L	96	90	110			
WG589422CCB3	CCB	05/20/24 15:09				U	mg/L		-0.00015	0.00015			

Copper, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589991													
WG589991ICV	ICV	05/30/24 17:41	II240515-3	2		1.941	mg/L	97	95	105			
WG589991ICB	ICB	05/30/24 17:47				U	mg/L		-0.03	0.03			
WG589991PQV	PQV	05/30/24 17:51	II240521-5	.05005		.052	mg/L	104	70	130			
WG589991SIC	SIC	05/30/24 17:54	II240521-3	.1001		.096	mg/L	96	80	120			
WG589991LFB	LFB	05/30/24 18:00	II240515-1	.5005		.524	mg/L	105	85	115			
L87654-01AS	AS	05/30/24 18:22	II240515-1	.5005	U	.52	mg/L	104	85	115			
L87654-01ASD	ASD	05/30/24 18:25	II240515-1	.5005	U	.522	mg/L	104	85	115	0	20	
WG589991CCV1	CCV	05/30/24 18:32	II240529-2	1		.986	mg/L	99	90	110			
WG589991CCB1	CCB	05/30/24 18:35				U	mg/L		-0.03	0.03			
WG589991CCV2	CCV	05/30/24 19:10	II240529-2	1		.977	mg/L	98	90	110			
WG589991CCB2	CCB	05/30/24 19:13				U	mg/L		-0.03	0.03			
L87804-06AS	AS	05/30/24 19:25	II240515-1	.5005	U	.531	mg/L	106	85	115			
L87804-06ASD	ASD	05/30/24 19:28	II240515-1	.5005	U	.53	mg/L	106	85	115	0	20	
WG589991CCV3	CCV	05/30/24 19:32	II240529-2	1		.976	mg/L	98	90	110			
WG589991CCB3	CCB	05/30/24 19:35				U	mg/L		-0.03	0.03			

WG590084

WG590084ICV	ICV	06/01/24 1:07	II240515-3	2		1.902	mg/L	95	95	105			
WG590084ICB	ICB	06/01/24 1:13				U	mg/L		-0.03	0.03			
WG590084PQV	PQV	06/01/24 1:16	II240521-5	.05005		.041	mg/L	82	70	130			
WG590084SIC	SIC	06/01/24 1:20	II240521-3	.1001		.095	mg/L	95	80	120			
WG590084LFB	LFB	06/01/24 1:26	II240515-1	.5005		.491	mg/L	98	85	115			
WG590084CCV1	CCV	06/01/24 1:58	II240529-2	1		.93	mg/L	93	90	110			
WG590084CCB1	CCB	06/01/24 2:01				U	mg/L		-0.03	0.03			
L87778-05AS	AS	06/01/24 2:07	II240515-1	.5005	U	.501	mg/L	100	85	115			
L87778-05ASD	ASD	06/01/24 2:10	II240515-1	.5005	U	.494	mg/L	99	85	115	1	20	
WG590084CCV2	CCV	06/01/24 2:36	II240529-2	1		.921	mg/L	92	90	110			
WG590084CCB2	CCB	06/01/24 2:39				U	mg/L		-0.03	0.03			
WG590084CCV3	CCV	06/01/24 2:58	II240529-2	1		.929	mg/L	93	90	110			
WG590084CCB3	CCB	06/01/24 3:01				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: **L87775**

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

SM 4500-F C-2011

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG590262													
WG590262ICV	ICV	06/03/24 11:47	WC240530-2	2.002		2.15	mg/L	107	90	110			
WG590262ICB	ICB	06/03/24 11:53				.19	mg/L		-0.3	0.3			
WG590262PQV	PQV	06/03/24 11:56	WC240424-1	.35		.45	mg/L	129	50	150			
WG590262LFB1	LFB	06/03/24 12:00	WC240411-1	5		5.09	mg/L	102	90	110			
WG590262CCV1	CCV	06/03/24 12:40	WC240530-2	2.002		1.898	mg/L	95	90	110			
WG590262CCB1	CCB	06/03/24 12:46				U	mg/L		-0.3	0.3			
L87742-01AS	AS	06/03/24 13:11	WC240411-1	5	1.69	6.42	mg/L	95	90	110			
L87742-01ASD	ASD	06/03/24 13:14	WC240411-1	5	1.69	6.48	mg/L	96	90	110	1	20	
WG590262CCV2	CCV	06/03/24 13:33	WC240530-2	2.002		2.142	mg/L	107	90	110			
WG590262CCB2	CCB	06/03/24 13:41				U	mg/L		-0.3	0.3			
WG590262LFB2	LFB	06/03/24 14:06	WC240411-1	5		5.05	mg/L	101	90	110			
L87775-07AS	AS	06/03/24 14:17	WC240411-1	5	U	5.12	mg/L	102	90	110			
L87775-07ASD	ASD	06/03/24 14:24	WC240411-1	5	U	5.28	mg/L	106	90	110	3	20	
WG590262CCV3	CCV	06/03/24 14:36	WC240530-2	2.002		1.992	mg/L	100	90	110			
WG590262CCB3	CCB	06/03/24 14:43				U	mg/L		-0.3	0.3			
WG590262CCV4	CCV	06/03/24 15:24	WC240530-2	2.002		2.12	mg/L	106	90	110			
WG590262CCB4	CCB	06/03/24 15:31				U	mg/L		-0.3	0.3			
WG590262CCV5	CCV	06/03/24 16:14	WC240530-2	2.002		2.002	mg/L	100	90	110			
WG590262CCB5	CCB	06/03/24 16:20				U	mg/L		-0.3	0.3			

GCC

ACZ Project ID: **L87775**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589991													
WG589991ICV	ICV	05/30/24 17:41	II240515-3	2		1.962	mg/L	98	95	105			
WG589991ICB	ICB	05/30/24 17:47				U	mg/L		-0.18	0.18			
WG589991PQV	PQV	05/30/24 17:51	II240521-5	.15045		.145	mg/L	96	70	130			
WG589991SIC	SIC	05/30/24 17:54	II240521-3	200.75045		198	mg/L	99	1	200			
WG589991LFB	LFB	05/30/24 18:00	II240515-1	1.003		1.066	mg/L	106	85	115			
L87654-01AS	AS	05/30/24 18:22	II240515-1	1.003	U	1.03	mg/L	103	85	115			
L87654-01ASD	ASD	05/30/24 18:25	II240515-1	1.003	U	1.037	mg/L	103	85	115	1	20	
WG589991CCV1	CCV	05/30/24 18:32	II240529-2	1		.997	mg/L	100	90	110			
WG589991CCB1	CCB	05/30/24 18:35				U	mg/L		-0.18	0.18			
WG589991CCV2	CCV	05/30/24 19:10	II240529-2	1		.986	mg/L	99	90	110			
WG589991CCB2	CCB	05/30/24 19:13				U	mg/L		-0.18	0.18			
L87804-06AS	AS	05/30/24 19:25	II240515-1	1.003	.061	1.131	mg/L	107	85	115			
L87804-06ASD	ASD	05/30/24 19:28	II240515-1	1.003	.061	1.124	mg/L	106	85	115	1	20	
WG589991CCV3	CCV	05/30/24 19:32	II240529-2	1		1.003	mg/L	100	90	110			
WG589991CCB3	CCB	05/30/24 19:35				U	mg/L		-0.18	0.18			

WG590084

WG590084ICV	ICV	06/01/24 1:07	II240515-3	2		1.989	mg/L	99	95	105			
WG590084ICB	ICB	06/01/24 1:13				U	mg/L		-0.18	0.18			
WG590084PQV	PQV	06/01/24 1:16	II240521-5	.15045		.147	mg/L	98	70	130			
WG590084SIC	SIC	06/01/24 1:20	II240521-3	200.75045		200	mg/L	100	1	200			
WG590084LFB	LFB	06/01/24 1:26	II240515-1	1.003		1.01	mg/L	101	85	115			
WG590084CCV1	CCV	06/01/24 1:58	II240529-2	1		.964	mg/L	96	90	110			
WG590084CCB1	CCB	06/01/24 2:01				U	mg/L		-0.18	0.18			
L87778-05AS	AS	06/01/24 2:07	II240515-1	1.003	1.25	2.225	mg/L	97	85	115			
L87778-05ASD	ASD	06/01/24 2:10	II240515-1	1.003	1.25	2.2	mg/L	95	85	115	1	20	
WG590084CCV2	CCV	06/01/24 2:36	II240529-2	1		.956	mg/L	96	90	110			
WG590084CCB2	CCB	06/01/24 2:39				U	mg/L		-0.18	0.18			
WG590084CCV3	CCV	06/01/24 2:58	II240529-2	1		.964	mg/L	96	90	110			
WG590084CCB3	CCB	06/01/24 3:01				U	mg/L		-0.18	0.18			

Lead, dissolved

EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589422													
WG589422ICV	ICV	05/20/24 13:54	MS240404-4	.05		.05033	mg/L	101	90	110			
WG589422ICB	ICB	05/20/24 13:57				U	mg/L		-0.00022	0.00022			
WG589422LFB	LFB	05/20/24 13:59	MS240514-1	.05005		.04981	mg/L	100	85	115			
WG589422CCV1	CCV	05/20/24 14:22	MS240421-5	.25025		.2476	mg/L	99	90	110			
WG589422CCB1	CCB	05/20/24 14:24				.0001	mg/L		-0.0003	0.0003			
L87751-01AS	AS	05/20/24 14:36	MS240514-1	.05005	U	.05049	mg/L	101	70	130			
L87751-01ASD	ASD	05/20/24 14:38	MS240514-1	.05005	U	.04865	mg/L	97	70	130	4	20	
WG589422CCV2	CCV	05/20/24 14:50	MS240421-5	.25025		.23916	mg/L	96	90	110			
WG589422CCB2	CCB	05/20/24 14:52				U	mg/L		-0.0003	0.0003			
WG589422CCV3	CCV	05/20/24 15:06	MS240421-5	.25025		.23798	mg/L	95	90	110			
WG589422CCB3	CCB	05/20/24 15:09				U	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: **L87775**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589991													
WG589991ICV	ICV	05/30/24 17:41	II240515-3	2		1.9055	mg/L	95	95	105			
WG589991ICB	ICB	05/30/24 17:47				U	mg/L		-0.024	0.024			
WG589991PQV	PQV	05/30/24 17:51	II240521-5	.04		.0387	mg/L	97	70	130			
WG589991SIC	SIC	05/30/24 17:54	II240521-3	.1		.0927	mg/L	93	80	120			
WG589991LFB	LFB	05/30/24 18:00	II240515-1	1		.9688	mg/L	97	85	115			
L87654-01AS	AS	05/30/24 18:22	II240515-1	1	.0592	.9966	mg/L	94	85	115			
L87654-01ASD	ASD	05/30/24 18:25	II240515-1	1	.0592	.9991	mg/L	94	85	115	0	20	
WG589991CCV1	CCV	05/30/24 18:32	II240529-2	1		.9456	mg/L	95	90	110			
WG589991CCB1	CCB	05/30/24 18:35				U	mg/L		-0.024	0.024			
WG589991CCV2	CCV	05/30/24 19:10	II240529-2	1		.937	mg/L	94	90	110			
WG589991CCB2	CCB	05/30/24 19:13				U	mg/L		-0.024	0.024			
L87804-06AS	AS	05/30/24 19:25	II240515-1	1	.0313	.9889	mg/L	96	85	115			
L87804-06ASD	ASD	05/30/24 19:28	II240515-1	1	.0313	.9991	mg/L	97	85	115	1	20	
WG589991CCV3	CCV	05/30/24 19:32	II240529-2	1		.9483	mg/L	95	90	110			
WG589991CCB3	CCB	05/30/24 19:35				U	mg/L		-0.024	0.024			
WG590084													
WG590084ICV	ICV	06/01/24 1:07	II240515-3	2		1.9165	mg/L	96	95	105			
WG590084ICB	ICB	06/01/24 1:13				U	mg/L		-0.024	0.024			
WG590084PQV	PQV	06/01/24 1:16	II240521-5	.04		.0337	mg/L	84	70	130			
WG590084SIC	SIC	06/01/24 1:20	II240521-3	.1		.0872	mg/L	87	80	120			
WG590084LFB	LFB	06/01/24 1:26	II240515-1	1		.9547	mg/L	95	85	115			
WG590084CCV1	CCV	06/01/24 1:58	II240529-2	1		.9331	mg/L	93	90	110			
WG590084CCB1	CCB	06/01/24 2:01				U	mg/L		-0.024	0.024			
L87778-05AS	AS	06/01/24 2:07	II240515-1	1	U	.9893	mg/L	99	85	115			
L87778-05ASD	ASD	06/01/24 2:10	II240515-1	1	U	.9702	mg/L	97	85	115	2	20	
WG590084CCV2	CCV	06/01/24 2:36	II240529-2	1		.9379	mg/L	94	90	110			
WG590084CCB2	CCB	06/01/24 2:39				U	mg/L		-0.024	0.024			
WG590084CCV3	CCV	06/01/24 2:58	II240529-2	1		.9371	mg/L	94	90	110			
WG590084CCB3	CCB	06/01/24 3:01				U	mg/L		-0.024	0.024			

GCC

ACZ Project ID: **L87775**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589991													
WG589991ICV	ICV	05/30/24 17:41	II240515-3	100		99.31	mg/L	99	95	105			
WG589991ICB	ICB	05/30/24 17:47				U	mg/L		-0.6	0.6			
WG589991PQV	PQV	05/30/24 17:51	II240521-5	1.006		.97	mg/L	96	70	130			
WG589991SIC	SIC	05/30/24 17:54	II240521-3	202.206		204.2	mg/L	101	1	200			
WG589991LFB	LFB	05/30/24 18:00	II240515-1	49.99866		52.29	mg/L	105	85	115			
L87654-01AS	AS	05/30/24 18:22	II240515-1	49.99866	139	184.4	mg/L	91	85	115			
L87654-01ASD	ASD	05/30/24 18:25	II240515-1	49.99866	139	188.5	mg/L	99	85	115	2	20	
WG589991CCV1	CCV	05/30/24 18:32	II240529-2	50		50.06	mg/L	100	90	110			
WG589991CCB1	CCB	05/30/24 18:35				U	mg/L		-0.6	0.6			
WG589991CCV2	CCV	05/30/24 19:10	II240529-2	50		49.39	mg/L	99	90	110			
WG589991CCB2	CCB	05/30/24 19:13				U	mg/L		-0.6	0.6			
L87804-06AS	AS	05/30/24 19:25	II240515-1	49.99866	19.6	73.06	mg/L	107	85	115			
L87804-06ASD	ASD	05/30/24 19:28	II240515-1	49.99866	19.6	72.04	mg/L	105	85	115	1	20	
WG589991CCV3	CCV	05/30/24 19:32	II240529-2	50		49.96	mg/L	100	90	110			
WG589991CCB3	CCB	05/30/24 19:35				U	mg/L		-0.6	0.6			
WG590084													
WG590084ICV	ICV	06/01/24 1:07	II240515-3	100		98.35	mg/L	98	95	105			
WG590084ICB	ICB	06/01/24 1:13				U	mg/L		-0.6	0.6			
WG590084PQV	PQV	06/01/24 1:16	II240521-5	1.006		1.03	mg/L	102	70	130			
WG590084SIC	SIC	06/01/24 1:20	II240521-3	202.206		203.7	mg/L	101	1	200			
WG590084LFB	LFB	06/01/24 1:26	II240515-1	49.99866		50.7	mg/L	101	85	115			
WG590084CCV1	CCV	06/01/24 1:58	II240529-2	50		49.28	mg/L	99	90	110			
WG590084CCB1	CCB	06/01/24 2:01				U	mg/L		-0.6	0.6			
L87778-05AS	AS	06/01/24 2:07	II240515-1	49.99866	31.6	83.93	mg/L	105	85	115			
L87778-05ASD	ASD	06/01/24 2:10	II240515-1	49.99866	31.6	83.56	mg/L	104	85	115	0	20	
WG590084CCV2	CCV	06/01/24 2:36	II240529-2	50		48.68	mg/L	97	90	110			
WG590084CCB2	CCB	06/01/24 2:39				U	mg/L		-0.6	0.6			
WG590084CCV3	CCV	06/01/24 2:58	II240529-2	50		49.17	mg/L	98	90	110			
WG590084CCB3	CCB	06/01/24 3:01				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: **L87775**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589991													
WG589991ICV	ICV	05/30/24 17:41	II240515-3	2		1.962	mg/L	98	95	105			
WG589991ICB	ICB	05/30/24 17:47				U	mg/L		-0.03	0.03			
WG589991PQV	PQV	05/30/24 17:51	II240521-5	.0502		.047	mg/L	94	70	130			
WG589991SIC	SIC	05/30/24 17:54	II240521-3	50.1502		48.37	mg/L	96	1	200			
WG589991LFB	LFB	05/30/24 18:00	II240515-1	.501		.523	mg/L	104	85	115			
L87654-01AS	AS	05/30/24 18:22	II240515-1	.501	.214	.713	mg/L	100	85	115			
L87654-01ASD	ASD	05/30/24 18:25	II240515-1	.501	.214	.721	mg/L	101	85	115	1	20	
WG589991CCV1	CCV	05/30/24 18:32	II240529-2	1		.998	mg/L	100	90	110			
WG589991CCB1	CCB	05/30/24 18:35				U	mg/L		-0.03	0.03			
WG589991CCV2	CCV	05/30/24 19:10	II240529-2	1		.988	mg/L	99	90	110			
WG589991CCB2	CCB	05/30/24 19:13				U	mg/L		-0.03	0.03			
L87804-06AS	AS	05/30/24 19:25	II240515-1	.501	U	.524	mg/L	105	85	115			
L87804-06ASD	ASD	05/30/24 19:28	II240515-1	.501	U	.521	mg/L	104	85	115	1	20	
WG589991CCV3	CCV	05/30/24 19:32	II240529-2	1		.994	mg/L	99	90	110			
WG589991CCB3	CCB	05/30/24 19:35				U	mg/L		-0.03	0.03			
WG590084													
WG590084ICV	ICV	06/01/24 1:07	II240515-3	2		1.907	mg/L	95	95	105			
WG590084ICB	ICB	06/01/24 1:13				U	mg/L		-0.03	0.03			
WG590084PQV	PQV	06/01/24 1:16	II240521-5	.0502		.044	mg/L	88	70	130			
WG590084SIC	SIC	06/01/24 1:20	II240521-3	50.1502		48.36	mg/L	96	1	200			
WG590084LFB	LFB	06/01/24 1:26	II240515-1	.501		.484	mg/L	97	85	115			
WG590084CCV1	CCV	06/01/24 1:58	II240529-2	1		.938	mg/L	94	90	110			
WG590084CCB1	CCB	06/01/24 2:01				U	mg/L		-0.03	0.03			
L87778-05AS	AS	06/01/24 2:07	II240515-1	.501	.013	.507	mg/L	99	85	115			
L87778-05ASD	ASD	06/01/24 2:10	II240515-1	.501	.013	.5	mg/L	97	85	115	1	20	
WG590084CCV2	CCV	06/01/24 2:36	II240529-2	1		.93	mg/L	93	90	110			
WG590084CCB2	CCB	06/01/24 2:39				U	mg/L		-0.03	0.03			
WG590084CCV3	CCV	06/01/24 2:58	II240529-2	1		.939	mg/L	94	90	110			
WG590084CCB3	CCB	06/01/24 3:01				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: **L87775**

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

Mercury, dissolved

EPA 245.1

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589908													
WG589908ICV	ICV	05/30/24 10:13	HG240528-3	.005		.00505	mg/L	101	95	105			
WG589908ICB	ICB	05/30/24 10:14				U	mg/L		-0.0002	0.0002			
WG589910													
WG589910CCV2	CCV	05/30/24 11:28	HG240528-3	.005		.00483	mg/L	97	90	110			
WG589910CCB1	CCB	05/30/24 11:29				U	mg/L		-0.0002	0.0002			
WG589910PQV	PQV	05/30/24 11:30	HG240528-5	.001001		.00098	mg/L	98	70	130			
WG589910LRB	LRB	05/30/24 11:31				U	mg/L		-0.00044	0.00044			
WG589910LFB	LFB	05/30/24 11:32	HG240528-6	.002002		.00186	mg/L	93	85	115			
WG589910CCV3	CCV	05/30/24 11:39	HG240528-3	.005		.00479	mg/L	96	90	110			
WG589910CCB2	CCB	05/30/24 11:40				U	mg/L		-0.0002	0.0002			
L87775-07LFM	LFM	05/30/24 11:42	HG240528-6	.002002	U	.00191	mg/L	95	85	115			
L87775-07LFMD	LFMD	05/30/24 11:43	HG240528-6	.002002	U	.00204	mg/L	102	85	115	7	20	
WG589910CCV4	CCV	05/30/24 11:51	HG240528-3	.005		.00518	mg/L	104	90	110			
WG589910CCB3	CCB	05/30/24 11:52				U	mg/L		-0.0002	0.0002			
WG589910CCV5	CCV	05/30/24 11:59	HG240528-3	.005		.00513	mg/L	103	90	110			
WG589910CCB4	CCB	05/30/24 12:00				U	mg/L		-0.0002	0.0002			

GCC

ACZ Project ID: **L87775**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589991													
WG589991ICV	ICV	05/30/24 17:41	II240515-3	2.004		2.0525	mg/L	102	95	105			
WG589991ICB	ICB	05/30/24 17:47				U	mg/L		-0.024	0.024			
WG589991PQV	PQV	05/30/24 17:51	II240521-5	.04008		.0433	mg/L	108	70	130			
WG589991SIC	SIC	05/30/24 17:54	II240521-3	.1002		.0919	mg/L	92	80	120			
WG589991LFB	LFB	05/30/24 18:00	II240515-1	.501		.5412	mg/L	108	85	115			
L87654-01AS	AS	05/30/24 18:22	II240515-1	.501	U	.5322	mg/L	106	85	115			
L87654-01ASD	ASD	05/30/24 18:25	II240515-1	.501	U	.535	mg/L	107	85	115	1	20	
WG589991CCV1	CCV	05/30/24 18:32	II240529-2	1.002		1.02	mg/L	102	90	110			
WG589991CCB1	CCB	05/30/24 18:35				U	mg/L		-0.024	0.024			
WG589991CCV2	CCV	05/30/24 19:10	II240529-2	1.002		1.015	mg/L	101	90	110			
WG589991CCB2	CCB	05/30/24 19:13				U	mg/L		-0.024	0.024			
L87804-06AS	AS	05/30/24 19:25	II240515-1	.501	U	.5345	mg/L	107	85	115			
L87804-06ASD	ASD	05/30/24 19:28	II240515-1	.501	U	.5402	mg/L	108	85	115	1	20	
WG589991CCV3	CCV	05/30/24 19:32	II240529-2	1.002		1.014	mg/L	101	90	110			
WG589991CCB3	CCB	05/30/24 19:35				U	mg/L		-0.024	0.024			

WG590218

WG590218ICV	ICV	06/01/24 17:26	II240515-3	2.004		1.9528	mg/L	97	95	105			
WG590218ICB	ICB	06/01/24 17:32				U	mg/L		-0.024	0.024			
WG590218PQV	PQV	06/01/24 17:35	II240521-5	.04008		.0408	mg/L	102	70	130			
WG590218SIC	SIC	06/01/24 17:38	II240521-3	.1002		.091	mg/L	91	80	120			
WG590218LFB	LFB	06/01/24 17:44	II240515-1	.501		.5113	mg/L	102	85	115			
WG590218CCV1	CCV	06/01/24 18:16	II240529-2	1.002		.9301	mg/L	93	90	110			
WG590218CCB1	CCB	06/01/24 18:19				U	mg/L		-0.024	0.024			
L87802-01AS	AS	06/01/24 18:25	II240515-1	.501	.0087	.5216	mg/L	102	85	115			
L87802-01ASD	ASD	06/01/24 18:28	II240515-1	.501	.0087	.4794	mg/L	94	85	115	8	20	
WG590218CCV2	CCV	06/01/24 18:54	II240529-2	1.002		.9365	mg/L	93	90	110			
WG590218CCB2	CCB	06/01/24 18:57				U	mg/L		-0.024	0.024			
WG590218CCV3	CCV	06/01/24 19:06	II240529-2	1.002		.9482	mg/L	95	90	110			
WG590218CCB3	CCB	06/01/24 19:09				U	mg/L		-0.024	0.024			

Nitrate/Nitrite as N

EPA 353.2

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589298													
WG589298ICV	ICV	05/17/24 1:11	WI240403-6	2.415		2.462	mg/L	102	90	110			
WG589298ICB	ICB	05/17/24 1:12				U	mg/L		-0.02	0.02			
WG589298LFB	LFB	05/17/24 1:16	WI240228-17	2		2.032	mg/L	102	90	110			
L87773-01AS	AS	05/17/24 1:18	WI240228-17	2	.495	2.527	mg/L	102	90	110			
L87773-02DUP	DUP	05/17/24 1:21			.393	.391	mg/L				1	20	
WG589298CCV1	CCV	05/17/24 1:26	WI240515-5	2		2.005	mg/L	100	90	110			
WG589298CCB1	CCB	05/17/24 1:29				U	mg/L		-0.02	0.02			
WG589298CCV2	CCV	05/17/24 1:39	WI240515-5	2		2.012	mg/L	101	90	110			
WG589298CCB2	CCB	05/17/24 1:42				U	mg/L		-0.02	0.02			

GCC

ACZ Project ID: **L87775**

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

EPA 353.2

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589298													
WG589298ICV	ICV	05/17/24 1:11	WI240403-6	.608		.608	mg/L	100	90	110			
WG589298ICB	ICB	05/17/24 1:12				U	mg/L		-0.01	0.01			
WG589298LFB	LFB	05/17/24 1:16	WI240228-17	1		1.002	mg/L	100	90	110			
L87773-01AS	AS	05/17/24 1:18	WI240228-17	1	.462	1.464	mg/L	100	90	110			
L87773-02DUP	DUP	05/17/24 1:21			U	U	mg/L				0	20	RA
WG589298CCV1	CCV	05/17/24 1:26	WI240515-5	1		.997	mg/L	100	90	110			
WG589298CCB1	CCB	05/17/24 1:29				U	mg/L		-0.01	0.01			
WG589298CCV2	CCV	05/17/24 1:39	WI240515-5	1		1.007	mg/L	101	90	110			
WG589298CCB2	CCB	05/17/24 1:42				U	mg/L		-0.01	0.01			

Potassium, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589991													
WG589991ICV	ICV	05/30/24 17:41	II240515-3	20		19.87	mg/L	99	95	105			
WG589991ICB	ICB	05/30/24 17:47				U	mg/L		-1.5	1.5			
WG589991PQV	PQV	05/30/24 17:51	II240521-5	1.002		1.01	mg/L	101	70	130			
WG589991SIC	SIC	05/30/24 17:54	II240521-3	1.002		1.04	mg/L	104	80	120			
WG589991LFB	LFB	05/30/24 18:00	II240515-1	99.96008		104.7	mg/L	105	85	115			
L87654-01AS	AS	05/30/24 18:22	II240515-1	99.96008	5.61	112.2	mg/L	107	85	115			
L87654-01ASD	ASD	05/30/24 18:25	II240515-1	99.96008	5.61	114.6	mg/L	109	85	115	2	20	
WG589991CCV1	CCV	05/30/24 18:32	II240529-2	10		10.17	mg/L	102	90	110			
WG589991CCB1	CCB	05/30/24 18:35				U	mg/L		-1.5	1.5			
WG589991CCV2	CCV	05/30/24 19:10	II240529-2	10		10.15	mg/L	102	90	110			
WG589991CCB2	CCB	05/30/24 19:13				U	mg/L		-1.5	1.5			
L87804-06AS	AS	05/30/24 19:25	II240515-1	99.96008	3.45	113	mg/L	110	85	115			
L87804-06ASD	ASD	05/30/24 19:28	II240515-1	99.96008	3.45	111.3	mg/L	108	85	115	2	20	
WG589991CCV3	CCV	05/30/24 19:32	II240529-2	10		10.22	mg/L	102	90	110			
WG589991CCB3	CCB	05/30/24 19:35				U	mg/L		-1.5	1.5			
WG590084													
WG590084ICV	ICV	06/01/24 1:07	II240515-3	20		19.57	mg/L	98	95	105			
WG590084ICB	ICB	06/01/24 1:13				U	mg/L		-1.5	1.5			
WG590084PQV	PQV	06/01/24 1:16	II240521-5	1.002		1	mg/L	100	70	130			
WG590084SIC	SIC	06/01/24 1:20	II240521-3	1.002		1.01	mg/L	101	80	120			
WG590084LFB	LFB	06/01/24 1:26	II240515-1	99.96008		97.83	mg/L	98	85	115			
WG590084CCV1	CCV	06/01/24 1:58	II240529-2	10		9.47	mg/L	95	90	110			
WG590084CCB1	CCB	06/01/24 2:01				U	mg/L		-1.5	1.5			
L87778-05AS	AS	06/01/24 2:07	II240515-1	99.96008	8.62	112.6	mg/L	104	85	115			
L87778-05ASD	ASD	06/01/24 2:10	II240515-1	99.96008	8.62	112.3	mg/L	104	85	115	0	20	
WG590084CCV2	CCV	06/01/24 2:36	II240529-2	10		9.49	mg/L	95	90	110			
WG590084CCB2	CCB	06/01/24 2:39				U	mg/L		-1.5	1.5			
WG590084CCV3	CCV	06/01/24 2:58	II240529-2	10		9.55	mg/L	96	90	110			
WG590084CCB3	CCB	06/01/24 3:01				U	mg/L		-1.5	1.5			

GCC

ACZ Project ID: **L87775**

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

SM 2540 C-2011

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589503													
WG589503PBW	PBW	05/21/24 13:30				U	mg/L		-20	20			
WG589503LCSW	LCSW	05/21/24 13:32	PCN626707	1000		974	mg/L	97	80	120			
L87775-06DUP	DUP	05/21/24 14:01			5060	5180	mg/L				2	10	
L87843-01DUP	DUP	05/21/24 14:30			928	940	mg/L				1	10	

Selenium, dissolved

EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589422													
WG589422ICV	ICV	05/20/24 13:54	MS240404-4	.05		.05294	mg/L	106	90	110			
WG589422ICB	ICB	05/20/24 13:57				U	mg/L		-0.00022	0.00022			
WG589422LFB	LFB	05/20/24 13:59	MS240514-1	.05005		.05191	mg/L	104	85	115			
WG589422CCV1	CCV	05/20/24 14:22	MS240421-5	.1001		.09928	mg/L	99	90	110			
WG589422CCB1	CCB	05/20/24 14:24				U	mg/L		-0.0003	0.0003			
L87751-01AS	AS	05/20/24 14:36	MS240514-1	.05005	U	.05616	mg/L	112	70	130			
L87751-01ASD	ASD	05/20/24 14:38	MS240514-1	.05005	U	.05345	mg/L	107	70	130	5	20	
WG589422CCV2	CCV	05/20/24 14:50	MS240421-5	.1001		.09822	mg/L	98	90	110			
WG589422CCB2	CCB	05/20/24 14:52				U	mg/L		-0.0003	0.0003			
WG589422CCV3	CCV	05/20/24 15:06	MS240421-5	.1001		.09837	mg/L	98	90	110			
WG589422CCB3	CCB	05/20/24 15:09				.00011	mg/L		-0.0003	0.0003			
WG589490													
WG589490ICV	ICV	05/30/24 11:04	MS240404-4	.05		.0515	mg/L	103	90	110			
WG589490ICB	ICB	05/30/24 11:07				U	mg/L		-0.00022	0.00022			
WG589490LFB	LFB	05/30/24 11:09	MS240514-1	.05005		.04847	mg/L	97	85	115			
WG589490CCV1	CCV	05/30/24 11:28	MS240421-5	.1001		.09852	mg/L	98	90	110			
WG589490CCB1	CCB	05/30/24 11:30				U	mg/L		-0.0003	0.0003			
L87775-05AS	AS	05/30/24 11:39	MS240514-1	.1001		.09915	mg/L	99	70	130			
L87775-05ASD	ASD	05/30/24 11:41	MS240514-1	.1001		.10458	mg/L	104	70	130	5	20	
WG589490CCV2	CCV	05/30/24 11:44	MS240421-5	.1001		.10257	mg/L	102	90	110			
WG589490CCB2	CCB	05/30/24 11:46				U	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: **L87775**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589991													
WG589991ICV	ICV	05/30/24 17:41	II240515-3	100		100.23	mg/L	100	95	105			
WG589991ICB	ICB	05/30/24 17:47				U	mg/L		-0.6	0.6			
WG589991PQV	PQV	05/30/24 17:51	II240521-5	1.005		1.05	mg/L	104	70	130			
WG589991SIC	SIC	05/30/24 17:54	II240521-3	1.005		1.07	mg/L	106	80	120			
WG589991LFB	LFB	05/30/24 18:00	II240515-1	99.97238		104.9	mg/L	105	85	115			
L87654-01AS	AS	05/30/24 18:22	II240515-1	99.97238	235	335.2	mg/L	100	85	115			
L87654-01ASD	ASD	05/30/24 18:25	II240515-1	99.97238	235	332.7	mg/L	98	85	115	1	20	
WG589991CCV1	CCV	05/30/24 18:32	II240529-2	50		51.28	mg/L	103	90	110			
WG589991CCB1	CCB	05/30/24 18:35				U	mg/L		-0.6	0.6			
WG589991CCV2	CCV	05/30/24 19:10	II240529-2	50		50.95	mg/L	102	90	110			
WG589991CCB2	CCB	05/30/24 19:13				.23	mg/L		-0.6	0.6			
L87804-06AS	AS	05/30/24 19:25	II240515-1	99.97238	38.9	147.5	mg/L	109	85	115			
L87804-06ASD	ASD	05/30/24 19:28	II240515-1	99.97238	38.9	145.5	mg/L	107	85	115	1	20	
WG589991CCV3	CCV	05/30/24 19:32	II240529-2	50		51.22	mg/L	102	90	110			
WG589991CCB3	CCB	05/30/24 19:35				.26	mg/L		-0.6	0.6			
WG590084													
WG590084ICV	ICV	06/01/24 1:07	II240515-3	100		98.04	mg/L	98	95	105			
WG590084ICB	ICB	06/01/24 1:13				U	mg/L		-0.6	0.6			
WG590084PQV	PQV	06/01/24 1:16	II240521-5	1.005		1.03	mg/L	102	70	130			
WG590084SIC	SIC	06/01/24 1:20	II240521-3	1.005		1.03	mg/L	102	80	120			
WG590084LFB	LFB	06/01/24 1:26	II240515-1	99.97238		96.84	mg/L	97	85	115			
WG590084CCV1	CCV	06/01/24 1:58	II240529-2	50		47.63	mg/L	95	90	110			
WG590084CCB1	CCB	06/01/24 2:01				U	mg/L		-0.6	0.6			
L87778-05AS	AS	06/01/24 2:07	II240515-1	99.97238	41.2	141.7	mg/L	101	85	115			
L87778-05ASD	ASD	06/01/24 2:10	II240515-1	99.97238	41.2	141.1	mg/L	100	85	115	0	20	
WG590084CCV2	CCV	06/01/24 2:36	II240529-2	50		47.47	mg/L	95	90	110			
WG590084CCB2	CCB	06/01/24 2:39				U	mg/L		-0.6	0.6			
WG590084CCV3	CCV	06/01/24 2:58	II240529-2	50		47.87	mg/L	96	90	110			
WG590084CCB3	CCB	06/01/24 3:01				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: **L87775**

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

ASTM D516-07/-11/-16

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589411													
WG589411ICV	ICV	05/20/24 10:55	WI240506-2	20		21.2	mg/L	106	85	115			
WG589411ICB	ICB	05/20/24 10:55				U	mg/L		-2.5	2.5			
WG589411CCV1	CCV	05/20/24 12:16	WI240517-1	25		26.8	mg/L	107	85	115			
WG589411CCB1	CCB	05/20/24 12:16				U	mg/L		-2.5	2.5			
WG589411LFB	LFB	05/20/24 12:16	WI240304-2	10		9.8	mg/L	98	85	115			
WG589411CCV2	CCV	05/20/24 12:19	WI240517-1	25		25.8	mg/L	103	85	115			
WG589411CCB2	CCB	05/20/24 12:20				U	mg/L		-2.5	2.5			
WG589411CCV3	CCV	05/20/24 12:23	WI240517-1	25		25.6	mg/L	102	85	115			
WG589411CCB3	CCB	05/20/24 12:23				U	mg/L		-2.5	2.5			
WG589411CCV4	CCV	05/20/24 12:27	WI240517-1	25		26	mg/L	104	85	115			
WG589411CCB4	CCB	05/20/24 12:27				U	mg/L		-2.5	2.5			
WG589411CCV5	CCV	05/20/24 12:32	WI240517-1	25		25.8	mg/L	103	85	115			
WG589411CCB5	CCB	05/20/24 12:33				U	mg/L		-2.5	2.5			
WG589411CCV6	CCV	05/20/24 12:38	WI240517-1	25		25.6	mg/L	102	85	115			
WG589411CCB6	CCB	05/20/24 12:38				U	mg/L		-2.5	2.5			
WG589411CCV7	CCV	05/20/24 12:43	WI240517-1	25		25.7	mg/L	103	85	115			
WG589411CCB7	CCB	05/20/24 12:43				U	mg/L		-2.5	2.5			
WG589411CCV8	CCV	05/20/24 12:44	WI240517-1	25		25.8	mg/L	103	85	115			
WG589411CCB8	CCB	05/20/24 12:45				U	mg/L		-2.5	2.5			
WG589411CCV9	CCV	05/20/24 12:46	WI240517-1	25		26.5	mg/L	106	85	115			
WG589411CCB9	CCB	05/20/24 12:46				U	mg/L		-2.5	2.5			
WG589411CCV10	CCV	05/20/24 12:47	WI240517-1	25		26.5	mg/L	106	85	115			
WG589411CCB10	CCB	05/20/24 12:47				U	mg/L		-2.5	2.5			
L87786-01AS	AS	05/20/24 12:49	SO4TURB	10	3800	3727.6	mg/L	-724	85	115			M3
WG589411CCV11	CCV	05/20/24 12:49	WI240517-1	25		26	mg/L	104	85	115			
WG589411CCB11	CCB	05/20/24 12:49				U	mg/L		-2.5	2.5			
WG589411CCV13	CCV	05/20/24 12:56	WI240517-1	25		27	mg/L	108	85	115			
WG589411CCB13	CCB	05/20/24 12:57				U	mg/L		-2.5	2.5			
L87786-01ASD	ASD	05/20/24 13:02	SO4TURB	10	3800	3830.4	mg/L	304	85	115	3	20	M3
WG589411CCV14	CCV	05/20/24 13:02	WI240517-1	25		26.8	mg/L	107	85	115			
WG589411CCB14	CCB	05/20/24 13:03				U	mg/L		-2.5	2.5			

GCC

ACZ Project ID: **L87775**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589991													
WG589991ICV	ICV	05/30/24 17:41	II240515-3	2		2.024	mg/L	101	95	105			
WG589991ICB	ICB	05/30/24 17:47				U	mg/L		-0.015	0.015			
WG589991PQV	PQV	05/30/24 17:51	II240521-5	.025025		.022	mg/L	88	70	130			
WG589991SIC	SIC	05/30/24 17:54	II240521-3	.1001		.099	mg/L	99	80	120			
WG589991LFB	LFB	05/30/24 18:00	II240515-1	.5005		.5326	mg/L	106	85	115			
L87654-01AS	AS	05/30/24 18:22	II240515-1	.5005	U	.5362	mg/L	107	85	115			
L87654-01ASD	ASD	05/30/24 18:25	II240515-1	.5005	U	.544	mg/L	109	85	115	1	20	
WG589991CCV1	CCV	05/30/24 18:32	II240529-2	1		1.035	mg/L	104	90	110			
WG589991CCB1	CCB	05/30/24 18:35				U	mg/L		-0.03	0.03			
WG589991CCV2	CCV	05/30/24 19:10	II240529-2	1		1.025	mg/L	103	90	110			
WG589991CCB2	CCB	05/30/24 19:13				U	mg/L		-0.03	0.03			
L87804-06AS	AS	05/30/24 19:25	II240515-1	.5005	U	.549	mg/L	110	85	115			
L87804-06ASD	ASD	05/30/24 19:28	II240515-1	.5005	U	.544	mg/L	109	85	115	1	20	
WG589991CCV3	CCV	05/30/24 19:32	II240529-2	1		1.029	mg/L	103	90	110			
WG589991CCB3	CCB	05/30/24 19:35				U	mg/L		-0.03	0.03			
WG590084													
WG590084ICV	ICV	06/01/24 1:07	II240515-3	2		1.996	mg/L	100	95	105			
WG590084ICB	ICB	06/01/24 1:13				U	mg/L		-0.015	0.015			
WG590084PQV	PQV	06/01/24 1:16	II240521-5	.025025		.027	mg/L	108	70	130			
WG590084SIC	SIC	06/01/24 1:20	II240521-3	.1001		.094	mg/L	94	80	120			
WG590084LFB	LFB	06/01/24 1:26	II240515-1	.5005		.4964	mg/L	99	85	115			
WG590084CCV1	CCV	06/01/24 1:58	II240529-2	1		.979	mg/L	98	90	110			
WG590084CCB1	CCB	06/01/24 2:01				U	mg/L		-0.03	0.03			
L87778-05AS	AS	06/01/24 2:07	II240515-1	.5005	U	.53	mg/L	106	85	115			
L87778-05ASD	ASD	06/01/24 2:10	II240515-1	.5005	U	.529	mg/L	106	85	115	0	20	
WG590084CCV2	CCV	06/01/24 2:36	II240529-2	1		.966	mg/L	97	90	110			
WG590084CCB2	CCB	06/01/24 2:39				U	mg/L		-0.03	0.03			
WG590084CCV3	CCV	06/01/24 2:58	II240529-2	1		.976	mg/L	98	90	110			
WG590084CCB3	CCB	06/01/24 3:01				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: **L87775**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589991													
WG589991ICV	ICV	05/30/24 17:41	II240515-3	2		1.906	mg/L	95	95	105			
WG589991ICB	ICB	05/30/24 17:47				U	mg/L		-0.06	0.06			
WG589991PQV	PQV	05/30/24 17:51	II240521-5	.0502		.047	mg/L	94	70	130			
WG589991SIC	SIC	05/30/24 17:54	II240521-3	.10025		.098	mg/L	98	80	120			
WG589991LFB	LFB	05/30/24 18:00	II240515-1	.50045		.514	mg/L	103	85	115			
L87654-01AS	AS	05/30/24 18:22	II240515-1	.50045	U	.513	mg/L	103	85	115			
L87654-01ASD	ASD	05/30/24 18:25	II240515-1	.50045	U	.522	mg/L	104	85	115	2	20	
WG589991CCV1	CCV	05/30/24 18:32	II240529-2	1		.972	mg/L	97	90	110			
WG589991CCB1	CCB	05/30/24 18:35				U	mg/L		-0.06	0.06			
WG589991CCV2	CCV	05/30/24 19:10	II240529-2	1		.961	mg/L	96	90	110			
WG589991CCB2	CCB	05/30/24 19:13				U	mg/L		-0.06	0.06			
L87804-06AS	AS	05/30/24 19:25	II240515-1	.50045	U	.518	mg/L	104	85	115			
L87804-06ASD	ASD	05/30/24 19:28	II240515-1	.50045	U	.519	mg/L	104	85	115	0	20	
WG589991CCV3	CCV	05/30/24 19:32	II240529-2	1		.963	mg/L	96	90	110			
WG589991CCB3	CCB	05/30/24 19:35				U	mg/L		-0.06	0.06			
WG590084													
WG590084ICV	ICV	06/01/24 1:07	II240515-3	2		1.917	mg/L	96	95	105			
WG590084ICB	ICB	06/01/24 1:13				U	mg/L		-0.06	0.06			
WG590084PQV	PQV	06/01/24 1:16	II240521-5	.0502		.053	mg/L	106	70	130			
WG590084SIC	SIC	06/01/24 1:20	II240521-3	.10025		.097	mg/L	97	80	120			
WG590084LFB	LFB	06/01/24 1:26	II240515-1	.50045		.493	mg/L	99	85	115			
WG590084CCV1	CCV	06/01/24 1:58	II240529-2	1		.941	mg/L	94	90	110			
WG590084CCB1	CCB	06/01/24 2:01				U	mg/L		-0.06	0.06			
L87778-05AS	AS	06/01/24 2:07	II240515-1	.50045	U	.546	mg/L	109	85	115			
L87778-05ASD	ASD	06/01/24 2:10	II240515-1	.50045	U	.54	mg/L	108	85	115	1	20	
WG590084CCV2	CCV	06/01/24 2:36	II240529-2	1		.941	mg/L	94	90	110			
WG590084CCB2	CCB	06/01/24 2:39				U	mg/L		-0.06	0.06			
WG590084CCV3	CCV	06/01/24 2:58	II240529-2	1		.932	mg/L	93	90	110			
WG590084CCB3	CCB	06/01/24 3:01				U	mg/L		-0.06	0.06			

GCC Rio Grande

ACZ Project ID: **L87775**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L87775-01	WG589298	Nitrite as N	EPA 353.2	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).
	WG589490	Selenium, dissolved	EPA 200.8	DB	Sample required dilution due to low bias result.
			EPA 200.8	EA	Concentration estimated. Analytical result was less than the negative MDL due to matrix interferences.
	WG589411	Sulfate	ASTM D516-07/-11/-16	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.
	WG589912	Total Alkalinity	SM 2320 B-2011	B7	Target analyte detected in prep / method blank at or above acceptance limit. Sample value is > 10X the concentration in the method blank.
L87775-02	WG589687	Chloride	SM 4500-Cl E-2011	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.
	WG589298	Nitrite as N	EPA 353.2	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).
	WG589490	Selenium, dissolved	EPA 200.8	DB	Sample required dilution due to low bias result.
			EPA 200.8	EA	Concentration estimated. Analytical result was less than the negative MDL due to matrix interferences.
	WG589411	Sulfate	ASTM D516-07/-11/-16	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.
	WG589912	Total Alkalinity	SM 2320 B-2011	B7	Target analyte detected in prep / method blank at or above acceptance limit. Sample value is > 10X the concentration in the method blank.
L87775-03	WG589687	Chloride	SM 4500-Cl E-2011	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.
	WG589298	Nitrite as N	EPA 353.2	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).
	WG589411	Sulfate	ASTM D516-07/-11/-16	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.
	WG589912	Total Alkalinity	SM 2320 B-2011	B7	Target analyte detected in prep / method blank at or above acceptance limit. Sample value is > 10X the concentration in the method blank.
L87775-04	WG589687	Chloride	SM 4500-Cl E-2011	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.
	WG589298	Nitrite as N	EPA 353.2	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).
	WG589411	Sulfate	ASTM D516-07/-11/-16	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.
	WG589912	Total Alkalinity	SM 2320 B-2011	B4	Target analyte detected in blank at or above the acceptance criteria.

GCC Rio Grande

ACZ Project ID: **L87775**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L87775-05	WG589687	Chloride	SM 4500-Cl E-2011	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.
	WG589298	Nitrite as N	EPA 353.2	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).
	WG589490	Selenium, dissolved	EPA 200.8	DB	Sample required dilution due to low bias result.
			EPA 200.8	EA	Concentration estimated. Analytical result was less than the negative MDL due to matrix interferences.
	WG589411	Sulfate	ASTM D516-07/-11/-16	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.
	WG589912	Total Alkalinity	SM 2320 B-2011	B7	Target analyte detected in prep / method blank at or above acceptance limit. Sample value is > 10X the concentration in the method blank.
L87775-06	WG589687	Chloride	SM 4500-Cl E-2011	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.
	WG589298	Nitrite as N	EPA 353.2	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).
	WG589411	Sulfate	ASTM D516-07/-11/-16	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.
	WG589912	Total Alkalinity	SM 2320 B-2011	B7	Target analyte detected in prep / method blank at or above acceptance limit. Sample value is > 10X the concentration in the method blank.
L87775-07	WG590084	Calcium, dissolved	EPA 200.7	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.
	WG590345	Chloride	SM 4500-Cl E-2011	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).
	WG589298	Nitrite as N	EPA 353.2	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).
	WG589503	Residue, Filterable (TDS) @180C	SM 2540 C-2011	Z3	Sample volume yielded a residue less than 2.5 mg
	WG589411	Sulfate	ASTM D516-07/-11/-16	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.
	WG589912	Total Alkalinity	SM 2320 B-2011	B4	Target analyte detected in blank at or above the acceptance criteria.

GCC Rio Grande

ACZ Project ID: **L87775**

No certification qualifiers associated with this analysis

GCC Rio Grande

ACZ Project ID: L87775

Date Received: 05/16/2024 11:23

Received By:

Date Printed: 5/17/2024

Receipt Verification

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

Samples/Containers

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

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?
-----	-----	-----	-----	-----
6289	0.7	<=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.

GCC Rio Grande

ACZ Project ID: L87775

Date Received: 05/16/2024 11:23

Received By:

Date Printed: 5/17/2024

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).



Accredited
Environmental
Testing

2773 Downhill Drive
Steamboat Springs, CO 80487
(970) 879-6590

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:

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

ANALYSES REQUESTED (attach list or use quote number)

Quote #: GW-COMPLIANCE

PO#: 258478

Reporting state for compliance testing:

Check box if samples include NRC licensed material? ☐

SAMPLE IDENTIFICATION

DATE: TIME

Matrix

of Containers

GW-Compliance

MW-13

5/15/2024 10:57

GW

3

✓

MW-14

5/15/2024 11:43

GW

3

✓

MW-6

5/15/2024 13:05

GW

3

✓

MW-7

5/15/2024 13:38

GW

3

✓

MW-8

5/15/2024 14:16

GW

3

✓

MW-2B

5/15/2024 12:00

GW

3

✓

Method Blank

5/15/2024 15:00

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

5/16/24 15:30

[Signature]

Qualtrax ID: 1984

Revision #: 2

White - Return with sample.

Yellow - Retain for your records.

June 12, 2024

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:
ACZ Project ID: L87864

Amy Rodrigues:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on May 21, 2024. This project has been assigned to ACZ's project number, L87864. 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 L87864. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

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

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

All samples and sub-samples associated with this project will be disposed of after June 12, 2025. 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.

Madeleine Murray
Madeleine Murray has reviewed
and approved this report.



GCC Rio Grande

Project ID:

Sample ID: MW-11

ACZ Sample ID: **L87864-01**

Date Sampled: 05/20/24 09:32

Date Received: 05/21/24

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	1	<0.05	U		mg/L	0.05	0.25	06/06/24 16:49	wtc
Arsenic, dissolved	EPA 200.8	1	0.00023	B		mg/L	0.0002	0.001	06/03/24 18:49	gjl
Beryllium, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.05	06/07/24 18:19	wtc
Boron, dissolved	EPA 200.7	1	0.434			mg/L	0.03	0.1	06/06/24 16:49	wtc
Cadmium, dissolved	EPA 200.8	1	<0.00005	U		mg/L	0.00005	0.00025	06/03/24 18:49	gjl
Calcium, dissolved	EPA 200.7	1	55.2			mg/L	0.1	0.5	06/06/24 16:49	wtc
Chromium, dissolved	EPA 200.7	1	<0.02	U		mg/L	0.02	0.05	06/06/24 16:49	wtc
Cobalt, dissolved	EPA 200.8	1	0.000505			mg/L	0.00005	0.00025	06/03/24 18:49	gjl
Copper, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.05	06/07/24 18:19	wtc
Iron, dissolved	EPA 200.7	1	<0.06	U		mg/L	0.06	0.15	06/06/24 16:49	wtc
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	06/03/24 18:49	gjl
Lithium, dissolved	EPA 200.7	1	0.154			mg/L	0.008	0.04	06/07/24 18:19	wtc
Magnesium, dissolved	EPA 200.7	1	31.3			mg/L	0.2	1	06/06/24 16:49	wtc
Manganese, dissolved	EPA 200.7	1	0.013	B		mg/L	0.01	0.05	06/07/24 18:19	wtc
Mercury, dissolved	EPA 245.1	1	<0.0002	U		mg/L	0.0002	0.001	06/05/24 15:45	aeH
Nickel, dissolved	EPA 200.7	1	<0.008	U		mg/L	0.008	0.04	06/06/24 16:49	wtc
Potassium, dissolved	EPA 200.7	1	3.40			mg/L	0.5	1	06/06/24 16:49	wtc
Selenium, dissolved	EPA 200.8	1	0.0487		*	mg/L	0.0001	0.00025	06/03/24 18:49	gjl
Sodium, dissolved	EPA 200.7	1	455			mg/L	0.2	1	06/06/24 16:49	wtc
Vanadium, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.025	06/06/24 16:49	wtc
Zinc, dissolved	EPA 200.7	1	<0.02	U		mg/L	0.02	0.05	06/07/24 18:19	wtc

GCC Rio Grande

Project ID:

Sample ID: MW-11

ACZ Sample ID: **L87864-01**

Date Sampled: 05/20/24 09:32

Date Received: 05/21/24

Sample Matrix: Groundwater

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM 2320 B-2011									
Bicarbonate as CaCO ₃		1	769			mg/L	2	20	05/31/24 0:00	as
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	05/31/24 0:00	as
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	05/31/24 0:00	as
Total Alkalinity		1	769			mg/L	2	20	05/31/24 0:00	as
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-7.4			%			06/12/24 0:00	calc
Sum of Anions			29			meq/L			06/12/24 0:00	calc
Sum of Cations			25			meq/L			06/12/24 0:00	calc
Chloride	SM 4500-Cl E-2011	5	111		*	mg/L	5	10	06/01/24 8:51	jqr
Fluoride	SM 4500-F C-2011	1	1.14			mg/L	0.15	0.35	06/06/24 17:18	smk/cm
Hardness as CaCO ₃ (dissolved)	Calculation (SM 2340 B-2011)		267			mg/L	0.2	5	06/12/24 0:00	calc
Nitrate as N	Calculation (NO ₃ NO ₂ -NO ₂)		<0.02	U		mg/L	0.02	0.1	06/12/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	<0.02	U	*	mg/L	0.02	0.1	05/22/24 0:16	pjb
Nitrite as N	EPA 353.2	1	<0.01	U	*	mg/L	0.01	0.05	05/22/24 0:16	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	1	1630			mg/L	20	40	05/24/24 14:35	emk
Sulfate	ASTM D516-07/-11/-16	25	476		*	mg/L	25	125	05/22/24 14:39	jqr
TDS (calculated)	Calculation		1600			mg/L			06/12/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.02						06/12/24 0:00	calc

GCC Rio Grande

Project ID:

Sample ID: MW-12

ACZ Sample ID: **L87864-02**

Date Sampled: 05/20/24 10:34

Date Received: 05/21/24

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	5	<0.25	U		mg/L	0.25	1.25	06/06/24 16:52	wtc
Arsenic, dissolved	EPA 200.8	2	0.00263			mg/L	0.0004	0.002	06/03/24 18:56	gjl
Beryllium, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.25	06/07/24 18:22	wtc
Boron, dissolved	EPA 200.7	5	0.961			mg/L	0.15	0.5	06/06/24 16:52	wtc
Cadmium, dissolved	EPA 200.8	2	<0.0001	U		mg/L	0.0001	0.0005	06/03/24 18:56	gjl
Calcium, dissolved	EPA 200.7	5	23.6			mg/L	0.5	2.5	06/06/24 16:52	wtc
Chromium, dissolved	EPA 200.7	5	<0.1	U		mg/L	0.1	0.25	06/06/24 16:52	wtc
Cobalt, dissolved	EPA 200.8	2	0.000603			mg/L	0.0001	0.0005	06/03/24 18:56	gjl
Copper, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.25	06/07/24 18:22	wtc
Iron, dissolved	EPA 200.7	5	<0.3	U		mg/L	0.3	0.75	06/06/24 16:52	wtc
Lead, dissolved	EPA 200.8	2	<0.0002	U		mg/L	0.0002	0.001	06/03/24 18:56	gjl
Lithium, dissolved	EPA 200.7	5	0.210			mg/L	0.04	0.2	06/07/24 18:22	wtc
Magnesium, dissolved	EPA 200.7	5	9.63			mg/L	1	5	06/06/24 16:52	wtc
Manganese, dissolved	EPA 200.7	5	0.055	B		mg/L	0.05	0.25	06/07/24 18:22	wtc
Mercury, dissolved	EPA 245.1	1	<0.0002	U		mg/L	0.0002	0.001	06/05/24 15:46	aeH
Nickel, dissolved	EPA 200.7	5	<0.04	U		mg/L	0.04	0.2	06/06/24 16:52	wtc
Potassium, dissolved	EPA 200.7	5	3.82	B		mg/L	2.5	5	06/06/24 16:52	wtc
Selenium, dissolved	EPA 200.8	2	<0.0002	U	*	mg/L	0.0002	0.0005	06/05/24 16:49	aps
Sodium, dissolved	EPA 200.7	5	977			mg/L	1	5	06/06/24 16:52	wtc
Vanadium, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.125	06/06/24 16:52	wtc
Zinc, dissolved	EPA 200.7	5	<0.1	U		mg/L	0.1	0.25	06/07/24 18:22	wtc

GCC Rio Grande

Project ID:

Sample ID: MW-12

ACZ Sample ID: **L87864-02**

Date Sampled: 05/20/24 10:34

Date Received: 05/21/24

Sample Matrix: Groundwater

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM 2320 B-2011									
Bicarbonate as CaCO ₃		1	651			mg/L	2	20	05/31/24 0:00	as
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	05/31/24 0:00	as
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	05/31/24 0:00	as
Total Alkalinity		1	651			mg/L	2	20	05/31/24 0:00	as
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-3.2			%			06/12/24 0:00	calc
Sum of Anions			48			meq/L			06/12/24 0:00	calc
Sum of Cations			45			meq/L			06/12/24 0:00	calc
Chloride	SM 4500-Cl E-2011	20	975		*	mg/L	20	40	06/01/24 9:09	jqr
Fluoride	SM 4500-F C-2011	1	1.93			mg/L	0.15	0.35	06/06/24 17:29	smk/cm
Hardness as CaCO ₃ (dissolved)	Calculation (SM 2340 B-2011)		99			mg/L	1	30	06/12/24 0:00	calc
Nitrate as N	Calculation (NO ₃ NO ₂ -NO ₂)		<0.02	U		mg/L	0.02	0.1	06/12/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	<0.02	U	*	mg/L	0.02	0.1	05/22/24 0:17	pjb
Nitrite as N	EPA 353.2	1	<0.01	U	*	mg/L	0.01	0.05	05/22/24 0:17	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	1	2690			mg/L	20	40	05/24/24 14:37	emk
Sulfate	ASTM D516-07/-11/-16	25	380		*	mg/L	25	125	05/22/24 14:40	jqr
TDS (calculated)	Calculation		2770			mg/L			06/12/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.97						06/12/24 0:00	calc

GCC Rio Grande

Project ID:

Sample ID: MW-9

ACZ Sample ID: **L87864-03**

Date Sampled: 05/20/24 12:58

Date Received: 05/21/24

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	5	<0.25	U		mg/L	0.25	1.25	06/06/24 16:55	wtc
Arsenic, dissolved	EPA 200.8	5	<0.001	U		mg/L	0.001	0.005	06/03/24 18:58	gjl
Beryllium, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.25	06/07/24 18:25	wtc
Boron, dissolved	EPA 200.7	5	1.47			mg/L	0.15	0.5	06/06/24 16:55	wtc
Cadmium, dissolved	EPA 200.8	5	<0.00025	U		mg/L	0.00025	0.00125	06/03/24 18:58	gjl
Calcium, dissolved	EPA 200.7	5	414			mg/L	0.5	2.5	06/06/24 16:55	wtc
Chromium, dissolved	EPA 200.7	5	<0.1	U		mg/L	0.1	0.25	06/06/24 16:55	wtc
Cobalt, dissolved	EPA 200.8	5	0.00210			mg/L	0.00025	0.00125	06/03/24 18:58	gjl
Copper, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.25	06/07/24 18:25	wtc
Iron, dissolved	EPA 200.7	5	2.10			mg/L	0.3	0.75	06/06/24 16:55	wtc
Lead, dissolved	EPA 200.8	5	<0.0005	U		mg/L	0.0005	0.0025	06/03/24 18:58	gjl
Lithium, dissolved	EPA 200.7	5	0.415			mg/L	0.04	0.2	06/07/24 18:25	wtc
Magnesium, dissolved	EPA 200.7	5	159			mg/L	1	5	06/06/24 16:55	wtc
Manganese, dissolved	EPA 200.7	5	0.408			mg/L	0.05	0.25	06/07/24 18:25	wtc
Mercury, dissolved	EPA 245.1	1	<0.0002	U		mg/L	0.0002	0.001	06/05/24 15:47	aeH
Nickel, dissolved	EPA 200.7	5	<0.04	U		mg/L	0.04	0.2	06/06/24 16:55	wtc
Potassium, dissolved	EPA 200.7	5	8.69			mg/L	2.5	5	06/06/24 16:55	wtc
Selenium, dissolved	EPA 200.8	5	<0.0005	U	*	mg/L	0.0005	0.00125	06/05/24 16:51	aps
Sodium, dissolved	EPA 200.7	5	830			mg/L	1	5	06/06/24 16:55	wtc
Vanadium, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.125	06/06/24 16:55	wtc
Zinc, dissolved	EPA 200.7	5	<0.1	U		mg/L	0.1	0.25	06/07/24 18:25	wtc

GCC Rio Grande

Project ID:

Sample ID: MW-9

ACZ Sample ID: **L87864-03**

Date Sampled: 05/20/24 12:58

Date Received: 05/21/24

Sample Matrix: Groundwater

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM 2320 B-2011									
Bicarbonate as CaCO ₃		1	438			mg/L	2	20	05/31/24 0:00	as
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	05/31/24 0:00	as
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	05/31/24 0:00	as
Total Alkalinity		1	438			mg/L	2	20	05/31/24 0:00	as
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-4.1			%			06/12/24 0:00	calc
Sum of Anions			77			meq/L			06/12/24 0:00	calc
Sum of Cations			71			meq/L			06/12/24 0:00	calc
Chloride	SM 4500-Cl E-2011	1	43.0		*	mg/L	1	2	06/01/24 9:22	jqr
Fluoride	SM 4500-F C-2011	1	0.53			mg/L	0.15	0.35	06/06/24 17:34	amk/cm
Hardness as CaCO ₃ (dissolved)	Calculation (SM 2340 B-2011)		1690			mg/L	1	30	06/12/24 0:00	calc
Nitrate as N	Calculation (NO ₃ NO ₂ -NO ₂)		<0.02	U		mg/L	0.02	0.1	06/12/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	<0.02	U	*	mg/L	0.02	0.1	05/22/24 0:19	pjb
Nitrite as N	EPA 353.2	1	<0.01	U	*	mg/L	0.01	0.05	05/22/24 0:19	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	2	4780	H	*	mg/L	40	80	06/02/24 12:40	cm
Sulfate	ASTM D516-07/-11/-16	100	3210		*	mg/L	100	500	05/22/24 14:47	jqr
TDS (calculated)	Calculation		4930			mg/L			06/12/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.97						06/12/24 0:00	calc

GCC Rio Grande

Project ID:

Sample ID: MW-10

ACZ Sample ID: **L87864-04**

Date Sampled: 05/20/24 13:41

Date Received: 05/21/24

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	5	<0.25	U		mg/L	0.25	1.25	06/06/24 16:58	wtc
Arsenic, dissolved	EPA 200.8	2	0.00070	B		mg/L	0.0004	0.002	06/03/24 19:00	gjl
Beryllium, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.25	06/07/24 18:28	wtc
Boron, dissolved	EPA 200.7	5	1.33			mg/L	0.15	0.5	06/06/24 16:58	wtc
Cadmium, dissolved	EPA 200.8	2	<0.0001	U		mg/L	0.0001	0.0005	06/03/24 19:00	gjl
Calcium, dissolved	EPA 200.7	5	33.4			mg/L	0.5	2.5	06/06/24 16:58	wtc
Chromium, dissolved	EPA 200.7	5	<0.1	U		mg/L	0.1	0.25	06/06/24 16:58	wtc
Cobalt, dissolved	EPA 200.8	2	0.000163	B		mg/L	0.0001	0.0005	06/03/24 19:00	gjl
Copper, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.25	06/07/24 18:28	wtc
Iron, dissolved	EPA 200.7	5	<0.3	U		mg/L	0.3	0.75	06/06/24 16:58	wtc
Lead, dissolved	EPA 200.8	2	<0.0002	U		mg/L	0.0002	0.001	06/03/24 19:00	gjl
Lithium, dissolved	EPA 200.7	5	0.233			mg/L	0.04	0.2	06/07/24 18:28	wtc
Magnesium, dissolved	EPA 200.7	5	11.0			mg/L	1	5	06/06/24 16:58	wtc
Manganese, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.25	06/07/24 18:28	wtc
Mercury, dissolved	EPA 245.1	1	<0.0002	U		mg/L	0.0002	0.001	06/05/24 15:48	aeH
Nickel, dissolved	EPA 200.7	5	<0.04	U		mg/L	0.04	0.2	06/06/24 16:58	wtc
Potassium, dissolved	EPA 200.7	5	4.44	B		mg/L	2.5	5	06/06/24 16:58	wtc
Selenium, dissolved	EPA 200.8	2	<0.0002	U	*	mg/L	0.0002	0.0005	06/05/24 16:53	aps
Sodium, dissolved	EPA 200.7	5	982			mg/L	1	5	06/06/24 16:58	wtc
Vanadium, dissolved	EPA 200.7	5	<0.05	U		mg/L	0.05	0.125	06/06/24 16:58	wtc
Zinc, dissolved	EPA 200.7	5	<0.1	U		mg/L	0.1	0.25	06/07/24 18:28	wtc

GCC Rio Grande

Project ID:

Sample ID: MW-10

ACZ Sample ID: **L87864-04**

Date Sampled: 05/20/24 13:41

Date Received: 05/21/24

Sample Matrix: Groundwater

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM 2320 B-2011									
Bicarbonate as CaCO ₃		1	721			mg/L	2	20	05/31/24 0:00	as
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	05/31/24 0:00	as
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	05/31/24 0:00	as
Total Alkalinity		1	721			mg/L	2	20	05/31/24 0:00	as
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-6.1			%			06/12/24 0:00	calc
Sum of Anions			52			meq/L			06/12/24 0:00	calc
Sum of Cations			46			meq/L			06/12/24 0:00	calc
Chloride	SM 4500-Cl E-2011	20	397		*	mg/L	20	40	06/01/24 9:13	jqr
Fluoride	SM 4500-F C-2011	1	1.43			mg/L	0.15	0.35	06/06/24 17:42	smk/cm
Hardness as CaCO ₃ (dissolved)	Calculation (SM 2340 B-2011)		129			mg/L	1	30	06/12/24 0:00	calc
Nitrate as N	Calculation (NO ₃ NO ₂ -NO ₂)		<0.02	U		mg/L	0.02	0.1	06/12/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	<0.02	U	*	mg/L	0.02	0.1	05/22/24 0:20	pjb
Nitrite as N	EPA 353.2	1	<0.01	U	*	mg/L	0.01	0.05	05/22/24 0:20	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	1	2980			mg/L	20	40	05/24/24 14:41	emk
Sulfate	ASTM D516-07/-11/-16	100	1260		*	mg/L	100	500	05/22/24 14:48	jqr
TDS (calculated)	Calculation		3130			mg/L			06/12/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.95						06/12/24 0:00	calc



Report Header Explanations

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

QC Sample Types

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

QC Sample Type Explanations

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

ACZ Qualifiers (Qual)

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

Method References

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

Comments

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

For a complete list of ACZ's Extended Qualifiers, please click:

<https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf>

GCC

ACZ Project ID: **L87864**

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
WG590177													
WG590177PBW1	PBW	05/31/24 16:53				16	mg/L		-20	20			
WG590177LCSW3	LCSW	05/31/24 17:06	WC240522-1	820.0001		751.9	mg/L	92	90	110			
L87866-01DUP	DUP	05/31/24 19:04			123	111.4	mg/L				10	20	
WG590177LCSW6	LCSW	05/31/24 19:17	WC240522-1	820.0001		770.3	mg/L	94	90	110			
WG590177PBW2	PBW	05/31/24 19:25				21	mg/L		-20	20			B4
WG590177LCSW9	LCSW	05/31/24 21:40	WC240522-1	820.0001		784.4	mg/L	96	90	110			
WG590177PBW3	PBW	05/31/24 21:47				21.8	mg/L		-20	20			B4 B7 BF
WG590177LCSW12	LCSW	05/31/24 23:42	WC240522-1	820.0001		787.2	mg/L	96	90	110			
WG590177PBW4	PBW	05/31/24 23:49				22.1	mg/L		-20	20			B4

Aluminum, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG590584													
WG590584ICV	ICV	06/06/24 16:25	II240515-3	2		1.905	mg/L	95	95	105			
WG590584ICB	ICB	06/06/24 16:31				U	mg/L		-0.15	0.15			
WG590584PQV	PQV	06/06/24 16:34	II240521-5	.25025		.242	mg/L	97	70	130			
WG590584SIC	SIC	06/06/24 16:37	II240521-3	200.45025		197.7	mg/L	99	1	200			
WG590584LFB	LFB	06/06/24 16:43	II240604-3	1.001		.986	mg/L	99	85	115			
L87865-03AS	AS	06/06/24 17:11	II240604-3	1.001	.081	1.082	mg/L	100	85	115			
WG590584CCV1	CCV	06/06/24 17:14	II240529-2	1		.953	mg/L	95	90	110			
WG590584CCB1	CCB	06/06/24 17:17				U	mg/L		-0.15	0.15			
L87865-03ASD	ASD	06/06/24 17:20	II240604-3	1.001	.081	1.069	mg/L	99	85	115	1	20	
WG590584CCV2	CCV	06/06/24 17:50	II240529-2	1		.942	mg/L	94	90	110			
WG590584CCB2	CCB	06/06/24 17:53				U	mg/L		-0.15	0.15			
WG590584CCV3	CCV	06/06/24 18:11	II240529-2	1		.954	mg/L	95	90	110			
WG590584CCB3	CCB	06/06/24 18:14				U	mg/L		-0.15	0.15			

Arsenic, dissolved

EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG590245													
WG590245ICV	ICV	06/03/24 18:23	MS240404-4	.05		.05098	mg/L	102	90	110			
WG590245ICB	ICB	06/03/24 18:25				U	mg/L		-0.00044	0.00044			
WG590245LFB	LFB	06/03/24 18:28	MS240514-1	.0501		.05295	mg/L	106	85	115			
L87839-03AS	AS	06/03/24 18:37	MS240514-1	.0501	.00066	.05256	mg/L	104	70	130			
L87839-03ASD	ASD	06/03/24 18:39	MS240514-1	.0501	.00066	.0532	mg/L	105	70	130	1	20	
WG590245CCV1	CCV	06/03/24 18:51	MS240421-5	.1002		.10481	mg/L	105	90	110			
WG590245CCB1	CCB	06/03/24 18:53				U	mg/L		-0.0006	0.0006			
WG590245CCV2	CCV	06/03/24 19:19	MS240421-5	.1002		.10586	mg/L	106	90	110			
WG590245CCB2	CCB	06/03/24 19:22				U	mg/L		-0.0006	0.0006			
WG590245CCV3	CCV	06/03/24 19:36	MS240421-5	.1002		.10337	mg/L	103	90	110			
WG590245CCB3	CCB	06/03/24 19:38				U	mg/L		-0.0006	0.0006			

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ACZ Project ID: **L87864**

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

Beryllium, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG590644													
WG590644ICV	ICV	06/07/24 17:19	II240515-3	2		1.911	mg/L	96	95	105			
WG590644ICB	ICB	06/07/24 17:24				U	mg/L		-0.03	0.03			
WG590644PQV	PQV	06/07/24 17:27	II240521-5	.0501		.048	mg/L	96	70	130			
WG590644SIC	SIC	06/07/24 17:30	II240521-3	.1002		.095	mg/L	95	80	120			
WG590644LFB	LFB	06/07/24 17:37	II240604-3	.501		.507	mg/L	101	85	115			
L87711-01AS	AS	06/07/24 17:46	II240604-3	.501	U	.493	mg/L	98	85	115			
L87711-01ASD	ASD	06/07/24 17:49	II240604-3	.501	U	.495	mg/L	99	85	115	0	20	
WG590644CCV1	CCV	06/07/24 18:07	II240529-2	1		.966	mg/L	97	90	110			
WG590644CCB1	CCB	06/07/24 18:10				U	mg/L		-0.03	0.03			
WG590644CCV2	CCV	06/07/24 18:44	II240529-2	1		.957	mg/L	96	90	110			
WG590644CCB2	CCB	06/07/24 18:47				U	mg/L		-0.03	0.03			
L87884-04AS	AS	06/07/24 18:56	II240604-3	.501	U	.489	mg/L	98	85	115			
L87884-04ASD	ASD	06/07/24 18:59	II240604-3	.501	U	.486	mg/L	97	85	115	1	20	
WG590644CCV3	CCV	06/07/24 19:05	II240529-2	1		.961	mg/L	96	90	110			
WG590644CCB3	CCB	06/07/24 19:08				U	mg/L		-0.03	0.03			

Boron, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG590584													
WG590584ICV	ICV	06/06/24 16:25	II240515-3	2		2.003	mg/L	100	95	105			
WG590584ICB	ICB	06/06/24 16:31				U	mg/L		-0.09	0.09			
WG590584PQV	PQV	06/06/24 16:34	II240521-5	.1001		.108	mg/L	108	70	130			
WG590584SIC	SIC	06/06/24 16:37	II240521-3	.1001		.105	mg/L	105	80	120			
WG590584LFB	LFB	06/06/24 16:43	II240604-3	.5005		.503	mg/L	100	85	115			
L87865-03AS	AS	06/06/24 17:11	II240604-3	.5005	U	.511	mg/L	102	85	115			
WG590584CCV1	CCV	06/06/24 17:14	II240529-2	1		1.003	mg/L	100	90	110			
WG590584CCB1	CCB	06/06/24 17:17				U	mg/L		-0.09	0.09			
L87865-03ASD	ASD	06/06/24 17:20	II240604-3	.5005	U	.506	mg/L	101	85	115	1	20	
WG590584CCV2	CCV	06/06/24 17:50	II240529-2	1		.984	mg/L	98	90	110			
WG590584CCB2	CCB	06/06/24 17:53				U	mg/L		-0.09	0.09			
WG590584CCV3	CCV	06/06/24 18:11	II240529-2	1		.996	mg/L	100	90	110			
WG590584CCB3	CCB	06/06/24 18:14				U	mg/L		-0.09	0.09			

Cadmium, dissolved

EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG590245													
WG590245ICV	ICV	06/03/24 18:23	MS240404-4	.05		.050951	mg/L	102	90	110			
WG590245ICB	ICB	06/03/24 18:25				.000053	mg/L		-0.00011	0.00011			
WG590245LFB	LFB	06/03/24 18:28	MS240514-1	.05005		.051155	mg/L	102	85	115			
L87839-03AS	AS	06/03/24 18:37	MS240514-1	.05005	.000051	.051967	mg/L	104	70	130			
L87839-03ASD	ASD	06/03/24 18:39	MS240514-1	.05005	.000051	.054285	mg/L	108	70	130	4	20	
WG590245CCV1	CCV	06/03/24 18:51	MS240421-5	.1001		.101956	mg/L	102	90	110			
WG590245CCB1	CCB	06/03/24 18:53				U	mg/L		-0.00015	0.00015			
WG590245CCV2	CCV	06/03/24 19:19	MS240421-5	.1001		.101362	mg/L	101	90	110			
WG590245CCB2	CCB	06/03/24 19:22				U	mg/L		-0.00015	0.00015			
WG590245CCV3	CCV	06/03/24 19:36	MS240421-5	.1001		.101772	mg/L	102	90	110			
WG590245CCB3	CCB	06/03/24 19:38				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: **L87864**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG590584													
WG590584ICV	ICV	06/06/24 16:25	II240515-3	100		95.56	mg/L	96	95	105			
WG590584ICB	ICB	06/06/24 16:31				U	mg/L		-0.3	0.3			
WG590584PQV	PQV	06/06/24 16:34	II240521-5	.5025		.49	mg/L	98	70	130			
WG590584SIC	SIC	06/06/24 16:37	II240521-3	201.5025		193	mg/L	96	1	200			
WG590584LFB	LFB	06/06/24 16:43	II240604-3	67.93628		66.54	mg/L	98	85	115			
L87865-03AS	AS	06/06/24 17:11	II240604-3	67.93628	22.9	88.09	mg/L	96	85	115			
WG590584CCV1	CCV	06/06/24 17:14	II240529-2	50		47.94	mg/L	96	90	110			
WG590584CCB1	CCB	06/06/24 17:17				U	mg/L		-0.3	0.3			
L87865-03ASD	ASD	06/06/24 17:20	II240604-3	67.93628	22.9	86.95	mg/L	94	85	115	1	20	
WG590584CCV2	CCV	06/06/24 17:50	II240529-2	50		47.84	mg/L	96	90	110			
WG590584CCB2	CCB	06/06/24 17:53				U	mg/L		-0.3	0.3			
WG590584CCV3	CCV	06/06/24 18:11	II240529-2	50		47.75	mg/L	96	90	110			
WG590584CCB3	CCB	06/06/24 18:14				U	mg/L		-0.3	0.3			

Chloride

SM 4500-Cl E-2011

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG590186													
WG590186ICV	ICV	06/01/24 8:22	WI231211-1	39.96		38.5	mg/L	96	90	110			
WG590186ICB	ICB	06/01/24 8:22				U	mg/L						
WG590186CCV1	CCV	06/01/24 8:38	WI240111-9	25.025		24.94	mg/L	100	90	110			
WG590186CCB1	CCB	06/01/24 8:38				U	mg/L						
WG590186PQV	PQV	06/01/24 8:39	WI240502-1	2.002		1.89	mg/L	94	50	150			
WG590186LFB	LFB	06/01/24 8:39	WI231211-4	20.02		20.63	mg/L	103	90	110			
WG590186CCV2	CCV	06/01/24 8:42	WI240111-9	25.025		25.24	mg/L	101	90	110			
WG590186CCB2	CCB	06/01/24 8:42				U	mg/L						
WG590186CCV3	CCV	06/01/24 8:49	WI240111-9	25.025		25.22	mg/L	101	90	110			
WG590186CCB3	CCB	06/01/24 8:50				U	mg/L						
L87864-01AS	AS	06/01/24 8:56	5XCL GAL	20	111	127.58	mg/L	83	90	110			M3
WG590186CCV4	CCV	06/01/24 8:58	WI240111-9	25.025		25.55	mg/L	102	90	110			
WG590186CCB4	CCB	06/01/24 8:58				U	mg/L						
WG590186CCV5	CCV	06/01/24 9:03	WI240111-9	25.025		25.1	mg/L	100	90	110			
WG590186CCB5	CCB	06/01/24 9:04				U	mg/L						
WG590186CCV6	CCV	06/01/24 9:08	WI240111-9	25.025		25.31	mg/L	101	90	110			
WG590186CCB6	CCB	06/01/24 9:08				U	mg/L						
L87864-02DUP	DUP	06/01/24 9:13			975	966.5	mg/L				1	20	
WG590186CCV7	CCV	06/01/24 9:14	WI240111-9	25.025		25.16	mg/L	101	90	110			
WG590186CCB7	CCB	06/01/24 9:14				U	mg/L						
WG590186CCV8	CCV	06/01/24 9:22	WI240111-9	25.025		25.15	mg/L	100	90	110			
WG590186CCB8	CCB	06/01/24 9:23				U	mg/L						
WG590186CCV9	CCV	06/01/24 9:23	WI240111-9	25.025		25.42	mg/L	102	90	110			
WG590186CCB9	CCB	06/01/24 9:24				U	mg/L						

GCC

ACZ Project ID: **L87864**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG590584													
WG590584ICV	ICV	06/06/24 16:25	II240515-3	2		1.907	mg/L	95	95	105			
WG590584ICB	ICB	06/06/24 16:31				U	mg/L		-0.06	0.06			
WG590584PQV	PQV	06/06/24 16:34	II240521-5	.05005		.054	mg/L	108	70	130			
WG590584SIC	SIC	06/06/24 16:37	II240521-3	.1001		.1	mg/L	100	80	120			
WG590584LFB	LFB	06/06/24 16:43	II240604-3	.5005		.492	mg/L	98	85	115			
L87865-03AS	AS	06/06/24 17:11	II240604-3	.5005	U	.492	mg/L	98	85	115			
WG590584CCV1	CCV	06/06/24 17:14	II240529-2	1		.949	mg/L	95	90	110			
WG590584CCB1	CCB	06/06/24 17:17				U	mg/L		-0.06	0.06			
L87865-03ASD	ASD	06/06/24 17:20	II240604-3	.5005	U	.486	mg/L	97	85	115	1	20	
WG590584CCV2	CCV	06/06/24 17:50	II240529-2	1		.944	mg/L	94	90	110			
WG590584CCB2	CCB	06/06/24 17:53				U	mg/L		-0.06	0.06			
WG590584CCV3	CCV	06/06/24 18:11	II240529-2	1		.946	mg/L	95	90	110			
WG590584CCB3	CCB	06/06/24 18:14				U	mg/L		-0.06	0.06			

Cobalt, dissolved

EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG590245													
WG590245ICV	ICV	06/03/24 18:23	MS240404-4	.05		.051815	mg/L	104	90	110			
WG590245ICB	ICB	06/03/24 18:25				.000052	mg/L		-0.00011	0.00011			
WG590245LFB	LFB	06/03/24 18:28	MS240514-1	.05005		.052405	mg/L	105	85	115			
L87839-03AS	AS	06/03/24 18:37	MS240514-1	.05005	.00101	.052318	mg/L	103	70	130			
L87839-03ASD	ASD	06/03/24 18:39	MS240514-1	.05005	.00101	.053041	mg/L	104	70	130	1	20	
WG590245CCV1	CCV	06/03/24 18:51	MS240421-5	.1001		.103525	mg/L	103	90	110			
WG590245CCB1	CCB	06/03/24 18:53				U	mg/L		-0.00015	0.00015			
WG590245CCV2	CCV	06/03/24 19:19	MS240421-5	.1001		.103183	mg/L	103	90	110			
WG590245CCB2	CCB	06/03/24 19:22				U	mg/L		-0.00015	0.00015			
WG590245CCV3	CCV	06/03/24 19:36	MS240421-5	.1001		.105477	mg/L	105	90	110			
WG590245CCB3	CCB	06/03/24 19:38				U	mg/L		-0.00015	0.00015			

Copper, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG590644													
WG590644ICV	ICV	06/07/24 17:19	II240515-3	2		1.897	mg/L	95	95	105			
WG590644ICB	ICB	06/07/24 17:24				U	mg/L		-0.03	0.03			
WG590644PQV	PQV	06/07/24 17:27	II240521-5	.05005		.049	mg/L	98	70	130			
WG590644SIC	SIC	06/07/24 17:30	II240521-3	.1001		.092	mg/L	92	80	120			
WG590644LFB	LFB	06/07/24 17:37	II240604-3	.5005		.501	mg/L	100	85	115			
L87711-01AS	AS	06/07/24 17:46	II240604-3	.5005	U	.493	mg/L	99	85	115			
L87711-01ASD	ASD	06/07/24 17:49	II240604-3	.5005	U	.492	mg/L	98	85	115	0	20	
WG590644CCV1	CCV	06/07/24 18:07	II240529-2	1		.951	mg/L	95	90	110			
WG590644CCB1	CCB	06/07/24 18:10				U	mg/L		-0.03	0.03			
WG590644CCV2	CCV	06/07/24 18:44	II240529-2	1		.941	mg/L	94	90	110			
WG590644CCB2	CCB	06/07/24 18:47				U	mg/L		-0.03	0.03			
L87884-04AS	AS	06/07/24 18:56	II240604-3	.5005	U	.493	mg/L	99	85	115			
L87884-04ASD	ASD	06/07/24 18:59	II240604-3	.5005	U	.488	mg/L	98	85	115	1	20	
WG590644CCV3	CCV	06/07/24 19:05	II240529-2	1		.937	mg/L	94	90	110			
WG590644CCB3	CCB	06/07/24 19:08				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: **L87864**

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

SM 4500-F C-2011

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG590589													
WG590589ICV	ICV	06/06/24 17:04	WC240530-2	2.002		2.13	mg/L	106	90	110			
WG590589ICB	ICB	06/06/24 17:08				.15	mg/L		-0.3	0.3			
WG590589PQV	PQV	06/06/24 17:11	WC240424-1	.35		.45	mg/L	129	50	150			
WG590589LFB	LFB	06/06/24 17:15	WC240411-1	5		4.93	mg/L	99	90	110			
L87864-01AS	AS	06/06/24 17:22	WC240411-1	5	1.14	5.77	mg/L	93	90	110			
L87864-01ASD	ASD	06/06/24 17:25	WC240411-1	5	1.14	5.85	mg/L	94	90	110	1	20	
WG590589CCV1	CCV	06/06/24 17:58	WC240530-2	2.002		2.128	mg/L	106	90	110			
WG590589CCB1	CCB	06/06/24 18:04				U	mg/L		-0.3	0.3			
WG590589CCV2	CCV	06/06/24 19:05	WC240530-2	2.002		2.069	mg/L	103	90	110			
WG590589CCB2	CCB	06/06/24 19:10				U	mg/L		-0.3	0.3			
WG590589CCV3	CCV	06/06/24 19:39	WC240530-2	2.002		2.098	mg/L	105	90	110			
WG590589CCB3	CCB	06/06/24 19:45				U	mg/L		-0.3	0.3			

Iron, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG590584													
WG590584ICV	ICV	06/06/24 16:25	II240515-3	2		1.909	mg/L	95	95	105			
WG590584ICB	ICB	06/06/24 16:31				U	mg/L		-0.18	0.18			
WG590584PQV	PQV	06/06/24 16:34	II240521-5	.15045		.149	mg/L	99	70	130			
WG590584SIC	SIC	06/06/24 16:37	II240521-3	200.75045		191.2	mg/L	95	1	200			
WG590584LFB	LFB	06/06/24 16:43	II240604-3	1.003		1.003	mg/L	100	85	115			
L87865-03AS	AS	06/06/24 17:11	II240604-3	1.003	U	1.034	mg/L	103	85	115			
WG590584CCV1	CCV	06/06/24 17:14	II240529-2	1		.961	mg/L	96	90	110			
WG590584CCB1	CCB	06/06/24 17:17				U	mg/L		-0.18	0.18			
L87865-03ASD	ASD	06/06/24 17:20	II240604-3	1.003	U	1.023	mg/L	102	85	115	1	20	
WG590584CCV2	CCV	06/06/24 17:50	II240529-2	1		.953	mg/L	95	90	110			
WG590584CCB2	CCB	06/06/24 17:53				U	mg/L		-0.18	0.18			
WG590584CCV3	CCV	06/06/24 18:11	II240529-2	1		.958	mg/L	96	90	110			
WG590584CCB3	CCB	06/06/24 18:14				U	mg/L		-0.18	0.18			

Lead, dissolved

EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG590245													
WG590245ICV	ICV	06/03/24 18:23	MS240404-4	.05		.0519	mg/L	104	90	110			
WG590245ICB	ICB	06/03/24 18:25				.00011	mg/L		-0.00022	0.00022			
WG590245LFB	LFB	06/03/24 18:28	MS240514-1	.05005		.05133	mg/L	103	85	115			
L87839-03AS	AS	06/03/24 18:37	MS240514-1	.05005	.00012	.05134	mg/L	102	70	130			
L87839-03ASD	ASD	06/03/24 18:39	MS240514-1	.05005	.00012	.05299	mg/L	106	70	130	3	20	
WG590245CCV1	CCV	06/03/24 18:51	MS240421-5	.25025		.26154	mg/L	105	90	110			
WG590245CCB1	CCB	06/03/24 18:53				U	mg/L		-0.0003	0.0003			
WG590245CCV2	CCV	06/03/24 19:19	MS240421-5	.25025		.2583	mg/L	103	90	110			
WG590245CCB2	CCB	06/03/24 19:22				U	mg/L		-0.0003	0.0003			
WG590245CCV3	CCV	06/03/24 19:36	MS240421-5	.25025		.25928	mg/L	104	90	110			
WG590245CCB3	CCB	06/03/24 19:38				.00011	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: **L87864**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG590644													
WG590644ICV	ICV	06/07/24 17:19	II240515-3	2		1.9312	mg/L	97	95	105			
WG590644ICB	ICB	06/07/24 17:24				U	mg/L		-0.024	0.024			
WG590644PQV	PQV	06/07/24 17:27	II240521-5	.04		.0355	mg/L	89	70	130			
WG590644SIC	SIC	06/07/24 17:30	II240521-3	.1		.0991	mg/L	99	80	120			
WG590644LFB	LFB	06/07/24 17:37	II240604-3	1		.963	mg/L	96	85	115			
L87711-01AS	AS	06/07/24 17:46	II240604-3	1	.0414	.9817	mg/L	94	85	115			
L87711-01ASD	ASD	06/07/24 17:49	II240604-3	1	.0414	.9901	mg/L	95	85	115	1	20	
WG590644CCV1	CCV	06/07/24 18:07	II240529-2	1		.9577	mg/L	96	90	110			
WG590644CCB1	CCB	06/07/24 18:10				U	mg/L		-0.024	0.024			
WG590644CCV2	CCV	06/07/24 18:44	II240529-2	1		.9513	mg/L	95	90	110			
WG590644CCB2	CCB	06/07/24 18:47				U	mg/L		-0.024	0.024			
L87884-04AS	AS	06/07/24 18:56	II240604-3	1	U	.9528	mg/L	95	85	115			
L87884-04ASD	ASD	06/07/24 18:59	II240604-3	1	U	.9454	mg/L	95	85	115	1	20	
WG590644CCV3	CCV	06/07/24 19:05	II240529-2	1		.9483	mg/L	95	90	110			
WG590644CCB3	CCB	06/07/24 19:08				U	mg/L		-0.024	0.024			

Magnesium, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG590584													
WG590584ICV	ICV	06/06/24 16:25	II240515-3	100		95.56	mg/L	96	95	105			
WG590584ICB	ICB	06/06/24 16:31				U	mg/L		-0.6	0.6			
WG590584PQV	PQV	06/06/24 16:34	II240521-5	1.006		1.03	mg/L	102	70	130			
WG590584SIC	SIC	06/06/24 16:37	II240521-3	202.206		201.7	mg/L	100	1	200			
WG590584LFB	LFB	06/06/24 16:43	II240604-3	49.99866		49.84	mg/L	100	85	115			
L87865-03AS	AS	06/06/24 17:11	II240604-3	49.99866	1.69	51.17	mg/L	99	85	115			
WG590584CCV1	CCV	06/06/24 17:14	II240529-2	50		48.4	mg/L	97	90	110			
WG590584CCB1	CCB	06/06/24 17:17				U	mg/L		-0.6	0.6			
L87865-03ASD	ASD	06/06/24 17:20	II240604-3	49.99866	1.69	50.47	mg/L	98	85	115	1	20	
WG590584CCV2	CCV	06/06/24 17:50	II240529-2	50		48.04	mg/L	96	90	110			
WG590584CCB2	CCB	06/06/24 17:53				U	mg/L		-0.6	0.6			
WG590584CCV3	CCV	06/06/24 18:11	II240529-2	50		47.59	mg/L	95	90	110			
WG590584CCB3	CCB	06/06/24 18:14				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: **L87864**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG590644													
WG590644ICV	ICV	06/07/24 17:19	II240515-3	2		1.907	mg/L	95	95	105			
WG590644ICB	ICB	06/07/24 17:24				U	mg/L		-0.03	0.03			
WG590644PQV	PQV	06/07/24 17:27	II240521-5	.0502		.047	mg/L	94	70	130			
WG590644SIC	SIC	06/07/24 17:30	II240521-3	50.1502		47.07	mg/L	94	1	200			
WG590644LFB	LFB	06/07/24 17:37	II240604-3	.501		.502	mg/L	100	85	115			
L87711-01AS	AS	06/07/24 17:46	II240604-3	.501	U	.494	mg/L	99	85	115			
L87711-01ASD	ASD	06/07/24 17:49	II240604-3	.501	U	.495	mg/L	99	85	115	0	20	
WG590644CCV1	CCV	06/07/24 18:07	II240529-2	1		.971	mg/L	97	90	110			
WG590644CCB1	CCB	06/07/24 18:10				U	mg/L		-0.03	0.03			
WG590644CCV2	CCV	06/07/24 18:44	II240529-2	1		.974	mg/L	97	90	110			
WG590644CCB2	CCB	06/07/24 18:47				U	mg/L		-0.03	0.03			
L87884-04AS	AS	06/07/24 18:56	II240604-3	.501	U	.499	mg/L	100	85	115			
L87884-04ASD	ASD	06/07/24 18:59	II240604-3	.501	U	.498	mg/L	99	85	115	0	20	
WG590644CCV3	CCV	06/07/24 19:05	II240529-2	1		.981	mg/L	98	90	110			
WG590644CCB3	CCB	06/07/24 19:08				U	mg/L		-0.03	0.03			

Mercury, dissolved

EPA 245.1

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG590351													
WG590351ICV	ICV	06/05/24 14:53	HG240528-3	.005		.00512	mg/L	102	95	105			
WG590351ICB	ICB	06/05/24 14:54				U	mg/L		-0.0002	0.0002			
WG590352													
WG590352CCV1	CCV	06/05/24 15:28	HG240528-3	.005		.00494	mg/L	99	90	110			
WG590352CCB1	CCB	06/05/24 15:29				U	mg/L		-0.0002	0.0002			
WG590352PQV	PQV	06/05/24 15:30	HG240528-5	.001001		.00098	mg/L	98	70	130			
WG590352LRB	LRB	06/05/24 15:31				U	mg/L		-0.00044	0.00044			
WG590352LFB	LFB	06/05/24 15:32	HG240528-6	.002002		.00192	mg/L	96	85	115			
WG590352CCV2	CCV	06/05/24 15:39	HG240528-3	.005		.00494	mg/L	99	90	110			
WG590352CCB2	CCB	06/05/24 15:40				U	mg/L		-0.0002	0.0002			
L87849-03LFM	LFM	06/05/24 15:43	HG240528-6	.002002	U	.00195	mg/L	97	85	115			
L87849-03LFMD	LFMD	06/05/24 15:44	HG240528-6	.002002	U	.00198	mg/L	99	85	115	2	20	
WG590352CCV3	CCV	06/05/24 15:50	HG240528-3	.005		.00514	mg/L	103	90	110			
WG590352CCB3	CCB	06/05/24 15:51				U	mg/L		-0.0002	0.0002			
L87891-05LFM	LFM	06/05/24 15:55	HG240528-6	.002002	U	.0019	mg/L	95	85	115			
L87891-05LFMD	LFMD	06/05/24 15:56	HG240528-6	.002002	U	.00188	mg/L	94	85	115	1	20	
WG590352CCV4	CCV	06/05/24 15:59	HG240528-3	.005		.00507	mg/L	101	90	110			
WG590352CCB4	CCB	06/05/24 16:00				U	mg/L		-0.0002	0.0002			

GCC

ACZ Project ID: **L87864**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG590584													
WG590584ICV	ICV	06/06/24 16:25	II240515-3	2.004		1.8942	mg/L	95	95	105			
WG590584ICB	ICB	06/06/24 16:31				U	mg/L		-0.024	0.024			
WG590584PQV	PQV	06/06/24 16:34	II240521-5	.04008		.0363	mg/L	91	70	130			
WG590584SIC	SIC	06/06/24 16:37	II240521-3	.1002		.0935	mg/L	93	80	120			
WG590584LFB	LFB	06/06/24 16:43	II240604-3	.501		.4855	mg/L	97	85	115			
L87865-03AS	AS	06/06/24 17:11	II240604-3	.501	U	.4821	mg/L	96	85	115			
WG590584CCV1	CCV	06/06/24 17:14	II240529-2	1.002		.926	mg/L	92	90	110			
WG590584CCB1	CCB	06/06/24 17:17				U	mg/L		-0.024	0.024			
L87865-03ASD	ASD	06/06/24 17:20	II240604-3	.501	U	.4789	mg/L	96	85	115	1	20	
WG590584CCV2	CCV	06/06/24 17:50	II240529-2	1.002		.9213	mg/L	92	90	110			
WG590584CCB2	CCB	06/06/24 17:53				U	mg/L		-0.024	0.024			
WG590584CCV3	CCV	06/06/24 18:11	II240529-2	1.002		.915	mg/L	91	90	110			
WG590584CCB3	CCB	06/06/24 18:14				U	mg/L		-0.024	0.024			

Nitrate/Nitrite as N

EPA 353.2

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589545													
WG589545ICV	ICV	05/21/24 23:39	WI240403-6	2.415		2.468	mg/L	102	90	110			
WG589545ICB	ICB	05/21/24 23:40				U	mg/L		-0.02	0.02			
WG589545LFB	LFB	05/21/24 23:44	WI240228-17	2		2.047	mg/L	102	90	110			
WG589545CCV1	CCV	05/21/24 23:54	WI240515-5	2		2.035	mg/L	102	90	110			
WG589545CCB1	CCB	05/21/24 23:57				U	mg/L		-0.02	0.02			
L87861-05AS	AS	05/22/24 0:06	WI240228-17	2	U	1.968	mg/L	98	90	110			
L87861-06DUP	DUP	05/22/24 0:08			.056	.056	mg/L				0	20	RA
WG589545CCV2	CCV	05/22/24 0:11	WI240515-5	2		2.03	mg/L	102	90	110			
WG589545CCB2	CCB	05/22/24 0:14				U	mg/L		-0.02	0.02			
WG589545CCV3	CCV	05/22/24 0:26	WI240515-5	2		2.038	mg/L	102	90	110			
WG589545CCB3	CCB	05/22/24 0:29				U	mg/L		-0.02	0.02			

Nitrite as N

EPA 353.2

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589545													
WG589545ICV	ICV	05/21/24 23:39	WI240403-6	.608		.612	mg/L	101	90	110			
WG589545ICB	ICB	05/21/24 23:40				U	mg/L		-0.01	0.01			
WG589545LFB	LFB	05/21/24 23:44	WI240228-17	1		1.003	mg/L	100	90	110			
WG589545CCV1	CCV	05/21/24 23:54	WI240515-5	1		1.032	mg/L	103	90	110			
WG589545CCB1	CCB	05/21/24 23:57				U	mg/L		-0.01	0.01			
L87861-05AS	AS	05/22/24 0:06	WI240228-17	1	U	.961	mg/L	96	90	110			
L87861-06DUP	DUP	05/22/24 0:08			U	U	mg/L				0	20	RA
WG589545CCV2	CCV	05/22/24 0:11	WI240515-5	1		1.03	mg/L	103	90	110			
WG589545CCB2	CCB	05/22/24 0:14				U	mg/L		-0.01	0.01			
WG589545CCV3	CCV	05/22/24 0:26	WI240515-5	1		1.027	mg/L	103	90	110			
WG589545CCB3	CCB	05/22/24 0:29				U	mg/L		-0.01	0.01			

GCC

ACZ Project ID: **L87864**

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

Potassium, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG590584													
WG590584ICV	ICV	06/06/24 16:25	II240515-3	20		19.35	mg/L	97	95	105			
WG590584ICB	ICB	06/06/24 16:31				U	mg/L		-1.5	1.5			
WG590584PQV	PQV	06/06/24 16:34	II240521-5	1.002		1.01	mg/L	101	70	130			
WG590584SIC	SIC	06/06/24 16:37	II240521-3	1.002		1	mg/L	100	80	120			
WG590584LFB	LFB	06/06/24 16:43	II240604-3	99.96008		98.65	mg/L	99	85	115			
L87865-03AS	AS	06/06/24 17:11	II240604-3	99.96008	U	98	mg/L	98	85	115			
WG590584CCV1	CCV	06/06/24 17:14	II240529-2	10		9.71	mg/L	97	90	110			
WG590584CCB1	CCB	06/06/24 17:17				U	mg/L		-1.5	1.5			
L87865-03ASD	ASD	06/06/24 17:20	II240604-3	99.96008	U	96.66	mg/L	97	85	115	1	20	
WG590584CCV2	CCV	06/06/24 17:50	II240529-2	10		9.41	mg/L	94	90	110			
WG590584CCB2	CCB	06/06/24 17:53				U	mg/L		-1.5	1.5			
WG590584CCV3	CCV	06/06/24 18:11	II240529-2	10		9.58	mg/L	96	90	110			
WG590584CCB3	CCB	06/06/24 18:14				U	mg/L		-1.5	1.5			

Residue, Filterable (TDS) @180C

SM 2540 C-2011

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589776													
WG589776PBW	PBW	05/24/24 14:30				U	mg/L		-20	20			
WG589776LCSW	LCSW	05/24/24 14:31	PCN626708	1000		982	mg/L	98	80	120			
L87869-03DUP	DUP	05/24/24 14:53			6500	6388	mg/L				2	10	
WG590230													
WG590230PBW	PBW	06/02/24 12:20				U	mg/L		-20	20			
WG590230LCSW	LCSW	06/02/24 12:22	PCN626711	1000		982	mg/L	98	80	120			
L87890-01DUP	DUP	06/02/24 12:51			494	496	mg/L				0	10	

GCC

ACZ Project ID: **L87864**

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

Selenium, dissolved

EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG590245													
WG590245ICV	ICV	06/03/24 18:23	MS240404-4	.05		.05326	mg/L	107	90	110			
WG590245ICB	ICB	06/03/24 18:25				.00011	mg/L		-0.00022	0.00022			
WG590245LFB	LFB	06/03/24 18:28	MS240514-1	.05005		.05474	mg/L	109	85	115			
L87839-03AS	AS	06/03/24 18:37	MS240514-1	.05005	.00013	.05596	mg/L	112	70	130			
L87839-03ASD	ASD	06/03/24 18:39	MS240514-1	.05005	.00013	.05671	mg/L	113	70	130	1	20	
WG590245CCV1	CCV	06/03/24 18:51	MS240421-5	.1001		.10974	mg/L	110	90	110			
WG590245CCB1	CCB	06/03/24 18:53				.00249	mg/L		-0.0003	0.0003			BB BE
WG590245CCV2	CCV	06/03/24 19:19	MS240421-5	.1001		.10812	mg/L	108	90	110			
WG590245CCB2	CCB	06/03/24 19:22				.00024	mg/L		-0.0003	0.0003			
WG590245CCV3	CCV	06/03/24 19:36	MS240421-5	.1001		.10739	mg/L	107	90	110			
WG590245CCB3	CCB	06/03/24 19:38				.0002	mg/L		-0.0003	0.0003			
WG590489													
WG590489ICV	ICV	06/05/24 16:42	MS240404-4	.05		.05177	mg/L	104	90	110			
WG590489ICB	ICB	06/05/24 16:44				.0001	mg/L		-0.00022	0.00022			
WG590489LFB	LFB	06/05/24 16:46	MS240514-1	.05005		.05236	mg/L	105	85	115			
WG590489CCV1	CCV	06/05/24 17:04	MS240421-5	.1001		.10236	mg/L	102	90	110			
WG590489CCB1	CCB	06/05/24 17:06				U	mg/L		-0.0003	0.0003			
L87888-01AS	AS	06/05/24 17:08	MS240514-1	.05005	.00279	.05727	mg/L	109	70	130			
L87888-01ASD	ASD	06/05/24 17:09	MS240514-1	.05005	.00279	.05629	mg/L	107	70	130	2	20	E6
WG590489CCV2	CCV	06/05/24 17:26	MS240421-5	.1001		.10097	mg/L	101	90	110			
WG590489CCB2	CCB	06/05/24 17:28				.0001	mg/L		-0.0003	0.0003			
WG590489CCV3	CCV	06/05/24 17:39	MS240421-5	.1001		.10077	mg/L	101	90	110			
WG590489CCB3	CCB	06/05/24 17:40				U	mg/L		-0.0003	0.0003			

Sodium, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG590584													
WG590584ICV	ICV	06/06/24 16:25	II240515-3	100		95.93	mg/L	96	95	105			
WG590584ICB	ICB	06/06/24 16:31				U	mg/L		-0.6	0.6			
WG590584PQV	PQV	06/06/24 16:34	II240521-5	1.005		1.05	mg/L	104	70	130			
WG590584SIC	SIC	06/06/24 16:37	II240521-3	1.005		1.05	mg/L	104	80	120			
WG590584LFB	LFB	06/06/24 16:43	II240604-3	99.97238		96.52	mg/L	97	85	115			
L87865-03AS	AS	06/06/24 17:11	II240604-3	99.97238	2.04	98.17	mg/L	96	85	115			
WG590584CCV1	CCV	06/06/24 17:14	II240529-2	50		47.82	mg/L	96	90	110			
WG590584CCB1	CCB	06/06/24 17:17				U	mg/L		-0.6	0.6			
L87865-03ASD	ASD	06/06/24 17:20	II240604-3	99.97238	2.04	96.83	mg/L	95	85	115	1	20	
WG590584CCV2	CCV	06/06/24 17:50	II240529-2	50		46.97	mg/L	94	90	110			
WG590584CCB2	CCB	06/06/24 17:53				U	mg/L		-0.6	0.6			
WG590584CCV3	CCV	06/06/24 18:11	II240529-2	50		47.76	mg/L	96	90	110			
WG590584CCB3	CCB	06/06/24 18:14				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: **L87864**

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

ASTM D516-07/-11/-16

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG589608													
WG589608ICV	ICV	05/22/24 10:45	WI240522-2	20		21.9	mg/L	110	85	115			
WG589608ICB	ICB	05/22/24 10:46				U	mg/L		-2.5	2.5			
WG589608CCV1	CCV	05/22/24 14:16	WI240517-1	25		28.5	mg/L	114	85	115			
WG589608CCB1	CCB	05/22/24 14:16				U	mg/L		-2.5	2.5			
WG589608LFB	LFB	05/22/24 14:16	WI240304-2	10		10.7	mg/L	107	85	115			
WG589608CCV2	CCV	05/22/24 14:20	WI240517-1	25		26.6	mg/L	106	85	115			
WG589608CCB2	CCB	05/22/24 14:20				U	mg/L		-2.5	2.5			
WG589608CCV3	CCV	05/22/24 14:23	WI240517-1	25		27	mg/L	108	85	115			
WG589608CCB3	CCB	05/22/24 14:23				U	mg/L		-2.5	2.5			
WG589608CCV4	CCV	05/22/24 14:28	WI240517-1	25		26.8	mg/L	107	85	115			
WG589608CCB4	CCB	05/22/24 14:28				U	mg/L		-2.5	2.5			
WG589608CCV5	CCV	05/22/24 14:33	WI240517-1	25		26.8	mg/L	107	85	115			
WG589608CCB5	CCB	05/22/24 14:33				U	mg/L		-2.5	2.5			
WG589608CCV6	CCV	05/22/24 14:38	WI240517-1	25		26.6	mg/L	106	85	115			
WG589608CCB6	CCB	05/22/24 14:38				U	mg/L		-2.5	2.5			
L87889-02AS	AS	05/22/24 14:42	SO4TURB25X	10	413	415.6	mg/L	26	85	115			M3
WG589608CCV7	CCV	05/22/24 14:43	WI240517-1	25		26.7	mg/L	107	85	115			
WG589608CCB7	CCB	05/22/24 14:43				U	mg/L		-2.5	2.5			
WG589608CCV8	CCV	05/22/24 14:44	WI240517-1	25		27.7	mg/L	111	85	115			
WG589608CCB8	CCB	05/22/24 14:45				U	mg/L		-2.5	2.5			
WG589608CCV9	CCV	05/22/24 14:45	WI240517-1	25		26.7	mg/L	107	85	115			
WG589608CCB9	CCB	05/22/24 14:46				U	mg/L		-2.5	2.5			
WG589608CCV10	CCV	05/22/24 14:47	WI240517-1	25		27.7	mg/L	111	85	115			
WG589608CCB10	CCB	05/22/24 14:47				U	mg/L		-2.5	2.5			
WG589608CCV11	CCV	05/22/24 14:48	WI240517-1	25		27.2	mg/L	109	85	115			
WG589608CCB11	CCB	05/22/24 14:48				U	mg/L		-2.5	2.5			
WG589608CCV12	CCV	05/22/24 14:50	WI240517-1	25		28.1	mg/L	112	85	115			
WG589608CCB12	CCB	05/22/24 14:50				U	mg/L		-2.5	2.5			
L87889-02ASD	ASD	05/22/24 14:56	SO4TURB25X	10	413	445.4	mg/L	324	85	115	7	20	M3
WG589608CCV13	CCV	05/22/24 14:56	WI240517-1	25		27.8	mg/L	111	85	115			
WG589608CCB13	CCB	05/22/24 14:56				U	mg/L		-2.5	2.5			

Vanadium, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG590584													
WG590584ICV	ICV	06/06/24 16:25	II240515-3	2		1.951	mg/L	98	95	105			
WG590584ICB	ICB	06/06/24 16:31				U	mg/L		-0.015	0.015			
WG590584PQV	PQV	06/06/24 16:34	II240521-5	.025025		.024	mg/L	96	70	130			
WG590584SIC	SIC	06/06/24 16:37	II240521-3	.1001		.097	mg/L	97	80	120			
WG590584LFB	LFB	06/06/24 16:43	II240604-3	.5005		.4972	mg/L	99	85	115			
L87865-03AS	AS	06/06/24 17:11	II240604-3	.5005	U	.4938	mg/L	99	85	115			
WG590584CCV1	CCV	06/06/24 17:14	II240529-2	1		.977	mg/L	98	90	110			
WG590584CCB1	CCB	06/06/24 17:17				U	mg/L		-0.03	0.03			
L87865-03ASD	ASD	06/06/24 17:20	II240604-3	.5005	U	.487	mg/L	97	85	115	1	20	
WG590584CCV2	CCV	06/06/24 17:50	II240529-2	1		.967	mg/L	97	90	110			
WG590584CCB2	CCB	06/06/24 17:53				U	mg/L		-0.03	0.03			
WG590584CCV3	CCV	06/06/24 18:11	II240529-2	1		.977	mg/L	98	90	110			
WG590584CCB3	CCB	06/06/24 18:14				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: **L87864**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG590644													
WG590644ICV	ICV	06/07/24 17:19	II240515-3	2		1.921	mg/L	96	95	105			
WG590644ICB	ICB	06/07/24 17:24				U	mg/L		-0.06	0.06			
WG590644PQV	PQV	06/07/24 17:27	II240521-5	.0502		.052	mg/L	104	70	130			
WG590644SIC	SIC	06/07/24 17:30	II240521-3	.10025		.098	mg/L	98	80	120			
WG590644LFB	LFB	06/07/24 17:37	II240604-3	.50045		.513	mg/L	103	85	115			
L87711-01AS	AS	06/07/24 17:46	II240604-3	.50045	U	.514	mg/L	103	85	115			
L87711-01ASD	ASD	06/07/24 17:49	II240604-3	.50045	U	.512	mg/L	102	85	115	0	20	
WG590644CCV1	CCV	06/07/24 18:07	II240529-2	1		.965	mg/L	97	90	110			
WG590644CCB1	CCB	06/07/24 18:10				U	mg/L		-0.06	0.06			
WG590644CCV2	CCV	06/07/24 18:44	II240529-2	1		.964	mg/L	96	90	110			
WG590644CCB2	CCB	06/07/24 18:47				U	mg/L		-0.06	0.06			
L87884-04AS	AS	06/07/24 18:56	II240604-3	.50045	U	.515	mg/L	103	85	115			
L87884-04ASD	ASD	06/07/24 18:59	II240604-3	.50045	U	.511	mg/L	102	85	115	1	20	
WG590644CCV3	CCV	06/07/24 19:05	II240529-2	1		.971	mg/L	97	90	110			
WG590644CCB3	CCB	06/07/24 19:08				U	mg/L		-0.06	0.06			

GCC Rio Grande

ACZ Project ID: **L87864**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L87864-01	WG590186	Chloride	SM 4500-Cl E-2011	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.
	WG589545	Nitrate/Nitrite as N	EPA 353.2	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	EPA 353.2	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).
	WG590245	Selenium, dissolved	EPA 200.8	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG589608	Sulfate	ASTM D516-07/-11/-16	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.
L87864-02	WG590186	Chloride	SM 4500-Cl E-2011	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.
	WG589545	Nitrate/Nitrite as N	EPA 353.2	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	EPA 353.2	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).
	WG590489	Selenium, dissolved	EPA 200.8	EA	Concentration estimated. Analytical result was less than the negative MDL due to matrix interferences.
	WG589608	Sulfate	ASTM D516-07/-11/-16	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.
L87864-03	WG590186	Chloride	SM 4500-Cl E-2011	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.
	WG589545	Nitrate/Nitrite as N	EPA 353.2	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	EPA 353.2	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).
	WG590230	Residue, Filterable (TDS) @180C	SM 2540 C-2011	H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
	WG590489	Selenium, dissolved	EPA 200.8	DF	Sample required dilution due to high sediment.
	WG589608	Sulfate	ASTM D516-07/-11/-16	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

GCC Rio Grande

ACZ Project ID: **L87864**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L87864-04	WG590186	Chloride	SM 4500-Cl E-2011	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.
	WG589545	Nitrate/Nitrite as N	EPA 353.2	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	EPA 353.2	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).
	WG590489	Selenium, dissolved	EPA 200.8	EA	Concentration estimated. Analytical result was less than the negative MDL due to matrix interferences.
	WG589608	Sulfate	ASTM D516-07/-11/-16	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

GCC Rio Grande

ACZ Project ID: **L87864**

No certification qualifiers associated with this analysis

GCC Rio Grande

ACZ Project ID: L87864

Date Received: 05/21/2024 11:29

Received By:

Date Printed: 5/22/2024

Receipt Verification

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

Samples/Containers

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

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?
-----	-----	-----	-----	-----
NA41919	0.2	<=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.

GCC Rio Grande

ACZ Project ID: L87864

Date Received: 05/21/2024 11:29

Received By:

Date Printed: 5/22/2024

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).

July 09, 2024

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:

ACZ Project ID: L88256

Amy Rodrigues:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on June 11, 2024. This project has been assigned to ACZ's project number, L88256. 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 L88256. 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 July 09, 2025. 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:

Sample ID: MW-21

ACZ Sample ID: **L88256-01**

Date Sampled: 06/10/24 10:56

Date Received: 06/11/24

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	2	<0.14	U		mg/L	0.14	0.5	06/28/24 0:13	aeb/ms p
Arsenic, dissolved	EPA 200.8	1	<0.0002	U		mg/L	0.0002	0.001	06/13/24 13:46	gjl
Beryllium, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	07/08/24 22:41	wtc
Boron, dissolved	EPA 200.7	2	0.677		*	mg/L	0.06	0.2	07/02/24 20:25	msp
Cadmium, dissolved	EPA 200.8	1	<0.00005	U		mg/L	0.00005	0.00025	06/13/24 13:46	gjl
Calcium, dissolved	EPA 200.7	2	12.2			mg/L	0.2	1	07/08/24 22:41	wtc
Chromium, dissolved	EPA 200.7	2	<0.04	U		mg/L	0.04	0.1	06/28/24 0:13	aeb/ms p
Cobalt, dissolved	EPA 200.8	1	0.000133	B		mg/L	0.00005	0.00025	06/13/24 13:46	gjl
Copper, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	07/02/24 20:25	msp
Iron, dissolved	EPA 200.7	2	<0.12	U		mg/L	0.12	0.3	06/28/24 0:13	aeb/ms p
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	06/13/24 13:46	gjl
Lithium, dissolved	EPA 200.7	2	0.260			mg/L	0.016	0.08	07/08/24 22:41	wtc
Magnesium, dissolved	EPA 200.7	2	9.03			mg/L	0.4	2	07/08/24 22:41	wtc
Manganese, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	06/28/24 0:13	aeb/ms p
Mercury, dissolved	EPA 245.1	1	<0.0002	U		mg/L	0.0002	0.001	06/21/24 11:49	aeb/ae h
Nickel, dissolved	EPA 200.7	2	<0.016	U	*	mg/L	0.016	0.08	07/08/24 22:41	wtc
Potassium, dissolved	EPA 200.7	2	2.93			mg/L	1	2	07/08/24 22:41	wtc
Selenium, dissolved	EPA 200.8	2	<0.0002	U	*	mg/L	0.0002	0.0005	06/14/24 14:23	aps
Sodium, dissolved	EPA 200.7	2	910			mg/L	0.4	2	07/08/24 22:41	wtc
Vanadium, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.05	06/28/24 0:13	aeb/ms p
Zinc, dissolved	EPA 200.7	2	<0.04	U		mg/L	0.04	0.1	06/28/24 0:13	aeb/ms p

GCC Rio Grande

Project ID:

Sample ID: MW-21

ACZ Sample ID: **L88256-01**

Date Sampled: 06/10/24 10:56

Date Received: 06/11/24

Sample Matrix: Groundwater

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM 2320 B-2011									
Bicarbonate as CaCO ₃		1	833			mg/L	2	20	06/18/24 0:00	asn
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	06/18/24 0:00	asn
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	06/18/24 0:00	asn
Total Alkalinity		1	833		*	mg/L	2	20	06/18/24 0:00	asn
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-3.4			%			07/09/24 0:00	calc
Sum of Anions			45			meq/L			07/09/24 0:00	calc
Sum of Cations			42			meq/L			07/09/24 0:00	calc
Chloride	SM 4500-Cl E-2011	5	146		*	mg/L	5	10	06/13/24 11:18	jqr
Fluoride	SM 4500-F C-2011	1	1.47			mg/L	0.15	0.35	06/27/24 23:57	jck
Hardness as CaCO ₃ (dissolved)	Calculation (SM 2340 B-2011)		68			mg/L	0.5	10	07/09/24 0:00	calc
Nitrate as N	Calculation (NO ₃ NO ₂ -NO ₂)		<0.02	U		mg/L	0.02	0.1	07/09/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	<0.02	U		mg/L	0.02	0.1	06/12/24 0:34	pjb
Nitrite as N	EPA 353.2	1	<0.01	U	*	mg/L	0.01	0.05	06/12/24 0:34	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	2	2520			mg/L	40	80	06/14/24 14:17	ptw
Sulfate	ASTM D516-07/-11/-16	50	1130		*	mg/L	50	250	06/14/24 9:51	jqr
TDS (calculated)	Calculation		2720			mg/L			07/09/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.93						07/09/24 0:00	calc

GCC Rio Grande

Project ID:

Sample ID: MW-23

ACZ Sample ID: **L88256-02**

Date Sampled: 06/10/24 12:21

Date Received: 06/11/24

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	1	<0.07	U		mg/L	0.07	0.25	06/28/24 0:16	aeb/ms p
Arsenic, dissolved	EPA 200.8	1	0.00146			mg/L	0.0002	0.001	06/13/24 13:48	gjl
Beryllium, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.05	07/08/24 22:50	wtc
Boron, dissolved	EPA 200.7	1	0.114			mg/L	0.03	0.1	06/28/24 0:16	aeb/ms p
Cadmium, dissolved	EPA 200.8	1	<0.00005	U		mg/L	0.00005	0.00025	06/13/24 13:48	gjl
Calcium, dissolved	EPA 200.7	1	21.2			mg/L	0.1	0.5	06/28/24 0:16	aeb/ms p
Chromium, dissolved	EPA 200.7	1	<0.02	U		mg/L	0.02	0.05	06/28/24 0:16	aeb/ms p
Cobalt, dissolved	EPA 200.8	1	0.000433			mg/L	0.00005	0.00025	06/13/24 13:48	gjl
Copper, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.05	07/02/24 20:28	msp
Iron, dissolved	EPA 200.7	1	<0.06	U		mg/L	0.06	0.15	06/28/24 0:16	aeb/ms p
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	06/13/24 13:48	gjl
Lithium, dissolved	EPA 200.7	1	0.0526			mg/L	0.008	0.04	06/28/24 0:16	aeb/ms p
Magnesium, dissolved	EPA 200.7	1	6.89			mg/L	0.2	1	06/28/24 0:16	aeb/ms p
Manganese, dissolved	EPA 200.7	1	0.017	B		mg/L	0.01	0.05	06/28/24 0:16	aeb/ms p
Mercury, dissolved	EPA 245.1	1	<0.0002	U		mg/L	0.0002	0.001	06/21/24 11:50	aeb/ae h
Nickel, dissolved	EPA 200.7	1	<0.008	U		mg/L	0.008	0.04	06/28/24 0:16	aeb/ms p
Potassium, dissolved	EPA 200.7	1	3.26			mg/L	0.5	1	06/28/24 0:16	aeb/ms p
Selenium, dissolved	EPA 200.8	1	0.0112			mg/L	0.0001	0.00025	06/13/24 13:48	gjl
Sodium, dissolved	EPA 200.7	1	165			mg/L	0.2	1	06/28/24 0:16	aeb/ms p
Vanadium, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.025	06/28/24 0:16	aeb/ms p
Zinc, dissolved	EPA 200.7	1	<0.02	U		mg/L	0.02	0.05	06/28/24 0:16	aeb/ms p

GCC Rio Grande

Project ID:

Sample ID: MW-23

ACZ Sample ID: **L88256-02**

Date Sampled: 06/10/24 12:21

Date Received: 06/11/24

Sample Matrix: Groundwater

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM 2320 B-2011									
Bicarbonate as CaCO ₃		1	261			mg/L	2	20	06/18/24 0:00	asn
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	06/18/24 0:00	asn
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	06/18/24 0:00	asn
Total Alkalinity		1	261		*	mg/L	2	20	06/18/24 0:00	asn
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-1.6			%			07/09/24 0:00	calc
Sum of Anions			9.3			meq/L			07/09/24 0:00	calc
Sum of Cations			9			meq/L			07/09/24 0:00	calc
Chloride	SM 4500-Cl E-2011	1	26.7		*	mg/L	1	2	06/13/24 11:29	jqr
Fluoride	SM 4500-F C-2011	1	0.95			mg/L	0.15	0.35	06/28/24 0:12	jck
Hardness as CaCO ₃ (dissolved)	Calculation (SM 2340 B-2011)		81			mg/L	0.2	5	07/09/24 0:00	calc
Nitrate as N	Calculation (NO ₃ NO ₂ -NO ₂)		0.709			mg/L	0.02	0.1	07/09/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	0.753			mg/L	0.02	0.1	06/12/24 0:37	pjb
Nitrite as N	EPA 353.2	1	0.044	B	*	mg/L	0.01	0.05	06/12/24 0:37	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	1	534			mg/L	20	40	06/14/24 14:21	ptw
Sulfate	ASTM D516-07/-11/-16	5	158		*	mg/L	5	25	06/14/24 9:35	jqr
TDS (calculated)	Calculation		541			mg/L			07/09/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.99						07/09/24 0:00	calc

GCC Rio Grande

Project ID:

Sample ID: MW-24

ACZ Sample ID: **L88256-03**

Date Sampled: 06/10/24 13:02

Date Received: 06/11/24

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	1	<0.07	U		mg/L	0.07	0.25	06/28/24 0:25	aeb/ms p
Arsenic, dissolved	EPA 200.8	1	0.00651			mg/L	0.0002	0.001	06/13/24 13:50	gjl
Beryllium, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.05	07/08/24 22:53	wtc
Boron, dissolved	EPA 200.7	1	0.281			mg/L	0.03	0.1	06/28/24 0:25	aeb/ms p
Cadmium, dissolved	EPA 200.8	1	<0.00005	U		mg/L	0.00005	0.00025	06/13/24 13:50	gjl
Calcium, dissolved	EPA 200.7	1	4.57			mg/L	0.1	0.5	06/28/24 0:25	aeb/ms p
Chromium, dissolved	EPA 200.7	1	<0.02	U		mg/L	0.02	0.05	06/28/24 0:25	aeb/ms p
Cobalt, dissolved	EPA 200.8	1	0.000067	B		mg/L	0.00005	0.00025	06/13/24 13:50	gjl
Copper, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.05	07/02/24 20:31	msp
Iron, dissolved	EPA 200.7	1	<0.06	U		mg/L	0.06	0.15	06/28/24 0:25	aeb/ms p
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	06/13/24 13:50	gjl
Lithium, dissolved	EPA 200.7	1	0.0345	B		mg/L	0.008	0.04	06/28/24 0:25	aeb/ms p
Magnesium, dissolved	EPA 200.7	1	1.40			mg/L	0.2	1	06/28/24 0:25	aeb/ms p
Manganese, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.05	06/28/24 0:25	aeb/ms p
Mercury, dissolved	EPA 245.1	1	<0.0002	U		mg/L	0.0002	0.001	06/21/24 11:51	aeb/ae h
Nickel, dissolved	EPA 200.7	1	<0.008	U		mg/L	0.008	0.04	06/28/24 0:25	aeb/ms p
Potassium, dissolved	EPA 200.7	1	1.25			mg/L	0.5	1	06/28/24 0:25	aeb/ms p
Selenium, dissolved	EPA 200.8	1	0.00284			mg/L	0.0001	0.00025	06/13/24 13:50	gjl
Sodium, dissolved	EPA 200.7	1	181			mg/L	0.2	1	06/28/24 0:25	aeb/ms p
Vanadium, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.025	06/28/24 0:25	aeb/ms p
Zinc, dissolved	EPA 200.7	1	<0.02	U		mg/L	0.02	0.05	06/28/24 0:25	aeb/ms p

GCC Rio Grande

Project ID:

Sample ID: MW-24

ACZ Sample ID: **L88256-03**

Date Sampled: 06/10/24 13:02

Date Received: 06/11/24

Sample Matrix: Groundwater

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM 2320 B-2011									
Bicarbonate as CaCO ₃		1	<2	U		mg/L	2	20	06/18/24 0:00	asn
Carbonate as CaCO ₃		1	208			mg/L	2	20	06/18/24 0:00	asn
Hydroxide as CaCO ₃		1	12.9	B		mg/L	2	20	06/18/24 0:00	asn
Total Alkalinity		1	221		*	mg/L	2	20	06/18/24 0:00	asn
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-4.0			%			07/09/24 0:00	calc
Sum of Anions			9.0			meq/L			07/09/24 0:00	calc
Sum of Cations			8.3			meq/L			07/09/24 0:00	calc
Chloride	SM 4500-Cl E-2011	5	49.7		*	mg/L	5	10	06/13/24 11:19	jqr
Fluoride	SM 4500-F C-2011	1	2.06			mg/L	0.15	0.35	06/28/24 0:16	jck
Hardness as CaCO ₃ (dissolved)	Calculation (SM 2340 B-2011)		17			mg/L	0.2	5	07/09/24 0:00	calc
Nitrate as N	Calculation (NO ₃ NO ₂ -NO ₂)		0.033	B		mg/L	0.02	0.1	07/09/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	0.360			mg/L	0.02	0.1	06/12/24 0:39	pjb
Nitrite as N	EPA 353.2	1	0.327		*	mg/L	0.01	0.05	06/12/24 0:39	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	2	704			mg/L	40	80	06/14/24 14:25	ptw
Sulfate	ASTM D516-07/-11/-16	5	147		*	mg/L	5	25	06/14/24 9:35	jqr
TDS (calculated)	Calculation		514			mg/L			07/09/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.37						07/09/24 0:00	calc

GCC Rio Grande

Project ID:

Sample ID: MW-3B

ACZ Sample ID: **L88256-04**

Date Sampled: 06/10/24 12:00

Date Received: 06/11/24

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	2	<0.14	U	*	mg/L	0.14	0.5	06/29/24 1:41	msp
Arsenic, dissolved	EPA 200.8	1	<0.0002	U		mg/L	0.0002	0.001	06/13/24 13:53	gjl
Beryllium, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	06/29/24 1:41	msp
Boron, dissolved	EPA 200.7	2	0.677			mg/L	0.06	0.2	06/29/24 1:41	msp
Cadmium, dissolved	EPA 200.8	1	<0.00005	U		mg/L	0.00005	0.00025	06/13/24 13:53	gjl
Calcium, dissolved	EPA 200.7	2	12.1			mg/L	0.2	1	06/29/24 1:41	msp
Chromium, dissolved	EPA 200.7	2	<0.04	U		mg/L	0.04	0.1	06/29/24 1:41	msp
Cobalt, dissolved	EPA 200.8	1	0.000139	B		mg/L	0.00005	0.00025	06/13/24 13:53	gjl
Copper, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	06/29/24 1:41	msp
Iron, dissolved	EPA 200.7	2	<0.12	U		mg/L	0.12	0.3	06/29/24 1:41	msp
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	06/13/24 13:53	gjl
Lithium, dissolved	EPA 200.7	2	0.247			mg/L	0.016	0.08	06/29/24 1:41	msp
Magnesium, dissolved	EPA 200.7	2	8.43			mg/L	0.4	2	07/01/24 13:20	msp
Manganese, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	06/29/24 1:41	msp
Mercury, dissolved	EPA 245.1	1	<0.0002	U		mg/L	0.0002	0.001	06/21/24 11:52	aeb/ae h
Nickel, dissolved	EPA 200.7	2	<0.016	U		mg/L	0.016	0.08	06/29/24 1:41	msp
Potassium, dissolved	EPA 200.7	2	2.83			mg/L	1	2	06/29/24 1:41	msp
Selenium, dissolved	EPA 200.8	2	<0.0002	U	*	mg/L	0.0002	0.0005	06/14/24 14:29	aps
Sodium, dissolved	EPA 200.7	2	920			mg/L	0.4	2	06/29/24 1:41	msp
Vanadium, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.05	06/29/24 1:41	msp
Zinc, dissolved	EPA 200.7	2	<0.04	U		mg/L	0.04	0.1	06/29/24 1:41	msp

GCC Rio Grande

Project ID:

Sample ID: MW-3B

ACZ Sample ID: **L88256-04**

Date Sampled: 06/10/24 12:00

Date Received: 06/11/24

Sample Matrix: Groundwater

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM 2320 B-2011									
Bicarbonate as CaCO ₃		1	838			mg/L	2	20	06/18/24 0:00	asn
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	06/18/24 0:00	asn
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	06/18/24 0:00	asn
Total Alkalinity		1	838		*	mg/L	2	20	06/18/24 0:00	asn
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-2.3			%			07/09/24 0:00	calc
Sum of Anions			44			meq/L			07/09/24 0:00	calc
Sum of Cations			42			meq/L			07/09/24 0:00	calc
Chloride	SM 4500-Cl E-2011	5	146		*	mg/L	5	10	06/13/24 11:19	jqr
Fluoride	SM 4500-F C-2011	1	1.38			mg/L	0.15	0.35	06/28/24 0:19	jck
Hardness as CaCO ₃ (dissolved)	Calculation (SM 2340 B-2011)		65			mg/L	0.5	10	07/09/24 0:00	calc
Nitrate as N	Calculation (NO ₃ NO ₂ -NO ₂)		0.039	B		mg/L	0.02	0.1	07/09/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	0.039	B		mg/L	0.02	0.1	06/12/24 0:40	pjb
Nitrite as N	EPA 353.2	1	<0.01	U	*	mg/L	0.01	0.05	06/12/24 0:40	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	2	2480			mg/L	40	80	06/14/24 14:29	ptw
Sulfate	ASTM D516-07/-11/-16	50	1120		*	mg/L	50	250	06/14/24 9:52	jqr
TDS (calculated)	Calculation		2720			mg/L			07/09/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.91						07/09/24 0:00	calc

GCC Rio Grande

Project ID:

Sample ID: MW-19

ACZ Sample ID: **L88256-05**

Date Sampled: 06/10/24 15:23

Date Received: 06/11/24

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	1	<0.07	U	*	mg/L	0.07	0.25	06/29/24 1:43	msp
Arsenic, dissolved	EPA 200.8	1	<0.0002	U		mg/L	0.0002	0.001	06/13/24 13:55	gjl
Beryllium, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.05	06/29/24 1:43	msp
Boron, dissolved	EPA 200.7	1	0.448			mg/L	0.03	0.1	06/29/24 1:43	msp
Cadmium, dissolved	EPA 200.8	1	<0.00005	U		mg/L	0.00005	0.00025	06/13/24 13:55	gjl
Calcium, dissolved	EPA 200.7	1	12.7			mg/L	0.1	0.5	06/29/24 1:43	msp
Chromium, dissolved	EPA 200.7	1	<0.02	U		mg/L	0.02	0.05	06/29/24 1:43	msp
Cobalt, dissolved	EPA 200.8	1	0.000105	B		mg/L	0.00005	0.00025	06/13/24 13:55	gjl
Copper, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.05	06/29/24 1:43	msp
Iron, dissolved	EPA 200.7	1	<0.06	U		mg/L	0.06	0.15	06/29/24 1:43	msp
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	06/13/24 13:55	gjl
Lithium, dissolved	EPA 200.7	1	0.116			mg/L	0.008	0.04	06/29/24 1:43	msp
Magnesium, dissolved	EPA 200.7	1	5.72			mg/L	0.2	1	07/01/24 13:23	msp
Manganese, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.05	06/29/24 1:43	msp
Mercury, dissolved	EPA 245.1	1	<0.0002	U		mg/L	0.0002	0.001	06/21/24 11:53	aeb/ae h
Nickel, dissolved	EPA 200.7	1	<0.008	U		mg/L	0.008	0.04	06/29/24 1:43	msp
Potassium, dissolved	EPA 200.7	1	2.62			mg/L	0.5	1	06/29/24 1:43	msp
Selenium, dissolved	EPA 200.8	20	<0.002	U	*	mg/L	0.002	0.005	06/14/24 14:31	aps
Sodium, dissolved	EPA 200.7	1	491			mg/L	0.2	1	06/29/24 1:43	msp
Vanadium, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.025	06/29/24 1:43	msp
Zinc, dissolved	EPA 200.7	1	<0.02	U		mg/L	0.02	0.05	06/29/24 1:43	msp

GCC Rio Grande

Project ID:

Sample ID: MW-19

ACZ Sample ID: **L88256-05**

Date Sampled: 06/10/24 15:23

Date Received: 06/11/24

Sample Matrix: Groundwater

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM 2320 B-2011									
Bicarbonate as CaCO ₃		1	535			mg/L	2	20	06/18/24 0:00	asn
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	06/18/24 0:00	asn
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	06/18/24 0:00	asn
Total Alkalinity		1	535		*	mg/L	2	20	06/18/24 0:00	asn
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			07/09/24 0:00	calc
Sum of Anions			23			meq/L			07/09/24 0:00	calc
Sum of Cations			23			meq/L			07/09/24 0:00	calc
Chloride	SM 4500-Cl E-2011	5	123		*	mg/L	5	10	06/13/24 11:20	jqr
Fluoride	SM 4500-F C-2011	1	1.40			mg/L	0.15	0.35	06/28/24 0:23	jck
Hardness as CaCO ₃ (dissolved)	Calculation (SM 2340 B-2011)		55			mg/L	0.2	5	07/09/24 0:00	calc
Nitrate as N	Calculation (NO ₃ NO ₂ -NO ₂)		<0.02	U		mg/L	0.02	0.1	07/09/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	<0.02	U		mg/L	0.02	0.1	06/12/24 0:42	pjb
Nitrite as N	EPA 353.2	1	<0.01	U	*	mg/L	0.01	0.05	06/12/24 0:42	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	1	1290			mg/L	20	40	06/14/24 14:33	ptw
Sulfate	ASTM D516-07/-11/-16	25	393		*	mg/L	25	125	06/14/24 9:52	jqr
TDS (calculated)	Calculation		1360			mg/L			07/09/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.95						07/09/24 0:00	calc

GCC Rio Grande

Project ID:

Sample ID: MW-20

ACZ Sample ID: **L88256-06**

Date Sampled: 06/10/24 16:12

Date Received: 06/11/24

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	2	<0.14	U	*	mg/L	0.14	0.5	06/29/24 1:45	msp
Arsenic, dissolved	EPA 200.8	1	0.00392			mg/L	0.0002	0.001	06/13/24 14:02	gjl
Beryllium, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	06/29/24 1:45	msp
Boron, dissolved	EPA 200.7	2	0.776			mg/L	0.06	0.2	06/29/24 1:45	msp
Cadmium, dissolved	EPA 200.8	1	<0.00005	U		mg/L	0.00005	0.00025	06/13/24 14:02	gjl
Calcium, dissolved	EPA 200.7	2	15.1			mg/L	0.2	1	06/29/24 1:45	msp
Chromium, dissolved	EPA 200.7	2	<0.04	U		mg/L	0.04	0.1	06/29/24 1:45	msp
Cobalt, dissolved	EPA 200.8	1	0.000329			mg/L	0.00005	0.00025	06/13/24 14:02	gjl
Copper, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	06/29/24 1:45	msp
Iron, dissolved	EPA 200.7	2	<0.12	U		mg/L	0.12	0.3	06/29/24 1:45	msp
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	06/13/24 14:02	gjl
Lithium, dissolved	EPA 200.7	2	0.165			mg/L	0.016	0.08	06/29/24 1:45	msp
Magnesium, dissolved	EPA 200.7	2	4.06			mg/L	0.4	2	07/01/24 13:26	msp
Manganese, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.1	06/29/24 1:45	msp
Mercury, dissolved	EPA 245.1	1	<0.0002	U		mg/L	0.0002	0.001	06/21/24 11:54	aeb/ae h
Nickel, dissolved	EPA 200.7	2	<0.016	U		mg/L	0.016	0.08	06/29/24 1:45	msp
Potassium, dissolved	EPA 200.7	2	3.85			mg/L	1	2	06/29/24 1:45	msp
Selenium, dissolved	EPA 200.8	2	<0.0002	U	*	mg/L	0.0002	0.0005	06/14/24 14:33	aps
Sodium, dissolved	EPA 200.7	2	840			mg/L	0.4	2	06/29/24 1:45	msp
Vanadium, dissolved	EPA 200.7	2	<0.02	U		mg/L	0.02	0.05	06/29/24 1:45	msp
Zinc, dissolved	EPA 200.7	2	<0.04	U		mg/L	0.04	0.1	06/29/24 1:45	msp

GCC Rio Grande

Project ID:

Sample ID: MW-20

ACZ Sample ID: **L88256-06**

Date Sampled: 06/10/24 16:12

Date Received: 06/11/24

Sample Matrix: Groundwater

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM 2320 B-2011									
Bicarbonate as CaCO ₃		1	546			mg/L	2	20	06/18/24 0:00	asn
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	06/18/24 0:00	asn
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	06/18/24 0:00	asn
Total Alkalinity		1	546		*	mg/L	2	20	06/18/24 0:00	asn
Cation-Anion Balance	Calculation									
Cation-Anion Balance			2.7			%			07/09/24 0:00	calc
Sum of Anions			36			meq/L			07/09/24 0:00	calc
Sum of Cations			38			meq/L			07/09/24 0:00	calc
Chloride	SM 4500-Cl E-2011	20	848		*	mg/L	20	40	06/13/24 11:30	jqr
Fluoride	SM 4500-F C-2011	1	2.23			mg/L	0.15	0.35	06/28/24 0:27	jck
Hardness as CaCO ₃ (dissolved)	Calculation (SM 2340 B-2011)		54			mg/L	0.5	10	07/09/24 0:00	calc
Nitrate as N	Calculation (NO ₃ NO ₂ -NO ₂)		0.363			mg/L	0.02	0.1	07/09/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	0.380			mg/L	0.02	0.1	06/12/24 0:47	pjb
Nitrite as N	EPA 353.2	1	0.017	B	*	mg/L	0.01	0.05	06/12/24 0:47	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	2	2230			mg/L	40	80	06/14/24 14:37	ptw
Sulfate	ASTM D516-07/-11/-16	5	77.6		*	mg/L	5	25	06/14/24 9:36	jqr
TDS (calculated)	Calculation		2120			mg/L			07/09/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.05						07/09/24 0:00	calc


Report Header Explanations

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

QC Sample Types

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

QC Sample Type Explanations

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

ACZ Qualifiers (Qual)

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

Method References

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

Comments

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

For a complete list of ACZ's Extended Qualifiers, please click:

<https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf>

GCC

ACZ Project ID: **L88256**

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
WG591371													
WG591371PBW1	PBW	06/18/24 17:47				4.8	mg/L		-20	20			
WG591371LCSW2	LCSW	06/18/24 17:57	WC240612-2	820.0001		766.4	mg/L	93	90	110			
WG591371LCSW4	LCSW	06/18/24 20:06	WC240612-2	820.0001		768.1	mg/L	94	90	110			
WG591371PBW2	PBW	06/18/24 20:13				30	mg/L		-20	20			B4 BF
WG591371LCSW6	LCSW	06/18/24 22:30	WC240612-2	820.0001		776.9	mg/L	95	90	110			
WG591371PBW3	PBW	06/18/24 22:37				25.6	mg/L		-20	20			B4 B7
L88256-05DUP	DUP	06/18/24 23:48			535	550.3	mg/L				3	20	
L88260-07DUP	DUP	06/19/24 1:07			615	621.4	mg/L				1	20	
WG591371LCSW8	LCSW	06/19/24 1:18	WC240612-2	820.0001		770.5	mg/L	94	90	110			
WG591371PBW4	PBW	06/19/24 1:26				27.8	mg/L		-20	20			B4 B7 BF
WG591371LCSW10	LCSW	06/19/24 3:53	WC240612-2	820.0001		781.7	mg/L	95	90	110			
WG591371PBW5	PBW	06/19/24 4:01				26.1	mg/L		-20	20			B4 BF
WG591371LCSW12	LCSW	06/19/24 5:12	WC240612-2	820.0001		789.2	mg/L	96	90	110			

Aluminum, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592055													
WG592055ICV	ICV	06/27/24 22:41	II240515-3	2		2.013	mg/L	101	95	105			
WG592055ICB	ICB	06/27/24 22:47				U	mg/L		-0.15	0.15			
WG592055PQV	PQV	06/27/24 22:50	II240624-6	.25025		.249	mg/L	100	70	130			
WG592055SIC	SIC	06/27/24 22:53	II240624-2	200.75025		205.4	mg/L	102	1	200			
WG592055LFB	LFB	06/27/24 22:59	II240617-1	1.001		1.062	mg/L	106	85	115			
WG592055CCV1	CCV	06/27/24 23:30	II240614-2	1		1.002	mg/L	100	90	110			
WG592055CCB1	CCB	06/27/24 23:33				U	mg/L		-0.15	0.15			
WG592055CCV2	CCV	06/28/24 0:07	II240614-2	1		.985	mg/L	99	90	110			
WG592055CCB2	CCB	06/28/24 0:10				U	mg/L		-0.15	0.15			
L88256-02AS	AS	06/28/24 0:19	II240617-1	1.001	U	1.088	mg/L	109	85	115			
L88256-02ASD	ASD	06/28/24 0:22	II240617-1	1.001	U	1.092	mg/L	109	85	115	0	20	
WG592055CCV3	CCV	06/28/24 0:28	II240614-2	1		.979	mg/L	98	90	110			
WG592055CCB3	CCB	06/28/24 0:31				U	mg/L		-0.15	0.15			
WG592136													
WG592136ICV	ICV	06/29/24 0:42	II240515-3	2		2.06	mg/L	103	95	105			
WG592136ICB	ICB	06/29/24 0:47				U	mg/L		-0.15	0.15			
WG592136PQV	PQV	06/29/24 0:50	II240624-6	.25025		.225	mg/L	90	70	130			
WG592136SIC	SIC	06/29/24 0:52	II240624-2	200.75025		201	mg/L	100	1	200			
WG592136LFB	LFB	06/29/24 0:57	II240617-1	1.001		1.04	mg/L	104	85	115			
WG592136CCV1	CCV	06/29/24 1:21	II240614-2	1		1.01	mg/L	101	90	110			
WG592136CCB1	CCB	06/29/24 1:24				U	mg/L		-0.15	0.15			
WG592136CCV2	CCV	06/29/24 1:50	II240614-2	1		1.03	mg/L	103	90	110			
WG592136CCB2	CCB	06/29/24 1:53				U	mg/L		-0.15	0.15			
L88288-03AS	AS	06/29/24 2:00	II240617-1	1.001	.3	1.49	mg/L	119	85	115			M1
L88288-03ASD	ASD	06/29/24 2:02	II240617-1	1.001	.3	1.47	mg/L	117	85	115	1	20	M1
WG592136CCV3	CCV	06/29/24 2:07	II240614-2	1		.948	mg/L	95	90	110			
WG592136CCB3	CCB	06/29/24 2:09				U	mg/L		-0.15	0.15			

GCC

ACZ Project ID: **L88256**

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

EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG591013													
WG591013ICV	ICV	06/13/24 13:08	MS240404-4	.05		.04977	mg/L	100	90	110			
WG591013ICB	ICB	06/13/24 13:11				U	mg/L		-0.00044	0.00044			
WG591013LFB	LFB	06/13/24 13:13	MS240514-1	.0501		.05169	mg/L	103	85	115			
L88221-05AS	AS	06/13/24 13:22	MS240514-1	.0501	.00021	.05526	mg/L	110	70	130			
L88221-05ASD	ASD	06/13/24 13:25	MS240514-1	.0501	.00021	.05403	mg/L	107	70	130	2	20	
WG591013CCV1	CCV	06/13/24 13:36	MS240421-5	.1002		.1015	mg/L	101	90	110			
WG591013CCB1	CCB	06/13/24 13:39				U	mg/L		-0.0006	0.0006			
L88256-05AS	AS	06/13/24 13:57	MS240514-1	.0501	U	.0553	mg/L	110	70	130			
L88256-05ASD	ASD	06/13/24 14:00	MS240514-1	.0501	U	.05928	mg/L	118	70	130	7	20	
WG591013CCV2	CCV	06/13/24 14:04	MS240421-5	.1002		.10298	mg/L	103	90	110			
WG591013CCB2	CCB	06/13/24 14:06				U	mg/L		-0.0006	0.0006			
WG591013CCV3	CCV	06/13/24 14:20	MS240421-5	.1002		.10276	mg/L	103	90	110			
WG591013CCB3	CCB	06/13/24 14:23				U	mg/L		-0.0006	0.0006			

Beryllium, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592136													
WG592136ICV	ICV	06/29/24 0:42	II240515-3	2		2.03	mg/L	102	95	105			
WG592136ICB	ICB	06/29/24 0:47				U	mg/L		-0.03	0.03			
WG592136PQV	PQV	06/29/24 0:50	II240624-6	.0501		.046	mg/L	92	70	130			
WG592136SIC	SIC	06/29/24 0:52	11240624-2	.1002		.118	mg/L	118	80	120			
WG592136LFB	LFB	06/29/24 0:57	II240617-1	.501		.525	mg/L	105	85	115			
WG592136CCV1	CCV	06/29/24 1:21	II240614-2	1		1.01	mg/L	101	90	110			
WG592136CCB1	CCB	06/29/24 1:24				U	mg/L		-0.03	0.03			
WG592136CCV2	CCV	06/29/24 1:50	II240614-2	1		1.03	mg/L	103	90	110			
WG592136CCB2	CCB	06/29/24 1:53				U	mg/L		-0.03	0.03			
L88288-03AS	AS	06/29/24 2:00	II240617-1	.501	U	.47	mg/L	94	85	115			
L88288-03ASD	ASD	06/29/24 2:02	II240617-1	.501	U	.48	mg/L	96	85	115	2	20	
WG592136CCV3	CCV	06/29/24 2:07	II240614-2	1		.949	mg/L	95	90	110			
WG592136CCB3	CCB	06/29/24 2:09				U	mg/L		-0.03	0.03			

WG592450

WG592450ICV	ICV	07/08/24 21:19	II240627-5	2		1.944	mg/L	97	95	105			
WG592450ICB	ICB	07/08/24 21:25				U	mg/L		-0.03	0.03			
WG592450PQV	PQV	07/08/24 21:28	II240624-6	.0501		.052	mg/L	104	70	130			
WG592450SIC	SIC	07/08/24 21:31	11240624-2	.1002		.1	mg/L	100	80	120			
WG592450LFB	LFB	07/08/24 21:37	II240702-3	.501		.517	mg/L	103	85	115			
WG592450CCV1	CCV	07/08/24 22:07	II240628-2	1		.955	mg/L	96	90	110			
WG592450CCB1	CCB	07/08/24 22:10				U	mg/L		-0.03	0.03			
L88170-11AS	AS	07/08/24 22:26	II240702-3	.501	U	.427	mg/L	85	85	115			
L88170-11ASD	ASD	07/08/24 22:29	II240702-3	.501	U	.502	mg/L	100	85	115	16	20	
WG592450CCV2	CCV	07/08/24 22:44	II240628-2	1		.954	mg/L	95	90	110			
WG592450CCB2	CCB	07/08/24 22:47				U	mg/L		-0.03	0.03			
WG592450CCV3	CCV	07/08/24 23:05	II240628-2	1		.954	mg/L	95	90	110			
WG592450CCB3	CCB	07/08/24 23:08				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: **L88256**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592055													
WG592055ICV	ICV	06/27/24 22:41	II240515-3	2		2.078	mg/L	104	95	105			
WG592055ICB	ICB	06/27/24 22:47				U	mg/L		-0.09	0.09			
WG592055PQV	PQV	06/27/24 22:50	II240624-6	.1001		.111	mg/L	111	70	130			
WG592055SIC	SIC	06/27/24 22:53	11240624-2	.1001		.112	mg/L	112	80	120			
WG592055LFB	LFB	06/27/24 22:59	II240617-1	.5005		.555	mg/L	111	85	115			
WG592055CCV1	CCV	06/27/24 23:30	II240614-2	1		1.023	mg/L	102	90	110			
WG592055CCB1	CCB	06/27/24 23:33				U	mg/L		-0.09	0.09			
WG592055CCV2	CCV	06/28/24 0:07	II240614-2	1		1.007	mg/L	101	90	110			
WG592055CCB2	CCB	06/28/24 0:10				U	mg/L		-0.09	0.09			
L88256-02AS	AS	06/28/24 0:19	II240617-1	.5005	.114	.658	mg/L	109	85	115			
L88256-02ASD	ASD	06/28/24 0:22	II240617-1	.5005	.114	.618	mg/L	101	85	115	6	20	
WG592055CCV3	CCV	06/28/24 0:28	II240614-2	1		1.017	mg/L	102	90	110			
WG592055CCB3	CCB	06/28/24 0:31				U	mg/L		-0.09	0.09			
WG592136													
WG592136ICV	ICV	06/29/24 0:42	II240515-3	2		2.06	mg/L	103	95	105			
WG592136ICB	ICB	06/29/24 0:47				U	mg/L		-0.09	0.09			
WG592136PQV	PQV	06/29/24 0:50	II240624-6	.1001		.109	mg/L	109	70	130			
WG592136SIC	SIC	06/29/24 0:52	11240624-2	.1001		.098	mg/L	98	80	120			
WG592136LFB	LFB	06/29/24 0:57	II240617-1	.5005		.537	mg/L	107	85	115			
WG592136CCV1	CCV	06/29/24 1:21	II240614-2	1		1.04	mg/L	104	90	110			
WG592136CCB1	CCB	06/29/24 1:24				U	mg/L		-0.09	0.09			
WG592136CCV2	CCV	06/29/24 1:50	II240614-2	1		1.09	mg/L	109	90	110			
WG592136CCB2	CCB	06/29/24 1:53				U	mg/L		-0.09	0.09			
L88288-03AS	AS	06/29/24 2:00	II240617-1	.5005	U	.501	mg/L	100	85	115			
L88288-03ASD	ASD	06/29/24 2:02	II240617-1	.5005	U	.472	mg/L	94	85	115	6	20	
WG592136CCV3	CCV	06/29/24 2:07	II240614-2	1		1.04	mg/L	104	90	110			
WG592136CCB3	CCB	06/29/24 2:09				U	mg/L		-0.09	0.09			

Cadmium, dissolved

EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG591013													
WG591013ICV	ICV	06/13/24 13:08	MS240404-4	.05		.050777	mg/L	102	90	110			
WG591013ICB	ICB	06/13/24 13:11				U	mg/L		-0.00011	0.00011			
WG591013LFB	LFB	06/13/24 13:13	MS240514-1	.05005		.05127	mg/L	102	85	115			
L88221-05AS	AS	06/13/24 13:22	MS240514-1	.05005	.000268	.052511	mg/L	104	70	130			
L88221-05ASD	ASD	06/13/24 13:25	MS240514-1	.05005	.000268	.051585	mg/L	103	70	130	2	20	
WG591013CCV1	CCV	06/13/24 13:36	MS240421-5	.1001		.102407	mg/L	102	90	110			
WG591013CCB1	CCB	06/13/24 13:39				U	mg/L		-0.00015	0.00015			
L88256-05AS	AS	06/13/24 13:57	MS240514-1	.05005	U	.050685	mg/L	101	70	130			
L88256-05ASD	ASD	06/13/24 14:00	MS240514-1	.05005	U	.052916	mg/L	106	70	130	4	20	
WG591013CCV2	CCV	06/13/24 14:04	MS240421-5	.1001		.100923	mg/L	101	90	110			
WG591013CCB2	CCB	06/13/24 14:06				U	mg/L		-0.00015	0.00015			
WG591013CCV3	CCV	06/13/24 14:20	MS240421-5	.1001		.103137	mg/L	103	90	110			
WG591013CCB3	CCB	06/13/24 14:23				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: **L88256**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592055													
WG592055ICV	ICV	06/27/24 22:41	II240515-3	100		97.84	mg/L	98	95	105			
WG592055ICB	ICB	06/27/24 22:47				U	mg/L		-0.3	0.3			
WG592055PQV	PQV	06/27/24 22:50	II240624-6	.5025		.51	mg/L	101	70	130			
WG592055SIC	SIC	06/27/24 22:53	11240624-2	201.5025		199.7	mg/L	99	1	200			
WG592055LFB	LFB	06/27/24 22:59	II240617-1	67.93628		70.22	mg/L	103	85	115			
WG592055CCV1	CCV	06/27/24 23:30	II240614-2	50		48.26	mg/L	97	90	110			
WG592055CCB1	CCB	06/27/24 23:33				U	mg/L		-0.3	0.3			
WG592055CCV2	CCV	06/28/24 0:07	II240614-2	50		48.04	mg/L	96	90	110			
WG592055CCB2	CCB	06/28/24 0:10				U	mg/L		-0.3	0.3			
L88256-02AS	AS	06/28/24 0:19	II240617-1	67.93628	21.2	91.35	mg/L	103	85	115			
L88256-02ASD	ASD	06/28/24 0:22	II240617-1	67.93628	21.2	90.73	mg/L	102	85	115	1	20	
WG592055CCV3	CCV	06/28/24 0:28	II240614-2	50		48.01	mg/L	96	90	110			
WG592055CCB3	CCB	06/28/24 0:31				U	mg/L		-0.3	0.3			
WG592136													
WG592136ICV	ICV	06/29/24 0:42	II240515-3	100		97.8	mg/L	98	95	105			
WG592136ICB	ICB	06/29/24 0:47				U	mg/L		-0.3	0.3			
WG592136PQV	PQV	06/29/24 0:50	II240624-6	.5025		.5	mg/L	100	70	130			
WG592136SIC	SIC	06/29/24 0:52	11240624-2	201.5025		191	mg/L	95	1	200			
WG592136LFB	LFB	06/29/24 0:57	II240617-1	67.93628		66.5	mg/L	98	85	115			
WG592136CCV1	CCV	06/29/24 1:21	II240614-2	50		48.7	mg/L	97	90	110			
WG592136CCB1	CCB	06/29/24 1:24				.15	mg/L		-0.3	0.3			
WG592136CCV2	CCV	06/29/24 1:50	II240614-2	50		51.1	mg/L	102	90	110			
WG592136CCB2	CCB	06/29/24 1:53				.1	mg/L		-0.3	0.3			
L88288-03AS	AS	06/29/24 2:00	II240617-1	67.93628	10	75.7	mg/L	97	85	115			
L88288-03ASD	ASD	06/29/24 2:02	II240617-1	67.93628	10	74	mg/L	94	85	115	2	20	
WG592136CCV3	CCV	06/29/24 2:07	II240614-2	50		47.3	mg/L	95	90	110			
WG592136CCB3	CCB	06/29/24 2:09				U	mg/L		-0.3	0.3			

GCC

ACZ Project ID: **L88256**

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

SM 4500-Cl E-2011

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG591032													
WG591032ICV	ICV	06/13/24 10:18	WI231211-1	39.96		38.37	mg/L	96	90	110			
WG591032ICB	ICB	06/13/24 10:18				U	mg/L						
WG591032CCV1	CCV	06/13/24 11:00	WI240606-12	25		24.48	mg/L	98	90	110			
WG591032CCB1	CCB	06/13/24 11:00				U	mg/L						
WG591032PQV	PQV	06/13/24 11:01	WI240606-13	2		1.96	mg/L	98	50	150			
WG591032LFB	LFB	06/13/24 11:01	WI231211-4	20.02		20.57	mg/L	103	90	110			
L88223-01AS	AS	06/13/24 11:02	WI231211-4	20.02	4.91	25.42	mg/L	102	90	110			
L88248-01DUP	DUP	06/13/24 11:03			6.02	6.02	mg/L				0	20	RA
WG591032CCV2	CCV	06/13/24 11:04	WI240606-12	25		24.71	mg/L	99	90	110			
WG591032CCB2	CCB	06/13/24 11:04				U	mg/L						
WG591032CCV3	CCV	06/13/24 11:11	WI240606-12	25		24.65	mg/L	99	90	110			
WG591032CCB3	CCB	06/13/24 11:12				U	mg/L						
L88262-04AS	AS	06/13/24 11:13	WI231211-4	20.02	U	20.82	mg/L	104	90	110			
L88262-05DUP	DUP	06/13/24 11:14			U	U	mg/L				0	20	RA
WG591032CCV4	CCV	06/13/24 11:20	WI240606-12	25		24.69	mg/L	99	90	110			
WG591032CCB4	CCB	06/13/24 11:20				U	mg/L						
WG591032CCV5	CCV	06/13/24 11:21	WI240606-12	25		24.73	mg/L	99	90	110			
WG591032CCB5	CCB	06/13/24 11:21				U	mg/L						
WG591032CCV6	CCV	06/13/24 11:29	WI240606-12	25		24.62	mg/L	98	90	110			
WG591032CCB6	CCB	06/13/24 11:30				U	mg/L						
WG591032CCV7	CCV	06/13/24 11:30	WI240606-12	25		24.65	mg/L	99	90	110			
WG591032CCB7	CCB	06/13/24 11:31				U	mg/L						

GCC

ACZ Project ID: **L88256**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592055													
WG592055ICV	ICV	06/27/24 22:41	II240515-3	2		1.961	mg/L	98	95	105			
WG592055ICB	ICB	06/27/24 22:47				U	mg/L		-0.06	0.06			
WG592055PQV	PQV	06/27/24 22:50	II240624-6	.05005		.056	mg/L	112	70	130			
WG592055SIC	SIC	06/27/24 22:53	11240624-2	.1001		.105	mg/L	105	80	120			
WG592055LFB	LFB	06/27/24 22:59	II240617-1	.5005		.52	mg/L	104	85	115			
WG592055CCV1	CCV	06/27/24 23:30	II240614-2	1		.967	mg/L	97	90	110			
WG592055CCB1	CCB	06/27/24 23:33				U	mg/L		-0.06	0.06			
WG592055CCV2	CCV	06/28/24 0:07	II240614-2	1		.957	mg/L	96	90	110			
WG592055CCB2	CCB	06/28/24 0:10				U	mg/L		-0.06	0.06			
L88256-02AS	AS	06/28/24 0:19	II240617-1	.5005	U	.516	mg/L	103	85	115			
L88256-02ASD	ASD	06/28/24 0:22	II240617-1	.5005	U	.483	mg/L	97	85	115	7	20	
WG592055CCV3	CCV	06/28/24 0:28	II240614-2	1		.962	mg/L	96	90	110			
WG592055CCB3	CCB	06/28/24 0:31				U	mg/L		-0.06	0.06			
WG592136													
WG592136ICV	ICV	06/29/24 0:42	II240515-3	2		1.92	mg/L	96	95	105			
WG592136ICB	ICB	06/29/24 0:47				U	mg/L		-0.06	0.06			
WG592136PQV	PQV	06/29/24 0:50	II240624-6	.05005		.048	mg/L	96	70	130			
WG592136SIC	SIC	06/29/24 0:52	11240624-2	.1001		.087	mg/L	87	80	120			
WG592136LFB	LFB	06/29/24 0:57	II240617-1	.5005		.495	mg/L	99	85	115			
WG592136CCV1	CCV	06/29/24 1:21	II240614-2	1		.969	mg/L	97	90	110			
WG592136CCB1	CCB	06/29/24 1:24				U	mg/L		-0.06	0.06			
WG592136CCV2	CCV	06/29/24 1:50	II240614-2	1		1.01	mg/L	101	90	110			
WG592136CCB2	CCB	06/29/24 1:53				U	mg/L		-0.06	0.06			
L88288-03AS	AS	06/29/24 2:00	II240617-1	.5005	U	.465	mg/L	93	85	115			
L88288-03ASD	ASD	06/29/24 2:02	II240617-1	.5005	U	.436	mg/L	87	85	115	6	20	
WG592136CCV3	CCV	06/29/24 2:07	II240614-2	1		.974	mg/L	97	90	110			
WG592136CCB3	CCB	06/29/24 2:09				U	mg/L		-0.06	0.06			

Cobalt, dissolved

EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG591013													
WG591013ICV	ICV	06/13/24 13:08	MS240404-4	.05		.052116	mg/L	104	90	110			
WG591013ICB	ICB	06/13/24 13:11				U	mg/L		-0.00011	0.00011			
WG591013LFB	LFB	06/13/24 13:13	MS240514-1	.05005		.052223	mg/L	104	85	115			
L88221-05AS	AS	06/13/24 13:22	MS240514-1	.05005	.000844	.051828	mg/L	102	70	130			
L88221-05ASD	ASD	06/13/24 13:25	MS240514-1	.05005	.000844	.051225	mg/L	101	70	130	1	20	
WG591013CCV1	CCV	06/13/24 13:36	MS240421-5	.1001		.102578	mg/L	102	90	110			
WG591013CCB1	CCB	06/13/24 13:39				U	mg/L		-0.00015	0.00015			
L88256-05AS	AS	06/13/24 13:57	MS240514-1	.05005	.000105	.050119	mg/L	100	70	130			
L88256-05ASD	ASD	06/13/24 14:00	MS240514-1	.05005	.000105	.05253	mg/L	105	70	130	5	20	
WG591013CCV2	CCV	06/13/24 14:04	MS240421-5	.1001		.102344	mg/L	102	90	110			
WG591013CCB2	CCB	06/13/24 14:06				U	mg/L		-0.00015	0.00015			
WG591013CCV3	CCV	06/13/24 14:20	MS240421-5	.1001		.101951	mg/L	102	90	110			
WG591013CCB3	CCB	06/13/24 14:23				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: **L88256**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592136													
WG592136ICV	ICV	06/29/24 0:42	II240515-3	2		1.99	mg/L	100	95	105			
WG592136ICB	ICB	06/29/24 0:47				U	mg/L		-0.03	0.03			
WG592136PQV	PQV	06/29/24 0:50	II240624-6	.05005		.047	mg/L	94	70	130			
WG592136SIC	SIC	06/29/24 0:52	11240624-2	.1001		.084	mg/L	84	80	120			
WG592136LFB	LFB	06/29/24 0:57	II240617-1	.5005		.552	mg/L	110	85	115			
WG592136CCV1	CCV	06/29/24 1:21	II240614-2	1		.981	mg/L	98	90	110			
WG592136CCB1	CCB	06/29/24 1:24				U	mg/L		-0.03	0.03			
WG592136CCV2	CCV	06/29/24 1:50	II240614-2	1		1.01	mg/L	101	90	110			
WG592136CCB2	CCB	06/29/24 1:53				U	mg/L		-0.03	0.03			
L88288-03AS	AS	06/29/24 2:00	II240617-1	.5005	U	.53	mg/L	106	85	115			
L88288-03ASD	ASD	06/29/24 2:02	II240617-1	.5005	U	.526	mg/L	105	85	115	1	20	
WG592136CCV3	CCV	06/29/24 2:07	II240614-2	1		.936	mg/L	94	90	110			
WG592136CCB3	CCB	06/29/24 2:09				U	mg/L		-0.03	0.03			
WG592131													
WG592131ICV	ICV	07/02/24 18:48	II240515-3	2		1.971	mg/L	99	95	105			
WG592131ICB	ICB	07/02/24 18:54				U	mg/L		-0.03	0.03			
WG592131PQV	PQV	07/02/24 18:57	II240624-6	.05005		.052	mg/L	104	70	130			
WG592131SIC	SIC	07/02/24 19:00	11240624-2	.1001		.095	mg/L	95	80	120			
WG592131LFB	LFB	07/02/24 19:06	II240617-1	.5005		.576	mg/L	115	85	115			
L88170-01AS	AS	07/02/24 19:18	II240617-1	.5005	U	.557	mg/L	111	85	115			
L88170-01ASD	ASD	07/02/24 19:21	II240617-1	.5005	U	.569	mg/L	114	85	115	2	20	
WG592131CCV1	CCV	07/02/24 19:36	II240614-2	1		.974	mg/L	97	90	110			
WG592131CCB1	CCB	07/02/24 19:39				U	mg/L		-0.03	0.03			
WG592131CCV2	CCV	07/02/24 20:13	II240614-2	1		.973	mg/L	97	90	110			
WG592131CCB2	CCB	07/02/24 20:16				U	mg/L		-0.03	0.03			
WG592131CCV3	CCV	07/02/24 20:34	II240614-2	1		.972	mg/L	97	90	110			
WG592131CCB3	CCB	07/02/24 20:37				U	mg/L		-0.03	0.03			

Fluoride

SM 4500-F C-2011

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592092													
WG592092ICV	ICV	06/27/24 22:08	WC240626-1	2		2.02	mg/L	101	90	110			
WG592092ICB	ICB	06/27/24 22:16				U	mg/L		-0.3	0.3			
WG592092PQV	PQV	06/27/24 22:19	WC240614-4	.35		.35	mg/L	100	50	150			
WG592092LFB1	LFB	06/27/24 22:22	WC240411-1	5		5.02	mg/L	100	90	110			
WG592092CCV1	CCV	06/27/24 23:09	WC240626-1	2		1.993	mg/L	100	90	110			
WG592092CCB1	CCB	06/27/24 23:17				U	mg/L		-0.3	0.3			
L88174-01AS	AS	06/27/24 23:37	WC240411-1	5	1.67	6.57	mg/L	98	90	110			
L88174-01ASD	ASD	06/27/24 23:41	WC240411-1	5	1.67	6.51	mg/L	97	90	110	1	20	
WG592092CCV2	CCV	06/28/24 0:01	WC240626-1	2		2.081	mg/L	104	90	110			
WG592092CCB2	CCB	06/28/24 0:09				U	mg/L		-0.3	0.3			
WG592092LFB2	LFB	06/28/24 0:31	WC240411-1	5		5.07	mg/L	101	90	110			
WG592092CCV3	CCV	06/28/24 0:48	WC240626-1	2		2.022	mg/L	101	90	110			
WG592092CCB3	CCB	06/28/24 0:56				U	mg/L		-0.3	0.3			
WG592092CCV4	CCV	06/28/24 1:48	WC240626-1	2		2.071	mg/L	104	90	110			
WG592092CCB4	CCB	06/28/24 1:54				U	mg/L		-0.3	0.3			
WG592092CCV5	CCV	06/28/24 2:39	WC240626-1	2		1.993	mg/L	100	90	110			
WG592092CCB5	CCB	06/28/24 2:47				U	mg/L		-0.3	0.3			

GCC

ACZ Project ID: **L88256**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592055													
WG592055ICV	ICV	06/27/24 22:41	II240515-3	2		1.973	mg/L	99	95	105			
WG592055ICB	ICB	06/27/24 22:47				U	mg/L		-0.18	0.18			
WG592055PQV	PQV	06/27/24 22:50	II240624-6	.15045		.158	mg/L	105	70	130			
WG592055SIC	SIC	06/27/24 22:53	11240624-2	200.75045		196.1	mg/L	98	1	200			
WG592055LFB	LFB	06/27/24 22:59	II240617-1	1.003		1.052	mg/L	105	85	115			
WG592055CCV1	CCV	06/27/24 23:30	II240614-2	1		.986	mg/L	99	90	110			
WG592055CCB1	CCB	06/27/24 23:33				U	mg/L		-0.18	0.18			
WG592055CCV2	CCV	06/28/24 0:07	II240614-2	1		.976	mg/L	98	90	110			
WG592055CCB2	CCB	06/28/24 0:10				U	mg/L		-0.18	0.18			
L88256-02AS	AS	06/28/24 0:19	II240617-1	1.003	U	1.106	mg/L	110	85	115			
L88256-02ASD	ASD	06/28/24 0:22	II240617-1	1.003	U	1.033	mg/L	103	85	115	7	20	
WG592055CCV3	CCV	06/28/24 0:28	II240614-2	1		.976	mg/L	98	90	110			
WG592055CCB3	CCB	06/28/24 0:31				U	mg/L		-0.18	0.18			
WG592136													
WG592136ICV	ICV	06/29/24 0:42	II240515-3	2		1.95	mg/L	98	95	105			
WG592136ICB	ICB	06/29/24 0:47				U	mg/L		-0.18	0.18			
WG592136PQV	PQV	06/29/24 0:50	II240624-6	.15045		.155	mg/L	103	70	130			
WG592136SIC	SIC	06/29/24 0:52	11240624-2	200.75045		180	mg/L	90	1	200			
WG592136LFB	LFB	06/29/24 0:57	II240617-1	1.003		1.03	mg/L	103	85	115			
WG592136CCV1	CCV	06/29/24 1:21	II240614-2	1		.989	mg/L	99	90	110			
WG592136CCB1	CCB	06/29/24 1:24				U	mg/L		-0.18	0.18			
WG592136CCV2	CCV	06/29/24 1:50	II240614-2	1		1.03	mg/L	103	90	110			
WG592136CCB2	CCB	06/29/24 1:53				U	mg/L		-0.18	0.18			
L88288-03AS	AS	06/29/24 2:00	II240617-1	1.003	.365	1.37	mg/L	100	85	115			
L88288-03ASD	ASD	06/29/24 2:02	II240617-1	1.003	.365	1.34	mg/L	97	85	115	2	20	
WG592136CCV3	CCV	06/29/24 2:07	II240614-2	1		.953	mg/L	95	90	110			
WG592136CCB3	CCB	06/29/24 2:09				U	mg/L		-0.18	0.18			

Lead, dissolved

EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG591013													
WG591013ICV	ICV	06/13/24 13:08	MS240404-4	.05		.05037	mg/L	101	90	110			
WG591013ICB	ICB	06/13/24 13:11				U	mg/L		-0.00022	0.00022			
WG591013LFB	LFB	06/13/24 13:13	MS240514-1	.05005		.05068	mg/L	101	85	115			
L88221-05AS	AS	06/13/24 13:22	MS240514-1	.05005	U	.05212	mg/L	104	70	130			
L88221-05ASD	ASD	06/13/24 13:25	MS240514-1	.05005	U	.05121	mg/L	102	70	130	2	20	
WG591013CCV1	CCV	06/13/24 13:36	MS240421-5	.25025		.25929	mg/L	104	90	110			
WG591013CCB1	CCB	06/13/24 13:39				.0001	mg/L		-0.0003	0.0003			
L88256-05AS	AS	06/13/24 13:57	MS240514-1	.05005	U	.05274	mg/L	105	70	130			
L88256-05ASD	ASD	06/13/24 14:00	MS240514-1	.05005	U	.05531	mg/L	111	70	130	5	20	
WG591013CCV2	CCV	06/13/24 14:04	MS240421-5	.25025		.25883	mg/L	103	90	110			
WG591013CCB2	CCB	06/13/24 14:06				U	mg/L		-0.0003	0.0003			
WG591013CCV3	CCV	06/13/24 14:20	MS240421-5	.25025		.25758	mg/L	103	90	110			
WG591013CCB3	CCB	06/13/24 14:23				U	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: **L88256**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592055													
WG592055ICV	ICV	06/27/24 22:41	II240515-3	2		1.9572	mg/L	98	95	105			
WG592055ICB	ICB	06/27/24 22:47				U	mg/L		-0.024	0.024			
WG592055PQV	PQV	06/27/24 22:50	II240624-6	.04		.0431	mg/L	108	70	130			
WG592055SIC	SIC	06/27/24 22:53	11240624-2	.1		.1075	mg/L	108	80	120			
WG592055LFB	LFB	06/27/24 22:59	II240617-1	1		1.014	mg/L	101	85	115			
WG592055CCV1	CCV	06/27/24 23:30	II240614-2	1		.9552	mg/L	96	90	110			
WG592055CCB1	CCB	06/27/24 23:33				U	mg/L		-0.024	0.024			
WG592055CCV2	CCV	06/28/24 0:07	II240614-2	1		.9469	mg/L	95	90	110			
WG592055CCB2	CCB	06/28/24 0:10				U	mg/L		-0.024	0.024			
L88256-02AS	AS	06/28/24 0:19	II240617-1	1	.0526	1.058	mg/L	101	85	115			
L88256-02ASD	ASD	06/28/24 0:22	II240617-1	1	.0526	1.037	mg/L	98	85	115	2	20	
WG592055CCV3	CCV	06/28/24 0:28	II240614-2	1		.9599	mg/L	96	90	110			
WG592055CCB3	CCB	06/28/24 0:31				U	mg/L		-0.024	0.024			
WG592136													
WG592136ICV	ICV	06/29/24 0:42	II240515-3	2		2	mg/L	100	95	105			
WG592136ICB	ICB	06/29/24 0:47				U	mg/L		-0.024	0.024			
WG592136PQV	PQV	06/29/24 0:50	II240624-6	.04		.034	mg/L	85	70	130			
WG592136SIC	SIC	06/29/24 0:52	11240624-2	.1		.0908	mg/L	91	80	120			
WG592136LFB	LFB	06/29/24 0:57	II240617-1	1		.98	mg/L	98	85	115			
WG592136CCV1	CCV	06/29/24 1:21	II240614-2	1		.965	mg/L	97	90	110			
WG592136CCB1	CCB	06/29/24 1:24				U	mg/L		-0.024	0.024			
WG592136CCV2	CCV	06/29/24 1:50	II240614-2	1		.999	mg/L	100	90	110			
WG592136CCB2	CCB	06/29/24 1:53				U	mg/L		-0.024	0.024			
L88288-03AS	AS	06/29/24 2:00	II240617-1	1	U	.951	mg/L	95	85	115			
L88288-03ASD	ASD	06/29/24 2:02	II240617-1	1	U	.936	mg/L	94	85	115	2	20	
WG592136CCV3	CCV	06/29/24 2:07	II240614-2	1		.921	mg/L	92	90	110			
WG592136CCB3	CCB	06/29/24 2:09				U	mg/L		-0.024	0.024			

GCC

ACZ Project ID: **L88256**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592055													
WG592055ICV	ICV	06/27/24 22:41	II240515-3	100		97.95	mg/L	98	95	105			
WG592055ICB	ICB	06/27/24 22:47				U	mg/L		-0.6	0.6			
WG592055PQV	PQV	06/27/24 22:50	II240624-6	1.006		1.09	mg/L	108	70	130			
WG592055SIC	SIC	06/27/24 22:53	11240624-2	202.206		203.3	mg/L	101	1	200			
WG592055LFB	LFB	06/27/24 22:59	II240617-1	49.99866		51.98	mg/L	104	85	115			
WG592055CCV1	CCV	06/27/24 23:30	II240614-2	50		48.68	mg/L	97	90	110			
WG592055CCB1	CCB	06/27/24 23:33				U	mg/L		-0.6	0.6			
WG592055CCV2	CCV	06/28/24 0:07	II240614-2	50		48.17	mg/L	96	90	110			
WG592055CCB2	CCB	06/28/24 0:10				U	mg/L		-0.6	0.6			
L88256-02AS	AS	06/28/24 0:19	II240617-1	49.99866	6.89	59.42	mg/L	105	85	115			
L88256-02ASD	ASD	06/28/24 0:22	II240617-1	49.99866	6.89	59.38	mg/L	105	85	115	0	20	
WG592055CCV3	CCV	06/28/24 0:28	II240614-2	50		48.09	mg/L	96	90	110			
WG592055CCB3	CCB	06/28/24 0:31				U	mg/L		-0.6	0.6			
WG592172													
WG592172ICV	ICV	07/01/24 12:20	II240627-5	100		97.22	mg/L	97	95	105			
WG592172ICB	ICB	07/01/24 12:25				U	mg/L		-0.6	0.6			
WG592172PQV	PQV	07/01/24 12:29	II240624-6	1.006		1.05	mg/L	104	70	130			
WG592172SIC	SIC	07/01/24 12:32	11240624-2	202.206		200.4	mg/L	99	1	200			
WG592172LFB	LFB	07/01/24 12:38	II240617-1	49.99866		50.4	mg/L	101	85	115			
L88169-01AS	AS	07/01/24 13:02	II240617-1	49.99866	26.5	73.46	mg/L	94	85	115			
L88169-01ASD	ASD	07/01/24 13:05	II240617-1	49.99866	26.5	73.9	mg/L	95	85	115	1	20	
WG592172CCV1	CCV	07/01/24 13:08	II240628-2	50		46.74	mg/L	93	90	110			
WG592172CCB1	CCB	07/01/24 13:11				U	mg/L		-0.6	0.6			
WG592172CCV2	CCV	07/01/24 13:45	II240628-2	50		47.48	mg/L	95	90	110			
WG592172CCB2	CCB	07/01/24 13:48				U	mg/L		-0.6	0.6			
L88288-03AS	AS	07/01/24 13:57	II240617-1	49.99866	1.61	51.39	mg/L	100	85	115			
L88288-03ASD	ASD	07/01/24 14:00	II240617-1	49.99866	1.61	52.16	mg/L	101	85	115	1	20	
WG592172CCV3	CCV	07/01/24 14:06	II240628-2	50		48.38	mg/L	97	90	110			
WG592172CCB3	CCB	07/01/24 14:09				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: **L88256**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592055													
WG592055ICV	ICV	06/27/24 22:41	II240515-3	2		1.996	mg/L	100	95	105			
WG592055ICB	ICB	06/27/24 22:47				U	mg/L		-0.03	0.03			
WG592055PQV	PQV	06/27/24 22:50	II240624-6	.0502		.051	mg/L	102	70	130			
WG592055SIC	SIC	06/27/24 22:53	11240624-2	50.4502		49.38	mg/L	98	1	200			
WG592055LFB	LFB	06/27/24 22:59	II240617-1	.501		.54	mg/L	108	85	115			
WG592055CCV1	CCV	06/27/24 23:30	II240614-2	1		.994	mg/L	99	90	110			
WG592055CCB1	CCB	06/27/24 23:33				U	mg/L		-0.03	0.03			
WG592055CCV2	CCV	06/28/24 0:07	II240614-2	1		.987	mg/L	99	90	110			
WG592055CCB2	CCB	06/28/24 0:10				U	mg/L		-0.03	0.03			
L88256-02AS	AS	06/28/24 0:19	II240617-1	.501	.017	.551	mg/L	107	85	115			
L88256-02ASD	ASD	06/28/24 0:22	II240617-1	.501	.017	.519	mg/L	100	85	115	6	20	
WG592055CCV3	CCV	06/28/24 0:28	II240614-2	1		.989	mg/L	99	90	110			
WG592055CCB3	CCB	06/28/24 0:31				U	mg/L		-0.03	0.03			
WG592136													
WG592136ICV	ICV	06/29/24 0:42	II240515-3	2		1.95	mg/L	98	95	105			
WG592136ICB	ICB	06/29/24 0:47				U	mg/L		-0.03	0.03			
WG592136PQV	PQV	06/29/24 0:50	II240624-6	.0502		.049	mg/L	98	70	130			
WG592136SIC	SIC	06/29/24 0:52	11240624-2	50.4502		44.6	mg/L	88	1	200			
WG592136LFB	LFB	06/29/24 0:57	II240617-1	.501		.518	mg/L	103	85	115			
WG592136CCV1	CCV	06/29/24 1:21	II240614-2	1		.991	mg/L	99	90	110			
WG592136CCB1	CCB	06/29/24 1:24				U	mg/L		-0.03	0.03			
WG592136CCV2	CCV	06/29/24 1:50	II240614-2	1		1.04	mg/L	104	90	110			
WG592136CCB2	CCB	06/29/24 1:53				U	mg/L		-0.03	0.03			
L88288-03AS	AS	06/29/24 2:00	II240617-1	.501	.013	.494	mg/L	96	85	115			
L88288-03ASD	ASD	06/29/24 2:02	II240617-1	.501	.013	.466	mg/L	90	85	115	6	20	
WG592136CCV3	CCV	06/29/24 2:07	II240614-2	1		.993	mg/L	99	90	110			
WG592136CCB3	CCB	06/29/24 2:09				U	mg/L		-0.03	0.03			

Mercury, dissolved

EPA 245.1

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG591474													
WG591474ICV	ICV	06/21/24 11:33	HG240528-3	.005		.00486	mg/L	97	95	105			
WG591474ICB	ICB	06/21/24 11:34				U	mg/L		-0.0002	0.0002			
WG591474PQV	PQV	06/21/24 11:35	HG240619-5	.001001		.00097	mg/L	97	70	130			
WG591474LRB	LRB	06/21/24 11:36				U	mg/L		-0.00044	0.00044			
WG591474LFB	LFB	06/21/24 11:37	HG240619-6	.002002		.002	mg/L	100	85	115			
L88098-01LFM	LFM	06/21/24 11:39	HG240619-6	.002002	U	.00191	mg/L	95	85	115			
L88098-01LFMD	LFMD	06/21/24 11:40	HG240619-6	.002002	U	.0019	mg/L	95	85	115	1	20	
WG591474CCV1	CCV	06/21/24 11:44	HG240528-3	.005		.00534	mg/L	107	90	110			
WG591474CCB1	CCB	06/21/24 11:45				U	mg/L		-0.0002	0.0002			
WG591474CCV2	CCV	06/21/24 11:56	HG240528-3	.005		.00523	mg/L	105	90	110			
WG591474CCB2	CCB	06/21/24 11:57				U	mg/L		-0.0002	0.0002			
L88432-06LFM	LFM	06/21/24 12:02	HG240619-6	.002002	U	.00198	mg/L	99	85	115			
L88432-06LFMD	LFMD	06/21/24 12:03	HG240619-6	.002002	U	.00209	mg/L	104	85	115	5	20	
WG591474CCV3	CCV	06/21/24 12:04	HG240528-3	.005		.00525	mg/L	105	90	110			
WG591474CCB3	CCB	06/21/24 12:05				U	mg/L		-0.0002	0.0002			

GCC

ACZ Project ID: **L88256**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592055													
WG592055ICV	ICV	06/27/24 22:41	II240515-3	2.004		1.9388	mg/L	97	95	105			
WG592055ICB	ICB	06/27/24 22:47				U	mg/L		-0.024	0.024			
WG592055PQV	PQV	06/27/24 22:50	II240624-6	.04008		.0414	mg/L	103	70	130			
WG592055SIC	SIC	06/27/24 22:53	11240624-2	.1002		.0956	mg/L	95	80	120			
WG592055LFB	LFB	06/27/24 22:59	II240617-1	.501		.5044	mg/L	101	85	115			
WG592055CCV1	CCV	06/27/24 23:30	II240614-2	1.002		.9593	mg/L	96	90	110			
WG592055CCB1	CCB	06/27/24 23:33				U	mg/L		-0.024	0.024			
WG592055CCV2	CCV	06/28/24 0:07	II240614-2	1.002		.9503	mg/L	95	90	110			
WG592055CCB2	CCB	06/28/24 0:10				U	mg/L		-0.024	0.024			
L88256-02AS	AS	06/28/24 0:19	II240617-1	.501	U	.5094	mg/L	102	85	115			
L88256-02ASD	ASD	06/28/24 0:22	II240617-1	.501	U	.4741	mg/L	95	85	115	7	20	
WG592055CCV3	CCV	06/28/24 0:28	II240614-2	1.002		.9488	mg/L	95	90	110			
WG592055CCB3	CCB	06/28/24 0:31				U	mg/L		-0.024	0.024			
WG592136													
WG592136ICV	ICV	06/29/24 0:42	II240515-3	2.004		1.97	mg/L	98	95	105			
WG592136ICB	ICB	06/29/24 0:47				U	mg/L		-0.024	0.024			
WG592136PQV	PQV	06/29/24 0:50	II240624-6	.04008		.0432	mg/L	108	70	130			
WG592136SIC	SIC	06/29/24 0:52	11240624-2	.1002		.0906	mg/L	90	80	120			
WG592136LFB	LFB	06/29/24 0:57	II240617-1	.501		.51	mg/L	102	85	115			
WG592136CCV1	CCV	06/29/24 1:21	II240614-2	1.002		.99	mg/L	99	90	110			
WG592136CCB1	CCB	06/29/24 1:24				U	mg/L		-0.024	0.024			
WG592136CCV2	CCV	06/29/24 1:50	II240614-2	1.002		1.03	mg/L	103	90	110			
WG592136CCB2	CCB	06/29/24 1:53				U	mg/L		-0.024	0.024			
L88288-03AS	AS	06/29/24 2:00	II240617-1	.501	U	.477	mg/L	95	85	115			
L88288-03ASD	ASD	06/29/24 2:02	II240617-1	.501	U	.454	mg/L	91	85	115	5	20	
WG592136CCV3	CCV	06/29/24 2:07	II240614-2	1.002		.995	mg/L	99	90	110			
WG592136CCB3	CCB	06/29/24 2:09				U	mg/L		-0.024	0.024			

Nitrate/Nitrite as N

EPA 353.2

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG590907													
WG590907ICV	ICV	06/12/24 0:28	WI240403-6	2.415		2.315	mg/L	96	90	110			
WG590907ICB	ICB	06/12/24 0:29				U	mg/L		-0.02	0.02			
WG590907LFB	LFB	06/12/24 0:33	WI240228-17	2		2.009	mg/L	100	90	110			
L88256-01AS	AS	06/12/24 0:35	WI240228-17	2	U	2.015	mg/L	101	90	110			
L88256-02DUP	DUP	06/12/24 0:38			.753	.756	mg/L				0	20	
WG590907CCV1	CCV	06/12/24 0:43	WI240605-5	2		1.998	mg/L	100	90	110			
WG590907CCB1	CCB	06/12/24 0:46				U	mg/L		-0.02	0.02			
WG590907CCV2	CCV	06/12/24 1:00	WI240605-5	2		1.989	mg/L	99	90	110			
WG590907CCB2	CCB	06/12/24 1:03				U	mg/L		-0.02	0.02			
WG590907CCV3	CCV	06/12/24 1:13	WI240605-5	2		1.988	mg/L	99	90	110			
WG590907CCB3	CCB	06/12/24 1:16				U	mg/L		-0.02	0.02			

GCC

ACZ Project ID: **L88256**

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

EPA 353.2

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG590907													
WG590907ICV	ICV	06/12/24 0:28	WI240403-6	.608		.611	mg/L	100	90	110			
WG590907ICB	ICB	06/12/24 0:29				U	mg/L		-0.01	0.01			
WG590907LFB	LFB	06/12/24 0:33	WI240228-17	1		1.01	mg/L	101	90	110			
L88256-01AS	AS	06/12/24 0:35	WI240228-17	1	U	1.029	mg/L	103	90	110			
L88256-02DUP	DUP	06/12/24 0:38			.044	.045	mg/L				2	20	RA
WG590907CCV1	CCV	06/12/24 0:43	WI240605-5	1		1.009	mg/L	101	90	110			
WG590907CCB1	CCB	06/12/24 0:46				U	mg/L		-0.01	0.01			
WG590907CCV2	CCV	06/12/24 1:00	WI240605-5	1		1.013	mg/L	101	90	110			
WG590907CCB2	CCB	06/12/24 1:03				U	mg/L		-0.01	0.01			
WG590907CCV3	CCV	06/12/24 1:13	WI240605-5	1		1.017	mg/L	102	90	110			
WG590907CCB3	CCB	06/12/24 1:16				U	mg/L		-0.01	0.01			

Potassium, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592055													
WG592055ICV	ICV	06/27/24 22:41	II240515-3	20		19.61	mg/L	98	95	105			
WG592055ICB	ICB	06/27/24 22:47				U	mg/L		-1.5	1.5			
WG592055PQV	PQV	06/27/24 22:50	II240624-6	1.002		1.09	mg/L	109	70	130			
WG592055SIC	SIC	06/27/24 22:53	11240624-2	1.002		1.09	mg/L	109	80	120			
WG592055LFB	LFB	06/27/24 22:59	II240617-1	99.96008		102.8	mg/L	103	85	115			
WG592055CCV1	CCV	06/27/24 23:30	II240614-2	10		9.62	mg/L	96	90	110			
WG592055CCB1	CCB	06/27/24 23:33				U	mg/L		-1.5	1.5			
WG592055CCV2	CCV	06/28/24 0:07	II240614-2	10		9.58	mg/L	96	90	110			
WG592055CCB2	CCB	06/28/24 0:10				U	mg/L		-1.5	1.5			
L88256-02AS	AS	06/28/24 0:19	II240617-1	99.96008	3.26	107.5	mg/L	104	85	115			
L88256-02ASD	ASD	06/28/24 0:22	II240617-1	99.96008	3.26	106.9	mg/L	104	85	115	1	20	
WG592055CCV3	CCV	06/28/24 0:28	II240614-2	10		9.68	mg/L	97	90	110			
WG592055CCB3	CCB	06/28/24 0:31				U	mg/L		-1.5	1.5			
WG592136													
WG592136ICV	ICV	06/29/24 0:42	II240515-3	20		20.2	mg/L	101	95	105			
WG592136ICB	ICB	06/29/24 0:47				U	mg/L		-1.5	1.5			
WG592136PQV	PQV	06/29/24 0:50	II240624-6	1.002		1.02	mg/L	102	70	130			
WG592136SIC	SIC	06/29/24 0:52	11240624-2	1.002		.98	mg/L	98	80	120			
WG592136LFB	LFB	06/29/24 0:57	II240617-1	99.96008		101	mg/L	101	85	115			
WG592136CCV1	CCV	06/29/24 1:21	II240614-2	10		9.93	mg/L	99	90	110			
WG592136CCB1	CCB	06/29/24 1:24				U	mg/L		-1.5	1.5			
WG592136CCV2	CCV	06/29/24 1:50	II240614-2	10		10.3	mg/L	103	90	110			
WG592136CCB2	CCB	06/29/24 1:53				U	mg/L		-1.5	1.5			
L88288-03AS	AS	06/29/24 2:00	II240617-1	99.96008	U	98.7	mg/L	99	85	115			
L88288-03ASD	ASD	06/29/24 2:02	II240617-1	99.96008	U	99.5	mg/L	100	85	115	1	20	
WG592136CCV3	CCV	06/29/24 2:07	II240614-2	10		9.6	mg/L	96	90	110			
WG592136CCB3	CCB	06/29/24 2:09				U	mg/L		-1.5	1.5			

GCC

ACZ Project ID: **L88256**

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

SM 2540 C-2011

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG591159													
WG591159PBW	PBW	06/14/24 14:10				U	mg/L		-20	20			
WG591159LCSW	LCSW	06/14/24 14:13	PCN626278	1000		980	mg/L	98	80	120			
L88267-04DUP	DUP	06/14/24 14:57			814	818	mg/L				0	10	

Selenium, dissolved

EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG591013													
WG591013ICV	ICV	06/13/24 13:08	MS240404-4	.05		.05218	mg/L	104	90	110			
WG591013ICB	ICB	06/13/24 13:11				U	mg/L		-0.00022	0.00022			
WG591013LFB	LFB	06/13/24 13:13	MS240514-1	.05005		.05362	mg/L	107	85	115			
L88221-05AS	AS	06/13/24 13:22	MS240514-1	.05005	.00028	.06071	mg/L	121	70	130			
L88221-05ASD	ASD	06/13/24 13:25	MS240514-1	.05005	.00028	.05991	mg/L	119	70	130	1	20	
WG591013CCV1	CCV	06/13/24 13:36	MS240421-5	.1001		.10415	mg/L	104	90	110			
WG591013CCB1	CCB	06/13/24 13:39				.00013	mg/L		-0.0003	0.0003			
L88256-05AS	AS	06/13/24 13:57	MS240514-1	.05005		.05912	mg/L	118	70	130			
L88256-05ASD	ASD	06/13/24 14:00	MS240514-1	.05005		.06476	mg/L	129	70	130	9	20	
WG591013CCV2	CCV	06/13/24 14:04	MS240421-5	.1001		.10192	mg/L	102	90	110			
WG591013CCB2	CCB	06/13/24 14:06				.00012	mg/L		-0.0003	0.0003			
WG591013CCV3	CCV	06/13/24 14:20	MS240421-5	.1001		.1053	mg/L	105	90	110			
WG591013CCB3	CCB	06/13/24 14:23				.00012	mg/L		-0.0003	0.0003			
WG591139													
WG591139ICV	ICV	06/14/24 13:42	MS240404-4	.05		.05136	mg/L	103	90	110			
WG591139ICB	ICB	06/14/24 13:43				U	mg/L		-0.00022	0.00022			
WG591139LFB	LFB	06/14/24 13:45	MS240514-1	.05005		.0506	mg/L	101	85	115			
L88224-01AS	AS	06/14/24 13:54	MS240514-1	.05005	.00038	.05573	mg/L	111	70	130			
L88224-01ASD	ASD	06/14/24 13:56	MS240514-1	.05005	.00038	.05684	mg/L	113	70	130	2	20	
WG591139CCV1	CCV	06/14/24 14:03	MS240421-5	.1001		.09386	mg/L	94	90	110			
WG591139CCB1	CCB	06/14/24 14:05				U	mg/L		-0.0003	0.0003			
WG591139CCV2	CCV	06/14/24 14:25	MS240421-5	.1001		.09547	mg/L	95	90	110			
WG591139CCB2	CCB	06/14/24 14:27				U	mg/L		-0.0003	0.0003			
WG591139CCV3	CCV	06/14/24 14:38	MS240421-5	.1001		.09976	mg/L	100	90	110			
WG591139CCB3	CCB	06/14/24 14:40				U	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: **L88256**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592055													
WG592055ICV	ICV	06/27/24 22:41	II240515-3	100		98.37	mg/L	98	95	105			
WG592055ICB	ICB	06/27/24 22:47				U	mg/L		-0.6	0.6			
WG592055PQV	PQV	06/27/24 22:50	II240624-6	1.005		1.04	mg/L	103	70	130			
WG592055SIC	SIC	06/27/24 22:53	11240624-2	1.005		1.09	mg/L	108	80	120			
WG592055LFB	LFB	06/27/24 22:59	II240617-1	99.97238		103	mg/L	103	85	115			
WG592055CCV1	CCV	06/27/24 23:30	II240614-2	50		48.32	mg/L	97	90	110			
WG592055CCB1	CCB	06/27/24 23:33				U	mg/L		-0.6	0.6			
WG592055CCV2	CCV	06/28/24 0:07	II240614-2	50		48.12	mg/L	96	90	110			
WG592055CCB2	CCB	06/28/24 0:10				U	mg/L		-0.6	0.6			
L88256-02AS	AS	06/28/24 0:19	II240617-1	99.97238	165	257.4	mg/L	92	85	115			
L88256-02ASD	ASD	06/28/24 0:22	II240617-1	99.97238	165	256.4	mg/L	91	85	115	0	20	
WG592055CCV3	CCV	06/28/24 0:28	II240614-2	50		48.17	mg/L	96	90	110			
WG592055CCB3	CCB	06/28/24 0:31				U	mg/L		-0.6	0.6			
WG592136													
WG592136ICV	ICV	06/29/24 0:42	II240515-3	100		99.1	mg/L	99	95	105			
WG592136ICB	ICB	06/29/24 0:47				U	mg/L		-0.6	0.6			
WG592136PQV	PQV	06/29/24 0:50	II240624-6	1.005		1.11	mg/L	110	70	130			
WG592136SIC	SIC	06/29/24 0:52	11240624-2	1.005		1.01	mg/L	100	80	120			
WG592136LFB	LFB	06/29/24 0:57	II240617-1	99.97238		97.6	mg/L	98	85	115			
WG592136CCV1	CCV	06/29/24 1:21	II240614-2	50		48.8	mg/L	98	90	110			
WG592136CCB1	CCB	06/29/24 1:24				U	mg/L		-0.6	0.6			
WG592136CCV2	CCV	06/29/24 1:50	II240614-2	50		51.9	mg/L	104	90	110			
WG592136CCB2	CCB	06/29/24 1:53				.43	mg/L		-0.6	0.6			
L88288-03AS	AS	06/29/24 2:00	II240617-1	99.97238	2.59	101	mg/L	98	85	115			
L88288-03ASD	ASD	06/29/24 2:02	II240617-1	99.97238	2.59	99.6	mg/L	97	85	115	1	20	
WG592136CCV3	CCV	06/29/24 2:07	II240614-2	50		47.9	mg/L	96	90	110			
WG592136CCB3	CCB	06/29/24 2:09				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: **L88256**

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

ASTM D516-07/-11/-16

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG591108													
WG591108ICV	ICV	06/14/24 8:59	WI240606-14	20.02		21.6	mg/L	108	85	115			
WG591108ICB	ICB	06/14/24 8:59				U	mg/L		-2.5	2.5			
WG591108CCV1	CCV	06/14/24 9:21	WI240603-1	25		27.7	mg/L	111	85	115			
WG591108CCB1	CCB	06/14/24 9:21				U	mg/L		-2.5	2.5			
WG591108LFB	LFB	06/14/24 9:21	WI240304-2	10		11.4	mg/L	114	85	115			
WG591108CCV2	CCV	06/14/24 9:25	WI240603-1	25		26.8	mg/L	107	85	115			
WG591108CCB2	CCB	06/14/24 9:25				U	mg/L		-2.5	2.5			
WG591108CCV3	CCV	06/14/24 9:28	WI240603-1	25		26.4	mg/L	106	85	115			
WG591108CCB3	CCB	06/14/24 9:28				U	mg/L		-2.5	2.5			
WG591108CCV4	CCV	06/14/24 9:32	WI240603-1	25		26.9	mg/L	108	85	115			
WG591108CCB4	CCB	06/14/24 9:33				U	mg/L		-2.5	2.5			
WG591108CCV5	CCV	06/14/24 9:38	WI240603-1	25		26.7	mg/L	107	85	115			
WG591108CCB5	CCB	06/14/24 9:38				U	mg/L		-2.5	2.5			
WG591108CCV6	CCV	06/14/24 9:40	WI240603-1	25		26.7	mg/L	107	85	115			
WG591108CCB6	CCB	06/14/24 9:41				U	mg/L		-2.5	2.5			
WG591108CCV7	CCV	06/14/24 9:46	WI240603-1	25		27.6	mg/L	110	85	115			
WG591108CCB7	CCB	06/14/24 9:46				U	mg/L		-2.5	2.5			
L88099-05AS	AS	06/14/24 9:49	SO4TURB25X	10	366	400	mg/L	340	85	115			M3
L88099-05ASD	ASD	06/14/24 9:49	SO4TURB25X	10	366	376.2	mg/L	102	85	115	6	20	
WG591108CCV8	CCV	06/14/24 9:52	WI240603-1	25		26.8	mg/L	107	85	115			
WG591108CCB8	CCB	06/14/24 9:53				U	mg/L		-2.5	2.5			
WG591108CCV9	CCV	06/14/24 9:53	WI240603-1	25		26.5	mg/L	106	85	115			
WG591108CCB9	CCB	06/14/24 9:54				U	mg/L		-2.5	2.5			
L88337-04AS	AS	06/14/24 9:55	SO4TURB25X	10	351	412.5	mg/L	615	85	115			M3
L88337-04ASD	ASD	06/14/24 9:55	SO4TURB25X	10	351	410	mg/L	590	85	115	1	20	M3
WG591108CCV10	CCV	06/14/24 9:56	WI240603-1	25		26.5	mg/L	106	85	115			
WG591108CCB10	CCB	06/14/24 9:56				U	mg/L		-2.5	2.5			

GCC

ACZ Project ID: **L88256**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592055													
WG592055ICV	ICV	06/27/24 22:41	II240515-3	2		2.013	mg/L	101	95	105			
WG592055ICB	ICB	06/27/24 22:47				U	mg/L		-0.015	0.015			
WG592055PQV	PQV	06/27/24 22:50	II240624-6	.025025		.027	mg/L	108	70	130			
WG592055SIC	SIC	06/27/24 22:53	11240624-2	.1001		.099	mg/L	99	80	120			
WG592055LFB	LFB	06/27/24 22:59	II240617-1	.5005		.5241	mg/L	105	85	115			
WG592055CCV1	CCV	06/27/24 23:30	II240614-2	1		.989	mg/L	99	90	110			
WG592055CCB1	CCB	06/27/24 23:33				U	mg/L		-0.03	0.03			
WG592055CCV2	CCV	06/28/24 0:07	II240614-2	1		.986	mg/L	99	90	110			
WG592055CCB2	CCB	06/28/24 0:10				U	mg/L		-0.03	0.03			
L88256-02AS	AS	06/28/24 0:19	II240617-1	.5005	U	.5362	mg/L	107	85	115			
L88256-02ASD	ASD	06/28/24 0:22	II240617-1	.5005	U	.535	mg/L	107	85	115	0	20	
WG592055CCV3	CCV	06/28/24 0:28	II240614-2	1		.98	mg/L	98	90	110			
WG592055CCB3	CCB	06/28/24 0:31				U	mg/L		-0.03	0.03			
WG592136													
WG592136ICV	ICV	06/29/24 0:42	II240515-3	2		2.03	mg/L	102	95	105			
WG592136ICB	ICB	06/29/24 0:47				U	mg/L		-0.015	0.015			
WG592136PQV	PQV	06/29/24 0:50	II240624-6	.025025		.024	mg/L	96	70	130			
WG592136SIC	SIC	06/29/24 0:52	11240624-2	.1001		.096	mg/L	96	80	120			
WG592136LFB	LFB	06/29/24 0:57	II240617-1	.5005		.507	mg/L	101	85	115			
WG592136CCV1	CCV	06/29/24 1:21	II240614-2	1		1.01	mg/L	101	90	110			
WG592136CCB1	CCB	06/29/24 1:24				U	mg/L		-0.03	0.03			
WG592136CCV2	CCV	06/29/24 1:50	II240614-2	1		1.04	mg/L	104	90	110			
WG592136CCB2	CCB	06/29/24 1:53				U	mg/L		-0.03	0.03			
L88288-03AS	AS	06/29/24 2:00	II240617-1	.5005	U	.496	mg/L	99	85	115			
L88288-03ASD	ASD	06/29/24 2:02	II240617-1	.5005	U	.49	mg/L	98	85	115	1	20	
WG592136CCV3	CCV	06/29/24 2:07	II240614-2	1		.961	mg/L	96	90	110			
WG592136CCB3	CCB	06/29/24 2:09				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: **L88256**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592055													
WG592055ICV	ICV	06/27/24 22:41	II240515-3	2		2.01	mg/L	101	95	105			
WG592055ICB	ICB	06/27/24 22:47				U	mg/L		-0.06	0.06			
WG592055PQV	PQV	06/27/24 22:50	II240624-6	.0502		.055	mg/L	110	70	130			
WG592055SIC	SIC	06/27/24 22:53	11240624-2	.10025		.107	mg/L	107	80	120			
WG592055LFB	LFB	06/27/24 22:59	II240617-1	.50045		.542	mg/L	108	85	115			
WG592055CCV1	CCV	06/27/24 23:30	II240614-2	1		.986	mg/L	99	90	110			
WG592055CCB1	CCB	06/27/24 23:33				U	mg/L		-0.06	0.06			
WG592055CCV2	CCV	06/28/24 0:07	II240614-2	1		.972	mg/L	97	90	110			
WG592055CCB2	CCB	06/28/24 0:10				U	mg/L		-0.06	0.06			
L88256-02AS	AS	06/28/24 0:19	II240617-1	.50045	U	.562	mg/L	112	85	115			
L88256-02ASD	ASD	06/28/24 0:22	II240617-1	.50045	U	.558	mg/L	111	85	115	1	20	
WG592055CCV3	CCV	06/28/24 0:28	II240614-2	1		.979	mg/L	98	90	110			
WG592055CCB3	CCB	06/28/24 0:31				U	mg/L		-0.06	0.06			
WG592136													
WG592136ICV	ICV	06/29/24 0:42	II240515-3	2		1.92	mg/L	96	95	105			
WG592136ICB	ICB	06/29/24 0:47				U	mg/L		-0.06	0.06			
WG592136PQV	PQV	06/29/24 0:50	II240624-6	.0502		.048	mg/L	96	70	130			
WG592136SIC	SIC	06/29/24 0:52	11240624-2	.10025		.087	mg/L	87	80	120			
WG592136LFB	LFB	06/29/24 0:57	II240617-1	.50045		.514	mg/L	103	85	115			
WG592136CCV1	CCV	06/29/24 1:21	II240614-2	1		.985	mg/L	99	90	110			
WG592136CCB1	CCB	06/29/24 1:24				U	mg/L		-0.06	0.06			
WG592136CCV2	CCV	06/29/24 1:50	II240614-2	1		1.02	mg/L	102	90	110			
WG592136CCB2	CCB	06/29/24 1:53				U	mg/L		-0.06	0.06			
L88288-03AS	AS	06/29/24 2:00	II240617-1	.50045	U	.516	mg/L	103	85	115			
L88288-03ASD	ASD	06/29/24 2:02	II240617-1	.50045	U	.492	mg/L	98	85	115	5	20	
WG592136CCV3	CCV	06/29/24 2:07	II240614-2	1		.988	mg/L	99	90	110			
WG592136CCB3	CCB	06/29/24 2:09				U	mg/L		-0.06	0.06			

GCC Rio Grande

ACZ Project ID: **L88256**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L88256-01	WG591032	Chloride	SM 4500-Cl E-2011	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).
	WG590907	Nitrite as N	EPA 353.2	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).
	WG591139	Selenium, dissolved	EPA 200.8	DB	Sample required dilution due to low bias result.
	WG591108	Sulfate	ASTM D516-07/-11/-16	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.
	WG591371	Total Alkalinity	SM 2320 B-2011	B7	Target analyte detected in prep / method blank at or above acceptance limit. Sample value is > 10X the concentration in the method blank.
L88256-02	WG591032	Chloride	SM 4500-Cl E-2011	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).
	WG590907	Nitrite as N	EPA 353.2	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).
	WG591108	Sulfate	ASTM D516-07/-11/-16	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.
	WG591371	Total Alkalinity	SM 2320 B-2011	B7	Target analyte detected in prep / method blank at or above acceptance limit. Sample value is > 10X the concentration in the method blank.
L88256-03	WG591032	Chloride	SM 4500-Cl E-2011	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).
	WG590907	Nitrite as N	EPA 353.2	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).
	WG591108	Sulfate	ASTM D516-07/-11/-16	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.
	WG591371	Total Alkalinity	SM 2320 B-2011	B4	Target analyte detected in blank at or above the acceptance criteria.
L88256-04	WG592136	Aluminum, dissolved	EPA 200.7	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG591032	Chloride	SM 4500-Cl E-2011	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).
	WG590907	Nitrite as N	EPA 353.2	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).
	WG591139	Selenium, dissolved	EPA 200.8	DB	Sample required dilution due to low bias result.
	WG591108	Sulfate	ASTM D516-07/-11/-16	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.
	WG591371	Total Alkalinity	SM 2320 B-2011	B7	Target analyte detected in prep / method blank at or above acceptance limit. Sample value is > 10X the concentration in the method blank.

GCC Rio Grande

ACZ Project ID: **L88256**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L88256-05	WG592136	Aluminum, dissolved	EPA 200.7	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG591032	Chloride	SM 4500-Cl E-2011	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).
	WG590907	Nitrite as N	EPA 353.2	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).
	WG591139	Selenium, dissolved	EPA 200.8	DB	Sample required dilution due to low bias result.
	WG591108	Sulfate	ASTM D516-07/-11/-16	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.
	WG591371	Total Alkalinity	SM 2320 B-2011	B7	Target analyte detected in prep / method blank at or above acceptance limit. Sample value is > 10X the concentration in the method blank.
L88256-06	WG592136	Aluminum, dissolved	EPA 200.7	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG591032	Chloride	SM 4500-Cl E-2011	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).
	WG590907	Nitrite as N	EPA 353.2	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).
	WG591139	Selenium, dissolved	EPA 200.8	EA	Concentration estimated. Analytical result was less than the negative MDL due to matrix interferences.
	WG591108	Sulfate	ASTM D516-07/-11/-16	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.
	WG591371	Total Alkalinity	SM 2320 B-2011	B7	Target analyte detected in prep / method blank at or above acceptance limit. Sample value is > 10X the concentration in the method blank.

GCC Rio Grande

ACZ Project ID: **L88256**

No certification qualifiers associated with this analysis

GCC Rio Grande

ACZ Project ID: L88256

Date Received: 06/11/2024 11:14

Received By:

Date Printed: 6/12/2024

Receipt Verification

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

Samples/Containers

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

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?
-----	-----	-----	-----	-----
5067	0.5	<=6.0	15	Yes

Was ice present in the shipment container(s)?

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

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

GCC Rio Grande

ACZ Project ID: L88256

Date Received: 06/11/2024 11:14

Received By:

Date Printed: 6/12/2024

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).

July 09, 2024

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:
ACZ Project ID: L88296

Amy Rodrigues:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on June 12, 2024. This project has been assigned to ACZ's project number, L88296. 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 L88296. 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 July 09, 2025. 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:

Sample ID: MW-18

ACZ Sample ID: **L88296-01**

Date Sampled: 06/11/24 13:11

Date Received: 06/12/24

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	1	<0.07	U		mg/L	0.07	0.25	06/29/24 14:35	msp
Arsenic, dissolved	EPA 200.8	1	0.00153			mg/L	0.0002	0.001	06/17/24 13:32	gjl
Beryllium, dissolved	EPA 200.7	1	0.011	B		mg/L	0.01	0.05	07/08/24 16:49	msp
Boron, dissolved	EPA 200.7	1	0.514			mg/L	0.03	0.1	07/01/24 19:15	msp
Cadmium, dissolved	EPA 200.8	1	<0.00005	U		mg/L	0.00005	0.00025	06/17/24 13:32	gjl
Calcium, dissolved	EPA 200.7	1	58.2			mg/L	0.1	0.5	06/29/24 14:35	msp
Chromium, dissolved	EPA 200.7	1	<0.02	U		mg/L	0.02	0.05	06/29/24 14:35	msp
Cobalt, dissolved	EPA 200.8	1	0.000771			mg/L	0.00005	0.00025	06/17/24 13:32	gjl
Copper, dissolved	EPA 200.7	1	<0.01	U	*	mg/L	0.01	0.05	07/01/24 19:15	msp
Iron, dissolved	EPA 200.7	1	0.066	B		mg/L	0.06	0.15	06/29/24 14:35	msp
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	06/17/24 13:32	gjl
Lithium, dissolved	EPA 200.7	1	0.123			mg/L	0.008	0.04	06/29/24 14:35	msp
Magnesium, dissolved	EPA 200.7	1	13.4			mg/L	0.2	1	06/29/24 14:35	msp
Manganese, dissolved	EPA 200.7	1	0.048	B		mg/L	0.01	0.05	06/29/24 14:35	msp
Mercury, dissolved	EPA 245.1	1	<0.0002	U		mg/L	0.0002	0.001	06/21/24 13:04	aeh/ae b
Nickel, dissolved	EPA 200.7	1	<0.008	U		mg/L	0.008	0.04	06/29/24 14:35	msp
Potassium, dissolved	EPA 200.7	1	3.44			mg/L	0.5	1	06/29/24 14:35	msp
Selenium, dissolved	EPA 200.8	1	0.00137			mg/L	0.0001	0.00025	06/17/24 13:32	gjl
Sodium, dissolved	EPA 200.7	1	220			mg/L	0.2	1	06/29/24 14:35	msp
Vanadium, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.025	06/29/24 14:35	msp
Zinc, dissolved	EPA 200.7	1	<0.02	U		mg/L	0.02	0.05	06/29/24 14:35	msp

GCC Rio Grande

Project ID:

Sample ID: MW-18

ACZ Sample ID: **L88296-01**

Date Sampled: 06/11/24 13:11

Date Received: 06/12/24

Sample Matrix: Groundwater

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM 2320 B-2011									
Bicarbonate as CaCO ₃		1	319		*	mg/L	2	20	06/25/24 0:00	asn
Carbonate as CaCO ₃		1	<2	U	*	mg/L	2	20	06/25/24 0:00	asn
Hydroxide as CaCO ₃		1	<2	U	*	mg/L	2	20	06/25/24 0:00	asn
Total Alkalinity		1	319		*	mg/L	2	20	06/25/24 0:00	asn
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-3.4			%			07/09/24 0:00	calc
Sum of Anions			15.0			meq/L			07/09/24 0:00	calc
Sum of Cations			14			meq/L			07/09/24 0:00	calc
Chloride	SM 4500-Cl E-2011	1	22.9		*	mg/L	1	2	06/13/24 14:44	jqr
Fluoride	SM 4500-F C-2011	1	1.22		*	mg/L	0.15	0.35	06/28/24 0:34	jck
Hardness as CaCO ₃ (dissolved)	Calculation (SM 2340 B-2011)		201			mg/L	0.2	5	07/09/24 0:00	calc
Nitrate as N	Calculation (NO ₃ NO ₂ -NO ₂)		1.36			mg/L	0.02	0.1	07/09/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	1.36		*	mg/L	0.02	0.1	06/13/24 0:18	pjb
Nitrite as N	EPA 353.2	1	<0.01	U	*	mg/L	0.01	0.05	06/13/24 0:18	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	1	830		*	mg/L	20	40	06/18/24 11:40	amw
Sulfate	ASTM D516-07/-11/-16	25	377		*	mg/L	25	125	06/14/24 10:33	jqr
TDS (calculated)	Calculation		891			mg/L			07/09/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.93						07/09/24 0:00	calc



Report Header Explanations

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

QC Sample Types

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

QC Sample Type Explanations

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

ACZ Qualifiers (Qual)

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

Method References

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

Comments

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

For a complete list of ACZ's Extended Qualifiers, please click:

<https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf>

GCC

ACZ Project ID: **L88296**

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
WG591832													
WG591832PBW1	PBW	06/25/24 16:40				12.6	mg/L		-20	20			
WG591832LCSW3	LCSW	06/25/24 16:56	WC240612-2	820.0001		755.3	mg/L	92	90	110			
WG591832LCSW6	LCSW	06/25/24 19:08	WC240612-2	820.0001		757.2	mg/L	92	90	110			
WG591832PBW2	PBW	06/25/24 19:15				26.3	mg/L		-20	20			B4 B7
L88347-01DUP	DUP	06/25/24 20:14			642	648.3	mg/L				1	20	B7
WG591832LCSW9	LCSW	06/25/24 21:49	WC240612-2	820.0001		770.3	mg/L	94	90	110			
WG591832PBW3	PBW	06/25/24 21:57				25.2	mg/L		-20	20			B4 B7
WG591832LCSW12	LCSW	06/26/24 0:06	WC240612-2	820.0001		775.4	mg/L	95	90	110			
WG591832PBW4	PBW	06/26/24 0:14				23.8	mg/L		-20	20			B4
WG591832LCSW15	LCSW	06/26/24 0:47	WC240612-2	820.0001		775	mg/L	95	90	110			

Aluminum, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592139													
WG592139ICV	ICV	06/29/24 12:48	II240627-5	2		2.014	mg/L	101	95	105			
WG592139ICB	ICB	06/29/24 12:54				U	mg/L		-0.15	0.15			
WG592139PQV	PQV	06/29/24 12:57	II240624-6	.25025		.284	mg/L	113	70	130			
WG592139SIC	SIC	06/29/24 13:00	11240624-2	200.75025		207.4	mg/L	103	1	200			
WG592139LFB	LFB	06/29/24 13:07	II240617-1	1.001		1.103	mg/L	110	85	115			
WG592139CCV1	CCV	06/29/24 13:39	II240614-2	1		1.054	mg/L	105	90	110			
WG592139CCB1	CCB	06/29/24 13:42				U	mg/L		-0.15	0.15			
WG592139CCV2	CCV	06/29/24 14:17	II240614-2	1		1.074	mg/L	107	90	110			
WG592139CCB2	CCB	06/29/24 14:20				U	mg/L		-0.15	0.15			
L88282-06AS	AS	06/29/24 14:29	II240617-1	1.001	.104	1.169	mg/L	106	85	115			
L88282-06ASD	ASD	06/29/24 14:32	II240617-1	1.001	.104	1.194	mg/L	109	85	115	2	20	
WG592139CCV3	CCV	06/29/24 14:39	II240614-2	1		1.03	mg/L	103	90	110			
WG592139CCB3	CCB	06/29/24 14:42				U	mg/L		-0.15	0.15			

Arsenic, dissolved

EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG591230													
WG591230ICV	ICV	06/17/24 12:29	MS240613-12	.05		.04868	mg/L	97	90	110			
WG591230ICB	ICB	06/17/24 12:31				U	mg/L		-0.00044	0.00044			
WG591230LFB	LFB	06/17/24 12:33	MS240613-7	.0501		.05125	mg/L	102	85	115			
WG591230CCV1	CCV	06/17/24 12:52	MS240421-5	.1002		.09858	mg/L	98	90	110			
WG591230CCB1	CCB	06/17/24 12:54				U	mg/L		-0.0006	0.0006			
L88284-05AS	AS	06/17/24 13:11	MS240613-7	.0501	U	.05581	mg/L	111	70	130			
L88284-05ASD	ASD	06/17/24 13:13	MS240613-7	.0501	U	.05589	mg/L	112	70	130	0	20	
WG591230CCV2	CCV	06/17/24 13:15	MS240421-5	.1002		.10302	mg/L	103	90	110			
WG591230CCB2	CCB	06/17/24 13:18				U	mg/L		-0.0006	0.0006			
WG591230CCV3	CCV	06/17/24 13:36	MS240421-5	.1002		.10321	mg/L	103	90	110			
WG591230CCB3	CCB	06/17/24 13:39				U	mg/L		-0.0006	0.0006			

GCC

ACZ Project ID: **L88296**

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

Beryllium, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592586													
WG592586ICV	ICV	07/08/24 16:27	II240627-5	2		1.915	mg/L	96	95	105			
WG592586ICB	ICB	07/08/24 16:33				.012	mg/L		-0.03	0.03			
WG592586PQV	PQV	07/08/24 16:36	II240624-6	.0501		.059	mg/L	118	70	130			
WG592586SIC	SIC	07/08/24 16:39	II240705-2	.1002		.108	mg/L	108	80	120			
WG592586LFB	LFB	07/08/24 16:46	II240702-3	.501		.506	mg/L	101	85	115			
L88468-03AS	AS	07/08/24 17:02	II240702-3	.501	.011	.49	mg/L	96	85	115			
L88468-03ASD	ASD	07/08/24 17:05	II240702-3	.501	.011	.503	mg/L	98	85	115	3	20	
WG592586CCV1	CCV	07/08/24 17:18	II240628-2	1		.972	mg/L	97	90	110			
WG592586CCB1	CCB	07/08/24 17:21				.012	mg/L		-0.03	0.03			
WG592586CCV2	CCV	07/08/24 17:57	II240628-2	1		.977	mg/L	98	90	110			
WG592586CCB2	CCB	07/08/24 18:00				.012	mg/L		-0.03	0.03			
WG592586CCV3	CCV	07/08/24 18:19	II240628-2	1		.973	mg/L	97	90	110			
WG592586CCB3	CCB	07/08/24 18:22				.011	mg/L		-0.03	0.03			

Boron, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592168													
WG592168ICV	ICV	07/01/24 17:33	II240627-5	2		2.091	mg/L	105	95	105			
WG592168ICB	ICB	07/01/24 17:39				U	mg/L		-0.09	0.09			
WG592168PQV	PQV	07/01/24 17:42	II240624-6	.1001		.117	mg/L	117	70	130			
WG592168SIC	SIC	07/01/24 17:45	11240624-2	.1001		.107	mg/L	107	80	120			
WG592168LFB	LFB	07/01/24 17:51	II240617-1	.5005		.555	mg/L	111	85	115			
WG592168CCV1	CCV	07/01/24 18:21	II240628-2	1		1.074	mg/L	107	90	110			
WG592168CCB1	CCB	07/01/24 18:24				U	mg/L		-0.09	0.09			
WG592168CCV2	CCV	07/01/24 18:57	II240628-2	1		1.019	mg/L	102	90	110			
WG592168CCB2	CCB	07/01/24 19:00				U	mg/L		-0.09	0.09			
L88282-06AS	AS	07/01/24 19:09	II240702-2	4.995	U	5.001	mg/L	100	85	115			
L88282-06ASD	ASD	07/01/24 19:12	II240702-2	4.995	U	5.189	mg/L	104	85	115	4	20	
WG592168CCV3	CCV	07/01/24 19:18	II240628-2	1		1.005	mg/L	101	90	110			
WG592168CCB3	CCB	07/01/24 19:21				U	mg/L		-0.09	0.09			

Cadmium, dissolved

EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG591230													
WG591230ICV	ICV	06/17/24 12:29	MS240613-12	.05		.048949	mg/L	98	90	110			
WG591230ICB	ICB	06/17/24 12:31				U	mg/L		-0.00011	0.00011			
WG591230LFB	LFB	06/17/24 12:33	MS240613-7	.05005		.04978	mg/L	99	85	115			
WG591230CCV1	CCV	06/17/24 12:52	MS240421-5	.1001		.098278	mg/L	98	90	110			
WG591230CCB1	CCB	06/17/24 12:54				U	mg/L		-0.00015	0.00015			
L88284-05AS	AS	06/17/24 13:11	MS240613-7	.05005	U	.052886	mg/L	106	70	130			
L88284-05ASD	ASD	06/17/24 13:13	MS240613-7	.05005	U	.053261	mg/L	106	70	130	1	20	
WG591230CCV2	CCV	06/17/24 13:15	MS240421-5	.1001		.098373	mg/L	98	90	110			
WG591230CCB2	CCB	06/17/24 13:18				U	mg/L		-0.00015	0.00015			
WG591230CCV3	CCV	06/17/24 13:36	MS240421-5	.1001		.096874	mg/L	97	90	110			
WG591230CCB3	CCB	06/17/24 13:39				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: **L88296**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592139													
WG592139ICV	ICV	06/29/24 12:48	II240627-5	100		98.38	mg/L	98	95	105			
WG592139ICB	ICB	06/29/24 12:54				U	mg/L		-0.3	0.3			
WG592139PQV	PQV	06/29/24 12:57	II240624-6	.5025		.57	mg/L	113	70	130			
WG592139SIC	SIC	06/29/24 13:00	II240624-2	201.5025		205	mg/L	102	1	200			
WG592139LFB	LFB	06/29/24 13:07	II240617-1	67.93628		70.91	mg/L	104	85	115			
WG592139CCV1	CCV	06/29/24 13:39	II240614-2	50		50.54	mg/L	101	90	110			
WG592139CCB1	CCB	06/29/24 13:42				U	mg/L		-0.3	0.3			
WG592139CCV2	CCV	06/29/24 14:17	II240614-2	50		51.03	mg/L	102	90	110			
WG592139CCB2	CCB	06/29/24 14:20				U	mg/L		-0.3	0.3			
L88282-06AS	AS	06/29/24 14:29	II240617-1	67.93628	12.8	85.23	mg/L	107	85	115			
L88282-06ASD	ASD	06/29/24 14:32	II240617-1	67.93628	12.8	85.68	mg/L	107	85	115	1	20	
WG592139CCV3	CCV	06/29/24 14:39	II240614-2	50		49.9	mg/L	100	90	110			
WG592139CCB3	CCB	06/29/24 14:42				U	mg/L		-0.3	0.3			

Chloride

SM 4500-Cl E-2011

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG591057													
WG591057ICV	ICV	06/13/24 10:18	WI231211-1	39.96		38.37	mg/L	96	90	110			
WG591057ICB	ICB	06/13/24 10:18				U	mg/L						
WG591057CCV1	CCV	06/13/24 14:32	WI240606-12	25		24.4	mg/L	98	90	110			
WG591057CCB1	CCB	06/13/24 14:32				U	mg/L						
WG591057PQV	PQV	06/13/24 14:33	WI240606-13	2		2.02	mg/L	101	50	150			
WG591057LFB	LFB	06/13/24 14:33	WI231211-4	20.02		20.72	mg/L	103	90	110			
WG591057CCV2	CCV	06/13/24 14:36	WI240606-12	25		24.73	mg/L	99	90	110			
WG591057CCB2	CCB	06/13/24 14:36				U	mg/L						
WG591057CCV3	CCV	06/13/24 14:44	WI240606-12	25		24.67	mg/L	99	90	110			
WG591057CCB3	CCB	06/13/24 14:44				U	mg/L						
L88302-01AS	AS	06/13/24 14:45	WI231211-4	20.02	7.57	27.2	mg/L	98	90	110			
L88302-02DUP	DUP	06/13/24 14:50			17.7	17.53	mg/L				1	20	
WG591057CCV4	CCV	06/13/24 14:50	WI240606-12	25		24.62	mg/L	98	90	110			
WG591057CCB4	CCB	06/13/24 14:51				U	mg/L						
WG591057CCV5	CCV	06/13/24 14:56	WI240606-12	25		24.72	mg/L	99	90	110			
WG591057CCB5	CCB	06/13/24 14:56				U	mg/L						
WG591057CCV6	CCV	06/13/24 15:05	WI240606-12	25		24.58	mg/L	98	90	110			
WG591057CCB6	CCB	06/13/24 15:05				U	mg/L						

GCC

ACZ Project ID: **L88296**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592139													
WG592139ICV	ICV	06/29/24 12:48	II240627-5	2		1.956	mg/L	98	95	105			
WG592139ICB	ICB	06/29/24 12:54				U	mg/L		-0.06	0.06			
WG592139PQV	PQV	06/29/24 12:57	II240624-6	.05005		.062	mg/L	124	70	130			
WG592139SIC	SIC	06/29/24 13:00	11240624-2	.1001		.106	mg/L	106	80	120			
WG592139LFB	LFB	06/29/24 13:07	II240617-1	.5005		.526	mg/L	105	85	115			
WG592139CCV1	CCV	06/29/24 13:39	II240614-2	1		1.01	mg/L	101	90	110			
WG592139CCB1	CCB	06/29/24 13:42				U	mg/L		-0.06	0.06			
WG592139CCV2	CCV	06/29/24 14:17	II240614-2	1		1.021	mg/L	102	90	110			
WG592139CCB2	CCB	06/29/24 14:20				U	mg/L		-0.06	0.06			
L88282-06AS	AS	06/29/24 14:29	II240617-1	.5005	U	.527	mg/L	105	85	115			
L88282-06ASD	ASD	06/29/24 14:32	II240617-1	.5005	U	.53	mg/L	106	85	115	1	20	
WG592139CCV3	CCV	06/29/24 14:39	II240614-2	1		1.003	mg/L	100	90	110			
WG592139CCB3	CCB	06/29/24 14:42				U	mg/L		-0.06	0.06			

Cobalt, dissolved

EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG591230													
WG591230ICV	ICV	06/17/24 12:29	MS240613-12	.05		.050918	mg/L	102	90	110			
WG591230ICB	ICB	06/17/24 12:31				U	mg/L		-0.00011	0.00011			
WG591230LFB	LFB	06/17/24 12:33	MS240613-7	.05005		.051502	mg/L	103	85	115			
WG591230CCV1	CCV	06/17/24 12:52	MS240421-5	.1001		.099689	mg/L	100	90	110			
WG591230CCB1	CCB	06/17/24 12:54				U	mg/L		-0.00015	0.00015			
L88284-05AS	AS	06/17/24 13:11	MS240613-7	.05005	U	.051769	mg/L	103	70	130			
L88284-05ASD	ASD	06/17/24 13:13	MS240613-7	.05005	U	.052353	mg/L	105	70	130	1	20	
WG591230CCV2	CCV	06/17/24 13:15	MS240421-5	.1001		.099892	mg/L	100	90	110			
WG591230CCB2	CCB	06/17/24 13:18				U	mg/L		-0.00015	0.00015			
WG591230CCV3	CCV	06/17/24 13:36	MS240421-5	.1001		.098295	mg/L	98	90	110			
WG591230CCB3	CCB	06/17/24 13:39				U	mg/L		-0.00015	0.00015			

Copper, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592168													
WG592168ICV	ICV	07/01/24 17:33	II240627-5	2		2.019	mg/L	101	95	105			
WG592168ICB	ICB	07/01/24 17:39				U	mg/L		-0.03	0.03			
WG592168PQV	PQV	07/01/24 17:42	II240624-6	.05005		.055	mg/L	110	70	130			
WG592168SIC	SIC	07/01/24 17:45	11240624-2	.1001		.096	mg/L	96	80	120			
WG592168LFB	LFB	07/01/24 17:51	II240617-1	.5005		.583	mg/L	116	85	115			LA
WG592168CCV1	CCV	07/01/24 18:21	II240628-2	1		1.015	mg/L	102	90	110			
WG592168CCB1	CCB	07/01/24 18:24				U	mg/L		-0.03	0.03			
WG592168CCV2	CCV	07/01/24 18:57	II240628-2	1		.98	mg/L	98	90	110			
WG592168CCB2	CCB	07/01/24 19:00				U	mg/L		-0.03	0.03			
L88282-06AS	AS	07/01/24 19:09	II240702-2	.5005	U	.519	mg/L	104	85	115			
L88282-06ASD	ASD	07/01/24 19:12	II240702-2	.5005	U	.531	mg/L	106	85	115	2	20	
WG592168CCV3	CCV	07/01/24 19:18	II240628-2	1		.955	mg/L	96	90	110			
WG592168CCB3	CCB	07/01/24 19:21				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: **L88296**

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

SM 4500-F C-2011

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592092													
WG592092ICV	ICV	06/27/24 22:08	WC240626-1	2		2.02	mg/L	101	90	110			
WG592092ICB	ICB	06/27/24 22:16				U	mg/L		-0.3	0.3			
WG592092PQV	PQV	06/27/24 22:19	WC240614-4	.35		.35	mg/L	100	50	150			
WG592092LFB1	LFB	06/27/24 22:22	WC240411-1	5		5.02	mg/L	100	90	110			
WG592092CCV1	CCV	06/27/24 23:09	WC240626-1	2		1.993	mg/L	100	90	110			
WG592092CCB1	CCB	06/27/24 23:17				U	mg/L		-0.3	0.3			
WG592092CCV2	CCV	06/28/24 0:01	WC240626-1	2		2.081	mg/L	104	90	110			
WG592092CCB2	CCB	06/28/24 0:09				U	mg/L		-0.3	0.3			
WG592092LFB2	LFB	06/28/24 0:31	WC240411-1	5		5.07	mg/L	101	90	110			
L88296-01AS	AS	06/28/24 0:38	WC240411-1	5	1.22	6.11	mg/L	98	90	110			
L88296-01ASD	ASD	06/28/24 0:41	WC240411-1	5	1.22	6.14	mg/L	98	90	110	0	20	
WG592092CCV3	CCV	06/28/24 0:48	WC240626-1	2		2.022	mg/L	101	90	110			
WG592092CCB3	CCB	06/28/24 0:56				U	mg/L		-0.3	0.3			
WG592092CCV4	CCV	06/28/24 1:48	WC240626-1	2		2.071	mg/L	104	90	110			
WG592092CCB4	CCB	06/28/24 1:54				U	mg/L		-0.3	0.3			
WG592092CCV5	CCV	06/28/24 2:39	WC240626-1	2		1.993	mg/L	100	90	110			
WG592092CCB5	CCB	06/28/24 2:47				U	mg/L		-0.3	0.3			

Iron, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592139													
WG592139ICV	ICV	06/29/24 12:48	II240627-5	2		1.988	mg/L	99	95	105			
WG592139ICB	ICB	06/29/24 12:54				U	mg/L		-0.18	0.18			
WG592139PQV	PQV	06/29/24 12:57	II240624-6	.15045		.184	mg/L	122	70	130			
WG592139SIC	SIC	06/29/24 13:00	11240624-2	200.75045		204.2	mg/L	102	1	200			
WG592139LFB	LFB	06/29/24 13:07	II240617-1	1.003		1.109	mg/L	111	85	115			
WG592139CCV1	CCV	06/29/24 13:39	II240614-2	1		1.044	mg/L	104	90	110			
WG592139CCB1	CCB	06/29/24 13:42				U	mg/L		-0.18	0.18			
WG592139CCV2	CCV	06/29/24 14:17	II240614-2	1		1.052	mg/L	105	90	110			
WG592139CCB2	CCB	06/29/24 14:20				U	mg/L		-0.18	0.18			
L88282-06AS	AS	06/29/24 14:29	II240617-1	1.003	.075	1.143	mg/L	106	85	115			
L88282-06ASD	ASD	06/29/24 14:32	II240617-1	1.003	.075	1.147	mg/L	107	85	115	0	20	
WG592139CCV3	CCV	06/29/24 14:39	II240614-2	1		1.035	mg/L	104	90	110			
WG592139CCB3	CCB	06/29/24 14:42				U	mg/L		-0.18	0.18			

GCC

ACZ Project ID: **L88296**

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

Lead, dissolved

EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG591230													
WG591230ICV	ICV	06/17/24 12:29	MS240613-12	.05		.04957	mg/L	99	90	110			
WG591230ICB	ICB	06/17/24 12:31				U	mg/L		-0.00022	0.00022			
WG591230LFB	LFB	06/17/24 12:33	MS240613-7	.05005		.04976	mg/L	99	85	115			
WG591230CCV1	CCV	06/17/24 12:52	MS240421-5	.25025		.25295	mg/L	101	90	110			
WG591230CCB1	CCB	06/17/24 12:54				U	mg/L		-0.0003	0.0003			
L88284-05AS	AS	06/17/24 13:11	MS240613-7	.05005	U	.05192	mg/L	104	70	130			
L88284-05ASD	ASD	06/17/24 13:13	MS240613-7	.05005	U	.05309	mg/L	106	70	130	2	20	
WG591230CCV2	CCV	06/17/24 13:15	MS240421-5	.25025		.26085	mg/L	104	90	110			
WG591230CCB2	CCB	06/17/24 13:18				U	mg/L		-0.0003	0.0003			
WG591230CCV3	CCV	06/17/24 13:36	MS240421-5	.25025		.24899	mg/L	99	90	110			
WG591230CCB3	CCB	06/17/24 13:39				U	mg/L		-0.0003	0.0003			

Lithium, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592139													
WG592139ICV	ICV	06/29/24 12:48	II240627-5	2		1.916	mg/L	96	95	105			
WG592139ICB	ICB	06/29/24 12:54				.0107	mg/L		-0.024	0.024			
WG592139PQV	PQV	06/29/24 12:57	II240624-6	.04		.0496	mg/L	124	70	130			
WG592139SIC	SIC	06/29/24 13:00	11240624-2	.1		.1044	mg/L	104	80	120			
WG592139LFB	LFB	06/29/24 13:07	II240617-1	1		1.013	mg/L	101	85	115			
WG592139CCV1	CCV	06/29/24 13:39	II240614-2	1		.9924	mg/L	99	90	110			
WG592139CCB1	CCB	06/29/24 13:42				.0084	mg/L		-0.024	0.024			
WG592139CCV2	CCV	06/29/24 14:17	II240614-2	1		1.003	mg/L	100	90	110			
WG592139CCB2	CCB	06/29/24 14:20				.0094	mg/L		-0.024	0.024			
L88282-06AS	AS	06/29/24 14:29	II240617-1	1	.0105	1.028	mg/L	102	85	115			
L88282-06ASD	ASD	06/29/24 14:32	II240617-1	1	.0105	1.013	mg/L	100	85	115	1	20	
WG592139CCV3	CCV	06/29/24 14:39	II240614-2	1		.9826	mg/L	98	90	110			
WG592139CCB3	CCB	06/29/24 14:42				.0098	mg/L		-0.024	0.024			

Magnesium, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592139													
WG592139ICV	ICV	06/29/24 12:48	II240627-5	100		98.73	mg/L	99	95	105			
WG592139ICB	ICB	06/29/24 12:54				U	mg/L		-0.6	0.6			
WG592139PQV	PQV	06/29/24 12:57	II240624-6	1.006		1.05	mg/L	104	70	130			
WG592139SIC	SIC	06/29/24 13:00	11240624-2	202.206		207.3	mg/L	103	1	200			
WG592139LFB	LFB	06/29/24 13:07	II240617-1	49.99866		52.81	mg/L	106	85	115			
WG592139CCV1	CCV	06/29/24 13:39	II240614-2	50		50.91	mg/L	102	90	110			
WG592139CCB1	CCB	06/29/24 13:42				U	mg/L		-0.6	0.6			
WG592139CCV2	CCV	06/29/24 14:17	II240614-2	50		51.35	mg/L	103	90	110			
WG592139CCB2	CCB	06/29/24 14:20				U	mg/L		-0.6	0.6			
L88282-06AS	AS	06/29/24 14:29	II240617-1	49.99866	1.23	55.51	mg/L	109	85	115			
L88282-06ASD	ASD	06/29/24 14:32	II240617-1	49.99866	1.23	55.89	mg/L	109	85	115	1	20	
WG592139CCV3	CCV	06/29/24 14:39	II240614-2	50		50.11	mg/L	100	90	110			
WG592139CCB3	CCB	06/29/24 14:42				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: **L88296**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592139													
WG592139ICV	ICV	06/29/24 12:48	II240627-5	2		1.999	mg/L	100	95	105			
WG592139ICB	ICB	06/29/24 12:54				U	mg/L		-0.03	0.03			
WG592139PQV	PQV	06/29/24 12:57	II240624-6	.0502		.062	mg/L	124	70	130			
WG592139SIC	SIC	06/29/24 13:00	11240624-2	50.4502		51.62	mg/L	102	1	200			
WG592139LFB	LFB	06/29/24 13:07	II240617-1	.501		.56	mg/L	112	85	115			
WG592139CCV1	CCV	06/29/24 13:39	II240614-2	1		1.057	mg/L	106	90	110			
WG592139CCB1	CCB	06/29/24 13:42				U	mg/L		-0.03	0.03			
WG592139CCV2	CCV	06/29/24 14:17	II240614-2	1		1.064	mg/L	106	90	110			
WG592139CCB2	CCB	06/29/24 14:20				U	mg/L		-0.03	0.03			
L88282-06AS	AS	06/29/24 14:29	II240617-1	.501	.018	.568	mg/L	110	85	115			
L88282-06ASD	ASD	06/29/24 14:32	II240617-1	.501	.018	.565	mg/L	109	85	115	1	20	
WG592139CCV3	CCV	06/29/24 14:39	II240614-2	1		1.046	mg/L	105	90	110			
WG592139CCB3	CCB	06/29/24 14:42				U	mg/L		-0.03	0.03			

Mercury, dissolved

EPA 245.1

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG591474													
WG591474ICV	ICV	06/21/24 11:33	HG240528-3	.005		.00486	mg/L	97	95	105			
WG591474ICB	ICB	06/21/24 11:34				U	mg/L		-0.0002	0.0002			
WG591478													
WG591478CCV1	CCV	06/21/24 12:43	HG240528-3	.005		.00531	mg/L	106	90	110			
WG591478CCB1	CCB	06/21/24 12:44				U	mg/L		-0.0002	0.0002			
WG591478LRB	LRB	06/21/24 12:46				U	mg/L		-0.00044	0.00044			
WG591478LFB	LFB	06/21/24 12:47	HG240619-6	.002002		.00198	mg/L	99	85	115			
WG591478CCV2	CCV	06/21/24 12:55	HG240528-3	.005		.00523	mg/L	105	90	110			
WG591478CCB2	CCB	06/21/24 12:56				U	mg/L		-0.0002	0.0002			
WG591478CCV3	CCV	06/21/24 13:06	HG240528-3	.005		.0053	mg/L	106	90	110			
WG591478CCB3	CCB	06/21/24 13:07				U	mg/L		-0.0002	0.0002			
L88427-01LFM	LFM	06/21/24 13:13	HG240619-6	.002002	U	.00192	mg/L	96	85	115			
L88427-01LFMD	LFMD	06/21/24 13:14	HG240619-6	.002002	U	.00196	mg/L	98	85	115	2	20	
WG591478CCV4	CCV	06/21/24 13:15	HG240528-3	.005		.0052	mg/L	104	90	110			
WG591478CCB4	CCB	06/21/24 13:15				U	mg/L		-0.0002	0.0002			
WG591478CCV5	CCV	06/21/24 13:45	HG240528-3	.005		.00504	mg/L	101	90	110			
WG591478CCB5	CCB	06/21/24 13:46				U	mg/L		-0.0002	0.0002			
WG591478PQV1	PQV	06/21/24 13:46	HG240619-5	.001001		.00107	mg/L	107	70	130			
WG591478CCV6	CCV	06/21/24 13:47	HG240528-3	.005		.00484	mg/L	97	90	110			
WG591478CCB6	CCB	06/21/24 13:48				U	mg/L		-0.0002	0.0002			

GCC

ACZ Project ID: **L88296**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592139													
WG592139ICV	ICV	06/29/24 12:48	II240627-5	2.004		1.9292	mg/L	96	95	105			
WG592139ICB	ICB	06/29/24 12:54				U	mg/L		-0.024	0.024			
WG592139PQV	PQV	06/29/24 12:57	II240624-6	.04008		.0438	mg/L	109	70	130			
WG592139SIC	SIC	06/29/24 13:00	11240624-2	.1002		.0965	mg/L	96	80	120			
WG592139LFB	LFB	06/29/24 13:07	II240617-1	.501		.5105	mg/L	102	85	115			
WG592139CCV1	CCV	06/29/24 13:39	II240614-2	1.002		.9732	mg/L	97	90	110			
WG592139CCB1	CCB	06/29/24 13:42				U	mg/L		-0.024	0.024			
WG592139CCV2	CCV	06/29/24 14:17	II240614-2	1.002		.9881	mg/L	99	90	110			
WG592139CCB2	CCB	06/29/24 14:20				U	mg/L		-0.024	0.024			
L88282-06AS	AS	06/29/24 14:29	II240617-1	.501	U	.5037	mg/L	101	85	115			
L88282-06ASD	ASD	06/29/24 14:32	II240617-1	.501	U	.5065	mg/L	101	85	115	1	20	
WG592139CCV3	CCV	06/29/24 14:39	II240614-2	1.002		.9609	mg/L	96	90	110			
WG592139CCB3	CCB	06/29/24 14:42				U	mg/L		-0.024	0.024			

Nitrate/Nitrite as N

EPA 353.2

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG591005													
WG591005ICV	ICV	06/12/24 23:41	WI240403-6	2.415		2.365	mg/L	98	90	110			
WG591005ICB	ICB	06/12/24 23:42				U	mg/L		-0.02	0.02			
WG591005LFB	LFB	06/12/24 23:46	WI240228-17	2		2.027	mg/L	101	90	110			
WG591005CCV1	CCV	06/12/24 23:56	WI240612-9	2		2.002	mg/L	100	90	110			
WG591005CCB1	CCB	06/12/24 23:59				U	mg/L		-0.02	0.02			
L88282-05AS	AS	06/13/24 0:08	WI240228-17	2	U	1.745	mg/L	87	90	110			M2
L88282-06DUP	DUP	06/13/24 0:10			.045	.046	mg/L				2	20	RA
WG591005CCV2	CCV	06/13/24 0:13	WI240612-9	2		1.996	mg/L	100	90	110			
WG591005CCB2	CCB	06/13/24 0:16				U	mg/L		-0.02	0.02			
WG591005CCV3	CCV	06/13/24 0:27	WI240612-9	2		1.992	mg/L	100	90	110			
WG591005CCB3	CCB	06/13/24 0:30				U	mg/L		-0.02	0.02			

Nitrite as N

EPA 353.2

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG591005													
WG591005ICV	ICV	06/12/24 23:41	WI240403-6	.608		.612	mg/L	101	90	110			
WG591005ICB	ICB	06/12/24 23:42				U	mg/L		-0.01	0.01			
WG591005LFB	LFB	06/12/24 23:46	WI240228-17	1		1.024	mg/L	102	90	110			
WG591005CCV1	CCV	06/12/24 23:56	WI240612-9	1		1.014	mg/L	101	90	110			
WG591005CCB1	CCB	06/12/24 23:59				U	mg/L		-0.01	0.01			
L88282-05AS	AS	06/13/24 0:08	WI240228-17	1	U	.892	mg/L	89	90	110			M2
L88282-06DUP	DUP	06/13/24 0:10			U	U	mg/L				0	20	RA
WG591005CCV2	CCV	06/13/24 0:13	WI240612-9	1		1.018	mg/L	102	90	110			
WG591005CCB2	CCB	06/13/24 0:16				U	mg/L		-0.01	0.01			
WG591005CCV3	CCV	06/13/24 0:27	WI240612-9	1		1.015	mg/L	102	90	110			
WG591005CCB3	CCB	06/13/24 0:30				U	mg/L		-0.01	0.01			

GCC

ACZ Project ID: **L88296**

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

Potassium, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592139													
WG592139ICV	ICV	06/29/24 12:48	II240627-5	20		19.65	mg/L	98	95	105			
WG592139ICB	ICB	06/29/24 12:54				U	mg/L		-1.5	1.5			
WG592139PQV	PQV	06/29/24 12:57	II240624-6	1.002		1.15	mg/L	115	70	130			
WG592139SIC	SIC	06/29/24 13:00	11240624-2	1.002		1.13	mg/L	113	80	120			
WG592139LFB	LFB	06/29/24 13:07	II240617-1	99.96008		103.9	mg/L	104	85	115			
WG592139CCV1	CCV	06/29/24 13:39	II240614-2	10		10.19	mg/L	102	90	110			
WG592139CCB1	CCB	06/29/24 13:42				U	mg/L		-1.5	1.5			
WG592139CCV2	CCV	06/29/24 14:17	II240614-2	10		10.27	mg/L	103	90	110			
WG592139CCB2	CCB	06/29/24 14:20				U	mg/L		-1.5	1.5			
L88282-06AS	AS	06/29/24 14:29	II240617-1	99.96008	U	107.2	mg/L	107	85	115			
L88282-06ASD	ASD	06/29/24 14:32	II240617-1	99.96008	U	107	mg/L	107	85	115	0	20	
WG592139CCV3	CCV	06/29/24 14:39	II240614-2	10		10.15	mg/L	102	90	110			
WG592139CCB3	CCB	06/29/24 14:42				U	mg/L		-1.5	1.5			

Residue, Filterable (TDS) @180C

SM 2540 C-2011

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG591330													
WG591330PBW	PBW	06/18/24 11:20				U	mg/L		-20	20			
WG591330LCSW	LCSW	06/18/24 11:22	PCN626718	1000		976	mg/L	98	80	120			
L88341-02DUP	DUP	06/18/24 11:51			124	126	mg/L				2	10	RA

Selenium, dissolved

EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG591230													
WG591230ICV	ICV	06/17/24 12:29	MS240613-12	.05		.04979	mg/L	100	90	110			
WG591230ICB	ICB	06/17/24 12:31				U	mg/L		-0.00022	0.00022			
WG591230LFB	LFB	06/17/24 12:33	MS240613-7	.05005		.0526	mg/L	105	85	115			
WG591230CCV1	CCV	06/17/24 12:52	MS240421-5	.1001		.10101	mg/L	101	90	110			
WG591230CCB1	CCB	06/17/24 12:54				U	mg/L		-0.0003	0.0003			
L88284-05AS	AS	06/17/24 13:11	MS240613-7	.05005	U	.05582	mg/L	112	70	130			
L88284-05ASD	ASD	06/17/24 13:13	MS240613-7	.05005	U	.05782	mg/L	116	70	130	4	20	
WG591230CCV2	CCV	06/17/24 13:15	MS240421-5	.1001		.10216	mg/L	102	90	110			
WG591230CCB2	CCB	06/17/24 13:18				U	mg/L		-0.0003	0.0003			
WG591230CCV3	CCV	06/17/24 13:36	MS240421-5	.1001		.10101	mg/L	101	90	110			
WG591230CCB3	CCB	06/17/24 13:39				U	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: **L88296**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592139													
WG592139ICV	ICV	06/29/24 12:48	II240627-5	100		98.59	mg/L	99	95	105			
WG592139ICB	ICB	06/29/24 12:54				U	mg/L		-0.6	0.6			
WG592139PQV	PQV	06/29/24 12:57	II240624-6	1.005		1.13	mg/L	112	70	130			
WG592139SIC	SIC	06/29/24 13:00	11240624-2	1.005		1.19	mg/L	118	80	120			
WG592139LFB	LFB	06/29/24 13:07	II240617-1	99.97238		103.1	mg/L	103	85	115			
WG592139CCV1	CCV	06/29/24 13:39	II240614-2	50		50.2	mg/L	100	90	110			
WG592139CCB1	CCB	06/29/24 13:42				U	mg/L		-0.6	0.6			
WG592139CCV2	CCV	06/29/24 14:17	II240614-2	50		50.46	mg/L	101	90	110			
WG592139CCB2	CCB	06/29/24 14:20				.21	mg/L		-0.6	0.6			
L88282-06AS	AS	06/29/24 14:29	II240617-1	99.97238	2.25	107.3	mg/L	105	85	115			
L88282-06ASD	ASD	06/29/24 14:32	II240617-1	99.97238	2.25	106.7	mg/L	104	85	115	1	20	
WG592139CCV3	CCV	06/29/24 14:39	II240614-2	50		49.51	mg/L	99	90	110			
WG592139CCB3	CCB	06/29/24 14:42				.29	mg/L		-0.6	0.6			

Sulfate

ASTM D516-07/-11/-16

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG591109													
WG591109ICV	ICV	06/14/24 8:59	WI240606-14	20.02		21.6	mg/L	108	85	115			
WG591109ICB	ICB	06/14/24 8:59				U	mg/L		-2.5	2.5			
WG591109CCV1	CCV	06/14/24 10:06	WI240603-1	25		27.7	mg/L	111	85	115			
WG591109CCB1	CCB	06/14/24 10:07				U	mg/L		-2.5	2.5			
WG591109LFB	LFB	06/14/24 10:07	WI240304-2	10		11.3	mg/L	113	85	115			
WG591109CCV2	CCV	06/14/24 10:10	WI240603-1	25		26.6	mg/L	106	85	115			
WG591109CCB2	CCB	06/14/24 10:10				U	mg/L		-2.5	2.5			
WG591109CCV3	CCV	06/14/24 10:14	WI240603-1	25		26.5	mg/L	106	85	115			
WG591109CCB3	CCB	06/14/24 10:14				U	mg/L		-2.5	2.5			
L88297-04AS	AS	06/14/24 10:15	WI240304-2	10	5	16.5	mg/L	115	85	115			
L88297-04ASD	ASD	06/14/24 10:17	WI240304-2	10	5	16.6	mg/L	116	85	115	1	20	M1
WG591109CCV4	CCV	06/14/24 10:18	WI240603-1	25		26.8	mg/L	107	85	115			
WG591109CCB4	CCB	06/14/24 10:18				U	mg/L		-2.5	2.5			
WG591109CCV5	CCV	06/14/24 10:20	WI240603-1	25		27.5	mg/L	110	85	115			
WG591109CCB5	CCB	06/14/24 10:21				U	mg/L		-2.5	2.5			
WG591109CCV6	CCV	06/14/24 10:32	WI240603-1	25		27.8	mg/L	111	85	115			
WG591109CCB6	CCB	06/14/24 10:32				U	mg/L		-2.5	2.5			
WG591109CCV7	CCV	06/14/24 10:33	WI240603-1	25		27.2	mg/L	109	85	115			
WG591109CCB7	CCB	06/14/24 10:34				U	mg/L		-2.5	2.5			
WG591109CCV8	CCV	06/14/24 10:36	WI240603-1	25		27.2	mg/L	109	85	115			
WG591109CCB8	CCB	06/14/24 10:37				U	mg/L		-2.5	2.5			

GCC

ACZ Project ID: **L88296**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592139													
WG592139ICV	ICV	06/29/24 12:48	II240627-5	2		2.012	mg/L	101	95	105			
WG592139ICB	ICB	06/29/24 12:54				U	mg/L		-0.015	0.015			
WG592139PQV	PQV	06/29/24 12:57	II240624-6	.025025		.028	mg/L	112	70	130			
WG592139SIC	SIC	06/29/24 13:00	11240624-2	.1001		.098	mg/L	98	80	120			
WG592139LFB	LFB	06/29/24 13:07	II240617-1	.5005		.5327	mg/L	106	85	115			
WG592139CCV1	CCV	06/29/24 13:39	II240614-2	1		1.033	mg/L	103	90	110			
WG592139CCB1	CCB	06/29/24 13:42				U	mg/L		-0.03	0.03			
WG592139CCV2	CCV	06/29/24 14:17	II240614-2	1		1.038	mg/L	104	90	110			
WG592139CCB2	CCB	06/29/24 14:20				U	mg/L		-0.03	0.03			
L88282-06AS	AS	06/29/24 14:29	II240617-1	.5005	U	.5456	mg/L	109	85	115			
L88282-06ASD	ASD	06/29/24 14:32	II240617-1	.5005	U	.545	mg/L	109	85	115	0	20	
WG592139CCV3	CCV	06/29/24 14:39	II240614-2	1		1.017	mg/L	102	90	110			
WG592139CCB3	CCB	06/29/24 14:42				U	mg/L		-0.03	0.03			

Zinc, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592139													
WG592139ICV	ICV	06/29/24 12:48	II240627-5	2		2.001	mg/L	100	95	105			
WG592139ICB	ICB	06/29/24 12:54				U	mg/L		-0.06	0.06			
WG592139PQV	PQV	06/29/24 12:57	II240624-6	.0502		.061	mg/L	122	70	130			
WG592139SIC	SIC	06/29/24 13:00	11240624-2	.10025		.116	mg/L	116	80	120			
WG592139LFB	LFB	06/29/24 13:07	II240617-1	.50045		.552	mg/L	110	85	115			
WG592139CCV1	CCV	06/29/24 13:39	II240614-2	1		1.035	mg/L	104	90	110			
WG592139CCB1	CCB	06/29/24 13:42				U	mg/L		-0.06	0.06			
WG592139CCV2	CCV	06/29/24 14:17	II240614-2	1		1.051	mg/L	105	90	110			
WG592139CCB2	CCB	06/29/24 14:20				U	mg/L		-0.06	0.06			
L88282-06AS	AS	06/29/24 14:29	II240617-1	.50045	U	.582	mg/L	112	85	115			
L88282-06ASD	ASD	06/29/24 14:32	II240617-1	.50045	U	.586	mg/L	113	85	115	1	20	
WG592139CCV3	CCV	06/29/24 14:39	II240614-2	1		1.032	mg/L	103	90	110			
WG592139CCB3	CCB	06/29/24 14:42				U	mg/L		-0.06	0.06			

GCC Rio Grande

ACZ Project ID: **L88296**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L88296-01	WG591832	Bicarbonate as CaCO ₃	SM 2320 B-2011	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO ₃	SM 2320 B-2011	Q6	Sample was received above recommended temperature.
	WG591057	Chloride	SM 4500-Cl E-2011	Q6	Sample was received above recommended temperature.
	WG592168	Copper, dissolved	EPA 200.7	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [$< MDL$].
	WG592092	Fluoride	SM 4500-F C-2011	Q6	Sample was received above recommended temperature.
	WG591832	Hydroxide as CaCO ₃	SM 2320 B-2011	Q6	Sample was received above recommended temperature.
	WG591005	Nitrate/Nitrite as N	EPA 353.2	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			EPA 353.2	Q6	Sample was received above recommended temperature.
			EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation ($< 10x MDL$).
			EPA 353.2	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			EPA 353.2	Q6	Sample was received above recommended temperature.
			EPA 353.2	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation ($< 10x MDL$).
	WG591330	Residue, Filterable (TDS) @180C	SM 2540 C-2011	Q6	Sample was received above recommended temperature.
			SM 2540 C-2011	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation ($< 10x MDL$).
	WG591109	Sulfate	ASTM D516-07/-11/-16	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			ASTM D516-07/-11/-16	Q6	Sample was received above recommended temperature.
	WG591832	Total Alkalinity	SM 2320 B-2011	B7	Target analyte detected in prep / method blank at or above acceptance limit. Sample value is $> 10X$ the concentration in the method blank.
			SM 2320 B-2011	Q6	Sample was received above recommended temperature.

GCC Rio Grande

ACZ Project ID: **L88296**

No certification qualifiers associated with this analysis

GCC Rio Grande

ACZ Project ID: L88296

Date Received: 06/12/2024 11:47

Received By:

Date Printed: 6/13/2024

Receipt Verification

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

Samples/Containers

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

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?
NA42090	6.9	<=6.0	15	Yes

Was ice present in the shipment container(s)?

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

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

GCC Rio Grande

ACZ Project ID: L88296

Date Received: 06/12/2024 11:47

Received By:

Date Printed: 6/13/2024

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).



Accredited
Environmental
Testing

2773 Downhill Drive
Steamboat Springs, CO 80487
(970) 879-6590

188296

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: SLR Consulting

E-mail: lbeck@slrconsulting.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

ANALYSES REQUESTED (attach list or use quote numbers)

Quote #: GW-COMPLIANCE

PO#: 258478

Reporting state for compliance testing:

Check box if samples include NRC licensed material?



SAMPLE IDENTIFICATION

DATE: TIME

Matrix

of Containers

GW-Compliance

MW-18

6/11/2024 13:11

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

6/11/2024 16:15

[Signature]

6/12/24 11:47

Qualtrax ID: 1984

Revision #: 2

White - Return with sample

Yellow - Retain for your records.



L88296-2407091536

July 19, 2024

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:
ACZ Project ID: L88585

Amy Rodrigues:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on June 26, 2024. This project has been assigned to ACZ's project number, L88585. 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 L88585. 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 July 19, 2025. 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

July 19, 2024

Project ID:

ACZ Project ID: L88585

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 1 groundwater sample from GCC Rio Grande on June 26, 2024. The sample was received in good condition. Upon receipt, the sample custodian removed the sample from the cooler, inspected the contents, and logged the sample into ACZ's computerized Laboratory Information Management System (LIMS). The sample was assigned ACZ LIMS project number L88585. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

All analyses were performed within EPA recommended holding times.

Sample Analysis

This sample was analyzed for inorganic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports.

GCC Rio Grande

Project ID:

Sample ID: MW-22

ACZ Sample ID: **L88585-01**

Date Sampled: 06/25/24 09:43

Date Received: 06/26/24

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	EPA 200.7	1	<0.07	U		mg/L	0.07	0.25	07/17/24 19:24	msp
Arsenic, dissolved	EPA 200.8	1	0.00751			mg/L	0.0002	0.001	07/01/24 11:43	gjl
Beryllium, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.05	07/17/24 19:24	msp
Boron, dissolved	EPA 200.7	1	0.289			mg/L	0.03	0.1	07/18/24 19:29	msp
Cadmium, dissolved	EPA 200.8	1	<0.00005	U		mg/L	0.00005	0.00025	07/01/24 11:43	gjl
Calcium, dissolved	EPA 200.7	1	4.60			mg/L	0.1	0.5	07/13/24 4:12	msp
Chromium, dissolved	EPA 200.7	1	<0.02	U		mg/L	0.02	0.05	07/13/24 4:12	msp
Cobalt, dissolved	EPA 200.8	1	0.000110	B		mg/L	0.00005	0.00025	07/01/24 11:43	gjl
Copper, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.05	07/17/24 19:24	msp
Iron, dissolved	EPA 200.7	1	<0.06	U		mg/L	0.06	0.15	07/13/24 4:12	msp
Lead, dissolved	EPA 200.8	1	<0.0001	U		mg/L	0.0001	0.0005	07/01/24 11:43	gjl
Lithium, dissolved	EPA 200.7	1	0.0565			mg/L	0.008	0.04	07/13/24 4:12	msp
Magnesium, dissolved	EPA 200.7	1	0.82	B		mg/L	0.2	1	07/13/24 4:12	msp
Manganese, dissolved	EPA 200.7	1	0.034	B		mg/L	0.01	0.05	07/18/24 19:29	msp
Mercury, dissolved	EPA 245.1	1	<0.0002	U		mg/L	0.0002	0.001	07/10/24 11:21	aeb
Nickel, dissolved	EPA 200.7	1	<0.008	U		mg/L	0.008	0.04	07/13/24 4:12	msp
Potassium, dissolved	EPA 200.7	1	0.81	B		mg/L	0.5	1	07/13/24 4:12	msp
Selenium, dissolved	EPA 200.8	1	0.00119			mg/L	0.0001	0.00025	07/01/24 14:48	gjl
Sodium, dissolved	EPA 200.7	1	286			mg/L	0.2	1	07/13/24 4:12	msp
Vanadium, dissolved	EPA 200.7	1	<0.01	U		mg/L	0.01	0.025	07/17/24 19:24	msp
Zinc, dissolved	EPA 200.7	1	0.125		*	mg/L	0.02	0.05	07/13/24 4:12	msp

GCC Rio Grande

Project ID:

Sample ID: MW-22

ACZ Sample ID: **L88585-01**

Date Sampled: 06/25/24 09:43

Date Received: 06/26/24

Sample Matrix: Groundwater

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM 2320 B-2011									
Bicarbonate as CaCO ₃		1	286			mg/L	2	20	07/04/24 0:00	emk
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	07/04/24 0:00	emk
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	07/04/24 0:00	emk
Total Alkalinity		1	286			mg/L	2	20	07/04/24 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-3.7			%			07/19/24 0:00	calc
Sum of Anions			14			meq/L			07/19/24 0:00	calc
Sum of Cations			13			meq/L			07/19/24 0:00	calc
Chloride	SM 4500-Cl E-2011	5	161		*	mg/L	5	10	06/28/24 11:49	jqr
Fluoride	SM 4500-F C-2011	1	1.99			mg/L	0.15	0.35	07/18/24 15:47	emk
Hardness as CaCO ₃ (dissolved)	Calculation (SM 2340 B-2011)		15			mg/L	0.2	5	07/19/24 0:00	calc
Nitrate as N	Calculation (NO ₃ NO ₂ -NO ₂)		0.028	B		mg/L	0.02	0.1	07/19/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2	1	0.183		*	mg/L	0.02	0.1	06/27/24 0:28	pjb
Nitrite as N	EPA 353.2	1	0.155		*	mg/L	0.01	0.05	06/27/24 0:28	pjb
Residue, Filterable (TDS) @180C	SM 2540 C-2011	1	792			mg/L	20	40	06/27/24 14:28	amw
Sulfate	ASTM D516-07/-11/-16	5	163		*	mg/L	5	25	07/01/24 10:48	jqr
TDS (calculated)	Calculation		793			mg/L			07/19/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.00						07/19/24 0:00	calc


Report Header Explanations

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

QC Sample Types

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

QC Sample Type Explanations

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

ACZ Qualifiers (Qual)

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

Method References

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

Comments

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

For a complete list of ACZ's Extended Qualifiers, please click:

<https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf>

GCC

ACZ Project ID: **L88585**

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
WG592423													
WG592423PBW1	PBW	07/03/24 19:22				U	mg/L		-20	20			
WG592423LCSW3	LCSW	07/03/24 19:37	WC240612-2	820.0001		764.8	mg/L	93	90	110			
WG592423LCSW6	LCSW	07/03/24 21:40	WC240612-2	820.0001		778.5	mg/L	95	90	110			
WG592423PBW2	PBW	07/03/24 21:48				16.9	mg/L		-20	20			
WG592423LCSW9	LCSW	07/03/24 23:51	WC240612-2	820.0001		787	mg/L	96	90	110			
WG592423PBW3	PBW	07/03/24 23:58				18.2	mg/L		-20	20			
WG592423LCSW12	LCSW	07/04/24 2:19	WC240612-2	820.0001		789.6	mg/L	96	90	110			
WG592423PBW4	PBW	07/04/24 2:26				13.1	mg/L		-20	20			
WG592423LCSW15	LCSW	07/04/24 4:39	WC240612-2	820.0001		780.1	mg/L	95	90	110			
WG592423PBW5	PBW	07/04/24 4:46				12.9	mg/L		-20	20			
L88611-01DUP	DUP	07/04/24 7:02			183	194.9	mg/L				6	20	
WG592423LCSW18	LCSW	07/04/24 7:17	WC240612-2	820.0001		788.9	mg/L	96	90	110			
WG592423PBW6	PBW	07/04/24 7:25				28.7	mg/L		-20	20			B4 B7
WG592423LCSW21	LCSW	07/04/24 8:43	WC240612-2	820.0001		789.6	mg/L	96	90	110			

Aluminum, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG593097													
WG593097ICV	ICV	07/17/24 18:17	II240710-5	2		1.95	mg/L	98	95	105			
WG593097ICB	ICB	07/17/24 18:22				U	mg/L		-0.15	0.15			
WG593097PQV	PQV	07/17/24 18:24	II240716-1	.250625		.247	mg/L	99	70	130			
WG593097SIC	SIC	07/17/24 18:26	II240705-2	200.75025		200	mg/L	100	1	200			
WG593097LFB	LFB	07/17/24 18:30	II240702-3	1.001		1.02	mg/L	102	85	115			
WG593097CCV1	CCV	07/17/24 18:52	II240710-1	1		.997	mg/L	100	90	110			
WG593097CCB1	CCB	07/17/24 18:54				U	mg/L		-0.15	0.15			
WG593097CCV2	CCV	07/17/24 19:17	II240710-1	1		.995	mg/L	100	90	110			
WG593097CCB2	CCB	07/17/24 19:20				U	mg/L		-0.15	0.15			
L88585-01AS	AS	07/17/24 19:26	II240702-3	1.001	U	1.02	mg/L	102	85	115			
L88585-01ASD	ASD	07/17/24 19:28	II240702-3	1.001	U	.983	mg/L	98	85	115	4	20	
WG593097CCV3	CCV	07/17/24 19:32	II240710-1	1		.998	mg/L	100	90	110			
WG593097CCB3	CCB	07/17/24 19:35				U	mg/L		-0.15	0.15			

Arsenic, dissolved

EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592185													
WG592185ICV	ICV	07/01/24 10:34	MS240613-12	.05		.05165	mg/L	103	90	110			
WG592185ICB	ICB	07/01/24 10:36				U	mg/L		-0.00044	0.00044			
WG592185LFB	LFB	07/01/24 10:38	MS240613-7	.0501		.05192	mg/L	104	85	115			
WG592185CCV1	CCV	07/01/24 10:59	MS240421-5	.1002		.10212	mg/L	102	90	110			
WG592185CCB1	CCB	07/01/24 11:02				U	mg/L		-0.0006	0.0006			
WG592185CCV2	CCV	07/01/24 11:22	MS240421-5	.1002		.10247	mg/L	102	90	110			
WG592185CCB2	CCB	07/01/24 11:25				U	mg/L		-0.0006	0.0006			
L88555-03AS	AS	07/01/24 11:34	MS240613-7	.0501	.00079	.05692	mg/L	112	70	130			
L88555-03ASD	ASD	07/01/24 11:36	MS240613-7	.0501	.00079	.05846	mg/L	115	70	130	3	20	
WG592185CCV3	CCV	07/01/24 11:46	MS240421-5	.1002		.10427	mg/L	104	90	110			
WG592185CCB3	CCB	07/01/24 11:48				U	mg/L		-0.0006	0.0006			

GCC

ACZ Project ID: **L88585**

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

Beryllium, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG593097													
WG593097ICV	ICV	07/17/24 18:17	II240710-5	2		1.94	mg/L	97	95	105			
WG593097ICB	ICB	07/17/24 18:22				U	mg/L		-0.03	0.03			
WG593097PQV	PQV	07/17/24 18:24	II240716-1	.0501		.051	mg/L	102	70	130			
WG593097SIC	SIC	07/17/24 18:26	II240705-2	.1002		.099	mg/L	99	80	120			
WG593097LFB	LFB	07/17/24 18:30	II240702-3	.501		.518	mg/L	103	85	115			
WG593097CCV1	CCV	07/17/24 18:52	II240710-1	1		1.01	mg/L	101	90	110			
WG593097CCB1	CCB	07/17/24 18:54				U	mg/L		-0.03	0.03			
WG593097CCV2	CCV	07/17/24 19:17	II240710-1	1		.983	mg/L	98	90	110			
WG593097CCB2	CCB	07/17/24 19:20				U	mg/L		-0.03	0.03			
L88585-01AS	AS	07/17/24 19:26	II240702-3	.501	U	.504	mg/L	101	85	115			
L88585-01ASD	ASD	07/17/24 19:28	II240702-3	.501	U	.502	mg/L	100	85	115	0	20	
WG593097CCV3	CCV	07/17/24 19:32	II240710-1	1		.988	mg/L	99	90	110			
WG593097CCB3	CCB	07/17/24 19:35				U	mg/L		-0.03	0.03			

Boron, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG593418													
WG593418ICV	ICV	07/18/24 18:17	II240716-3	2		2.079	mg/L	104	95	105			
WG593418ICB	ICB	07/18/24 18:23				U	mg/L		-0.09	0.09			
WG593418PQV	PQV	07/18/24 18:26	II240716-1	.1001		.107	mg/L	107	70	130			
WG593418SIC	SIC	07/18/24 18:29	II240705-2	.1001		.108	mg/L	108	80	120			
WG593418LFB	LFB	07/18/24 18:35	II240719-3	.5005		.51	mg/L	102	85	115			
WG593418CCV1	CCV	07/18/24 19:05	II240710-1	1		1.026	mg/L	103	90	110			
WG593418CCB1	CCB	07/18/24 19:08				U	mg/L		-0.09	0.09			
WG593418CCV2	CCV	07/18/24 19:41	II240710-1	1		1.017	mg/L	102	90	110			
WG593418CCB2	CCB	07/18/24 19:44				U	mg/L		-0.09	0.09			
L88621-05AS	AS	07/18/24 19:57	II240719-3	.5005	U	.518	mg/L	103	85	115			
L88621-05ASD	ASD	07/18/24 20:00	II240719-3	.5005	U	.511	mg/L	102	85	115	1	20	
WG593418CCV3	CCV	07/18/24 20:03	II240710-1	1		1.013	mg/L	101	90	110			
WG593418CCB3	CCB	07/18/24 20:06				U	mg/L		-0.09	0.09			

Cadmium, dissolved

EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592185													
WG592185ICV	ICV	07/01/24 10:34	MS240613-12	.05		.050233	mg/L	100	90	110			
WG592185ICB	ICB	07/01/24 10:36				.000074	mg/L		-0.00011	0.00011			
WG592185LFB	LFB	07/01/24 10:38	MS240613-7	.05005		.048184	mg/L	96	85	115			
WG592185CCV1	CCV	07/01/24 10:59	MS240421-5	.1001		.098413	mg/L	98	90	110			
WG592185CCB1	CCB	07/01/24 11:02				U	mg/L		-0.00015	0.00015			
WG592185CCV2	CCV	07/01/24 11:22	MS240421-5	.1001		.100226	mg/L	100	90	110			
WG592185CCB2	CCB	07/01/24 11:25				U	mg/L		-0.00015	0.00015			
L88555-03AS	AS	07/01/24 11:34	MS240613-7	.05005	U	.052054	mg/L	104	70	130			
L88555-03ASD	ASD	07/01/24 11:36	MS240613-7	.05005	U	.053584	mg/L	107	70	130	3	20	
WG592185CCV3	CCV	07/01/24 11:46	MS240421-5	.1001		.100398	mg/L	100	90	110			
WG592185CCB3	CCB	07/01/24 11:48				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: **L88585**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592979													
WG592979ICV	ICV	07/13/24 2:30	II240710-5	100		96.14	mg/L	96	95	105			
WG592979ICB	ICB	07/13/24 2:36				U	mg/L		-0.3	0.3			
WG592979PQV	PQV	07/13/24 2:39	II240624-6	.5025		.5	mg/L	100	70	130			
WG592979SIC	SIC	07/13/24 2:42	II240705-2	201.5025		197.1	mg/L	98	1	200			
WG592979LFB	LFB	07/13/24 2:48	II240702-3	67.93628		70.34	mg/L	104	85	115			
WG592979CCV1	CCV	07/13/24 3:18	II240710-1	50		50.17	mg/L	100	90	110			
WG592979CCB1	CCB	07/13/24 3:21				.15	mg/L		-0.3	0.3			
L88539-14AS	AS	07/13/24 3:51	II240702-3	67.93628	141	204.4	mg/L	93	85	115			
WG592979CCV2	CCV	07/13/24 3:54	II240710-1	50		50.88	mg/L	102	90	110			
WG592979CCB2	CCB	07/13/24 3:57				.1	mg/L		-0.3	0.3			
L88539-14ASD	ASD	07/13/24 4:00	II240702-3	67.93628	141	200.8	mg/L	88	85	115	2	20	
WG592979CCV3	CCV	07/13/24 4:15	II240710-1	50		48.92	mg/L	98	90	110			
WG592979CCB3	CCB	07/13/24 4:18				U	mg/L		-0.3	0.3			

Chloride

SM 4500-Cl E-2011

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592119													
WG592119ICV	ICV	06/28/24 10:04	WI231211-1	39.96		38.19	mg/L	96	90	110			
WG592119ICB	ICB	06/28/24 10:04				U	mg/L						
WG592119CCV1	CCV	06/28/24 11:27	WI240606-12	25		23.85	mg/L	95	90	110			
WG592119CCB1	CCB	06/28/24 11:27				U	mg/L						
WG592119PQV	PQV	06/28/24 11:28	WI240606-13	2		1.94	mg/L	97	50	150			
WG592119LFB1	LFB	06/28/24 11:28	WI231211-4	20.02		20.32	mg/L	101	90	110			
WG592119CCV2	CCV	06/28/24 11:31	WI240606-12	25		24.2	mg/L	97	90	110			
WG592119CCB2	CCB	06/28/24 11:31				U	mg/L						
L88588-03DUP	DUP	06/28/24 11:38			1.38	1.37	mg/L				1	20	RA
WG592119CCV3	CCV	06/28/24 11:38	WI240606-12	25		24.14	mg/L	97	90	110			
WG592119CCB3	CCB	06/28/24 11:39				U	mg/L						
WG592119LFB2	LFB	06/28/24 11:47	WI231211-4	20.02		20.29	mg/L	101	90	110			
WG592119CCV4	CCV	06/28/24 11:47	WI240606-12	25		24.07	mg/L	96	90	110			
WG592119CCB4	CCB	06/28/24 11:47				U	mg/L						
WG592119CCV5	CCV	06/28/24 11:50	WI240606-12	25		24.41	mg/L	98	90	110			
WG592119CCB5	CCB	06/28/24 11:50				U	mg/L						
L88588-02AS	AS	06/28/24 11:56	WI231211-4	20.02	1.35	21.64	mg/L	101	90	110			
WG592119CCV6	CCV	06/28/24 11:56	WI240606-12	25		23.86	mg/L	95	90	110			
WG592119CCB6	CCB	06/28/24 11:57				U	mg/L						

GCC

ACZ Project ID: **L88585**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592979													
WG592979ICV	ICV	07/13/24 2:30	II240710-5	2		1.927	mg/L	96	95	105			
WG592979ICB	ICB	07/13/24 2:36				U	mg/L		-0.06	0.06			
WG592979PQV	PQV	07/13/24 2:39	II240624-6	.05005		.063	mg/L	126	70	130			
WG592979SIC	SIC	07/13/24 2:42	II240705-2	.1001		.11	mg/L	110	80	120			
WG592979LFB	LFB	07/13/24 2:48	II240702-3	.5005		.527	mg/L	105	85	115			
WG592979CCV1	CCV	07/13/24 3:18	II240710-1	1		1.012	mg/L	101	90	110			
WG592979CCB1	CCB	07/13/24 3:21				U	mg/L		-0.06	0.06			
L88539-14AS	AS	07/13/24 3:51	II240702-3	.5005	U	.518	mg/L	103	85	115			
WG592979CCV2	CCV	07/13/24 3:54	II240710-1	1		1.015	mg/L	102	90	110			
WG592979CCB2	CCB	07/13/24 3:57				U	mg/L		-0.06	0.06			
L88539-14ASD	ASD	07/13/24 4:00	II240702-3	.5005	U	.507	mg/L	101	85	115	2	20	
WG592979CCV3	CCV	07/13/24 4:15	II240710-1	1		.98	mg/L	98	90	110			
WG592979CCB3	CCB	07/13/24 4:18				U	mg/L		-0.06	0.06			

Cobalt, dissolved

EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592185													
WG592185ICV	ICV	07/01/24 10:34	MS240613-12	.05		.051641	mg/L	103	90	110			
WG592185ICB	ICB	07/01/24 10:36				.000077	mg/L		-0.00011	0.00011			
WG592185LFB	LFB	07/01/24 10:38	MS240613-7	.05005		.050618	mg/L	101	85	115			
WG592185CCV1	CCV	07/01/24 10:59	MS240421-5	.1001		.10204	mg/L	102	90	110			
WG592185CCB1	CCB	07/01/24 11:02				U	mg/L		-0.00015	0.00015			
WG592185CCV2	CCV	07/01/24 11:22	MS240421-5	.1001		.100779	mg/L	101	90	110			
WG592185CCB2	CCB	07/01/24 11:25				U	mg/L		-0.00015	0.00015			
L88555-03AS	AS	07/01/24 11:34	MS240613-7	.05005	.000422	.052063	mg/L	103	70	130			
L88555-03ASD	ASD	07/01/24 11:36	MS240613-7	.05005	.000422	.05375	mg/L	107	70	130	3	20	
WG592185CCV3	CCV	07/01/24 11:46	MS240421-5	.1001		.102032	mg/L	102	90	110			
WG592185CCB3	CCB	07/01/24 11:48				U	mg/L		-0.00015	0.00015			

Copper, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG593097													
WG593097ICV	ICV	07/17/24 18:17	II240710-5	2		1.91	mg/L	96	95	105			
WG593097ICB	ICB	07/17/24 18:22				U	mg/L		-0.03	0.03			
WG593097PQV	PQV	07/17/24 18:24	II240716-1	.05005		.051	mg/L	102	70	130			
WG593097SIC	SIC	07/17/24 18:26	II240705-2	.1001		.092	mg/L	92	80	120			
WG593097LFB	LFB	07/17/24 18:30	II240702-3	.5005		.552	mg/L	110	85	115			
WG593097CCV1	CCV	07/17/24 18:52	II240710-1	1		.975	mg/L	98	90	110			
WG593097CCB1	CCB	07/17/24 18:54				U	mg/L		-0.03	0.03			
WG593097CCV2	CCV	07/17/24 19:17	II240710-1	1		.968	mg/L	97	90	110			
WG593097CCB2	CCB	07/17/24 19:20				U	mg/L		-0.03	0.03			
L88585-01AS	AS	07/17/24 19:26	II240702-3	.5005	U	.552	mg/L	110	85	115			
L88585-01ASD	ASD	07/17/24 19:28	II240702-3	.5005	U	.55	mg/L	110	85	115	0	20	
WG593097CCV3	CCV	07/17/24 19:32	II240710-1	1		.98	mg/L	98	90	110			
WG593097CCB3	CCB	07/17/24 19:35				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: **L88585**

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

SM 4500-F C-2011

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG593373													
WG593373ICV	ICV	07/18/24 13:57	WC240712-2	2		1.98	mg/L	99	90	110			
WG593373ICB	ICB	07/18/24 14:03				U	mg/L		-0.3	0.3			
WG593373PQV	PQV	07/18/24 14:06	WC240614-4	.35		.42	mg/L	120	50	150			
WG593373LFB1	LFB	07/18/24 14:09	WC240411-1	5		5	mg/L	100	90	110			
WG593373CCV1	CCV	07/18/24 14:59	WC240712-2	2		1.907	mg/L	95	90	110			
WG593373CCB1	CCB	07/18/24 15:05				U	mg/L		-0.3	0.3			
L88577-01AS	AS	07/18/24 15:25	WC240411-1	75	U	75.7	mg/L	101	90	110			
L88577-01ASD	ASD	07/18/24 15:30	WC240411-1	75	U	74.67	mg/L	100	90	110	1	20	
WG593373CCV2	CCV	07/18/24 15:51	WC240712-2	2		2.196	mg/L	110	90	110			
WG593373CCB2	CCB	07/18/24 15:58				U	mg/L		-0.3	0.3			
WG593373LFB2	LFB	07/18/24 16:24	WC240411-1	5		5.35	mg/L	107	90	110			
WG593373CCB3	CCB	07/18/24 16:49				U	mg/L		-0.3	0.3			
WG593373CCB4	CCB	07/18/24 17:44				U	mg/L		-0.3	0.3			
WG593373CCV5	CCV	07/18/24 18:46	WC240712-2	2		1.925	mg/L	96	90	110			
WG593373CCB5	CCB	07/18/24 18:51				U	mg/L		-0.3	0.3			

Iron, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592979													
WG592979ICV	ICV	07/13/24 2:30	II240710-5	2		1.949	mg/L	97	95	105			
WG592979ICB	ICB	07/13/24 2:36				U	mg/L		-0.18	0.18			
WG592979PQV	PQV	07/13/24 2:39	II240624-6	.15045		.162	mg/L	108	70	130			
WG592979SIC	SIC	07/13/24 2:42	II240705-2	200.75045		194.1	mg/L	97	1	200			
WG592979LFB	LFB	07/13/24 2:48	II240702-3	1.003		1.128	mg/L	112	85	115			
WG592979CCV1	CCV	07/13/24 3:18	II240710-1	1		1.031	mg/L	103	90	110			
WG592979CCB1	CCB	07/13/24 3:21				U	mg/L		-0.18	0.18			
L88539-14AS	AS	07/13/24 3:51	II240702-3	1.003	.076	1.093	mg/L	101	85	115			
WG592979CCV2	CCV	07/13/24 3:54	II240710-1	1		1.046	mg/L	105	90	110			
WG592979CCB2	CCB	07/13/24 3:57				U	mg/L		-0.18	0.18			
L88539-14ASD	ASD	07/13/24 4:00	II240702-3	1.003	.076	1.053	mg/L	97	85	115	4	20	
WG592979CCV3	CCV	07/13/24 4:15	II240710-1	1		1.002	mg/L	100	90	110			
WG592979CCB3	CCB	07/13/24 4:18				U	mg/L		-0.18	0.18			

Lead, dissolved

EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592185													
WG592185ICV	ICV	07/01/24 10:34	MS240613-12	.05		.05114	mg/L	102	90	110			
WG592185ICB	ICB	07/01/24 10:36				.00016	mg/L		-0.00022	0.00022			
WG592185LFB	LFB	07/01/24 10:38	MS240613-7	.05005		.04992	mg/L	100	85	115			
WG592185CCV1	CCV	07/01/24 10:59	MS240421-5	.25025		.25637	mg/L	102	90	110			
WG592185CCB1	CCB	07/01/24 11:02				U	mg/L		-0.0003	0.0003			
WG592185CCV2	CCV	07/01/24 11:22	MS240421-5	.25025		.25912	mg/L	104	90	110			
WG592185CCB2	CCB	07/01/24 11:25				U	mg/L		-0.0003	0.0003			
L88555-03AS	AS	07/01/24 11:34	MS240613-7	.05005	.00025	.05386	mg/L	107	70	130			
L88555-03ASD	ASD	07/01/24 11:36	MS240613-7	.05005	.00025	.05538	mg/L	110	70	130	3	20	
WG592185CCV3	CCV	07/01/24 11:46	MS240421-5	.25025		.25922	mg/L	104	90	110			
WG592185CCB3	CCB	07/01/24 11:48				U	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: **L88585**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592979													
WG592979ICV	ICV	07/13/24 2:30	II240710-5	2		1.94	mg/L	97	95	105			
WG592979ICB	ICB	07/13/24 2:36				U	mg/L		-0.024	0.024			
WG592979PQV	PQV	07/13/24 2:39	II240624-6	.04		.045	mg/L	113	70	130			
WG592979SIC	SIC	07/13/24 2:42	II240705-2	.10006		.1059	mg/L	106	80	120			
WG592979LFB	LFB	07/13/24 2:48	II240702-3	1		.9986	mg/L	100	85	115			
WG592979CCV1	CCV	07/13/24 3:18	II240710-1	1		1	mg/L	100	90	110			
WG592979CCB1	CCB	07/13/24 3:21				U	mg/L		-0.024	0.024			
L88539-14AS	AS	07/13/24 3:51	II240702-3	1	.0194	.9797	mg/L	96	85	115			
WG592979CCV2	CCV	07/13/24 3:54	II240710-1	1		.9914	mg/L	99	90	110			
WG592979CCB2	CCB	07/13/24 3:57				U	mg/L		-0.024	0.024			
L88539-14ASD	ASD	07/13/24 4:00	II240702-3	1	.0194	1.023	mg/L	100	85	115	4	20	
WG592979CCV3	CCV	07/13/24 4:15	II240710-1	1		.9671	mg/L	97	90	110			
WG592979CCB3	CCB	07/13/24 4:18				U	mg/L		-0.024	0.024			

Magnesium, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592979													
WG592979ICV	ICV	07/13/24 2:30	II240710-5	100		96.24	mg/L	96	95	105			
WG592979ICB	ICB	07/13/24 2:36				U	mg/L		-0.6	0.6			
WG592979PQV	PQV	07/13/24 2:39	II240624-6	1.006		.78	mg/L	78	70	130			
WG592979SIC	SIC	07/13/24 2:42	II240705-2	202.206		200.5	mg/L	99	1	200			
WG592979LFB	LFB	07/13/24 2:48	II240702-3	49.99866		51.58	mg/L	103	85	115			
WG592979CCV1	CCV	07/13/24 3:18	II240710-1	50		50.19	mg/L	100	90	110			
WG592979CCB1	CCB	07/13/24 3:21				U	mg/L		-0.6	0.6			
L88539-14AS	AS	07/13/24 3:51	II240702-3	49.99866	81.5	128.4	mg/L	94	85	115			
WG592979CCV2	CCV	07/13/24 3:54	II240710-1	50		50.5	mg/L	101	90	110			
WG592979CCB2	CCB	07/13/24 3:57				U	mg/L		-0.6	0.6			
L88539-14ASD	ASD	07/13/24 4:00	II240702-3	49.99866	81.5	126	mg/L	89	85	115	2	20	
WG592979CCV3	CCV	07/13/24 4:15	II240710-1	50		48.64	mg/L	97	90	110			
WG592979CCB3	CCB	07/13/24 4:18				U	mg/L		-0.6	0.6			

Manganese, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG593418													
WG593418ICV	ICV	07/18/24 18:17	II240716-3	2		2.011	mg/L	101	95	105			
WG593418ICB	ICB	07/18/24 18:23				U	mg/L		-0.03	0.03			
WG593418PQV	PQV	07/18/24 18:26	II240716-1	.0502		.049	mg/L	98	70	130			
WG593418SIC	SIC	07/18/24 18:29	II240705-2	50.4502		48.61	mg/L	96	1	200			
WG593418LFB	LFB	07/18/24 18:35	II240719-3	.504		.505	mg/L	100	85	115			
WG593418CCV1	CCV	07/18/24 19:05	II240710-1	1		1.002	mg/L	100	90	110			
WG593418CCB1	CCB	07/18/24 19:08				U	mg/L		-0.03	0.03			
WG593418CCV2	CCV	07/18/24 19:41	II240710-1	1		.995	mg/L	100	90	110			
WG593418CCB2	CCB	07/18/24 19:44				U	mg/L		-0.03	0.03			
L88621-05AS	AS	07/18/24 19:57	II240719-3	.504	.023	.524	mg/L	99	85	115			
L88621-05ASD	ASD	07/18/24 20:00	II240719-3	.504	.023	.522	mg/L	99	85	115	0	20	
WG593418CCV3	CCV	07/18/24 20:03	II240710-1	1		.983	mg/L	98	90	110			
WG593418CCB3	CCB	07/18/24 20:06				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: **L88585**

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

Mercury, dissolved

EPA 245.1

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592641													
WG592641ICV	ICV	07/10/24 10:16	HG240528-3	.005		.00502	mg/L	100	95	105			
WG592641ICB	ICB	07/10/24 10:17				U	mg/L		-0.0002	0.0002			
WG592648													
WG592648CCV1	CCV	07/10/24 10:51	HG240528-3	.005		.00487	mg/L	97	90	110			
WG592648CCB1	CCB	07/10/24 10:52				U	mg/L		-0.0002	0.0002			
WG592648PQV	PQV	07/10/24 10:53	HG240619-5	.001001		.00097	mg/L	97	70	130			
WG592648LRB	LRB	07/10/24 10:54				U	mg/L		-0.00044	0.00044			
WG592648LFB	LFB	07/10/24 10:55	HG240619-6	.002002		.00183	mg/L	91	85	115			
WG592648CCV2	CCV	07/10/24 11:02	HG240528-3	.005		.00496	mg/L	99	90	110			
WG592648CCB2	CCB	07/10/24 11:03				U	mg/L		-0.0002	0.0002			
WG592648CCV3	CCV	07/10/24 11:14	HG240528-3	.005		.00495	mg/L	99	90	110			
WG592648CCB3	CCB	07/10/24 11:15				U	mg/L		-0.0002	0.0002			
L88550-01LFM	LFM	07/10/24 11:17	HG240619-6	.002002	U	.00174	mg/L	87	85	115			
L88550-01LFMD	LFMD	07/10/24 11:18	HG240619-6	.002002	U	.00176	mg/L	88	85	115	1	20	
WG592648CCV4	CCV	07/10/24 11:22	HG240528-3	.005		.00485	mg/L	97	90	110			
WG592648CCB4	CCB	07/10/24 11:23				U	mg/L		-0.0002	0.0002			

Nickel, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592979													
WG592979ICV	ICV	07/13/24 2:30	II240710-5	2.004		1.944	mg/L	97	95	105			
WG592979ICB	ICB	07/13/24 2:36				U	mg/L		-0.024	0.024			
WG592979PQV	PQV	07/13/24 2:39	II240624-6	.04008		.0413	mg/L	103	70	130			
WG592979SIC	SIC	07/13/24 2:42	II240705-2	.1002		.0924	mg/L	92	80	120			
WG592979LFB	LFB	07/13/24 2:48	II240702-3	.501		.5071	mg/L	101	85	115			
WG592979CCV1	CCV	07/13/24 3:18	II240710-1	1.002		1.03	mg/L	103	90	110			
WG592979CCB1	CCB	07/13/24 3:21				U	mg/L		-0.024	0.024			
L88539-14AS	AS	07/13/24 3:51	II240702-3	.501	.0097	.5078	mg/L	99	85	115			
WG592979CCV2	CCV	07/13/24 3:54	II240710-1	1.002		1.031	mg/L	103	90	110			
WG592979CCB2	CCB	07/13/24 3:57				U	mg/L		-0.024	0.024			
L88539-14ASD	ASD	07/13/24 4:00	II240702-3	.501	.0097	.499	mg/L	98	85	115	2	20	
WG592979CCV3	CCV	07/13/24 4:15	II240710-1	1.002		.9989	mg/L	100	90	110			
WG592979CCB3	CCB	07/13/24 4:18				U	mg/L		-0.024	0.024			

GCC

ACZ Project ID: **L88585**

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

Nitrate/Nitrite as N

EPA 353.2

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG591986													
WG591986ICV	ICV	06/26/24 23:52	WI240403-6	2.415		2.366	mg/L	98	90	110			
WG591986ICB	ICB	06/26/24 23:53				U	mg/L		-0.02	0.02			
WG591986PQV	PQV	06/26/24 23:57	WI240228-18	.1		.103	mg/L	103	70	130			
WG591986LFB	LFB	06/26/24 23:58	WI240228-17	2		2.076	mg/L	104	90	110			
WG591986CCV1	CCV	06/27/24 0:07	WI240626-5	2		1.998	mg/L	100	90	110			
WG591986CCB1	CCB	06/27/24 0:10				U	mg/L		-0.02	0.02			
L88581-01AS	AS	06/27/24 0:20	WI240228-17	2	U	1.965	mg/L	98	90	110			
L88581-02DUP	DUP	06/27/24 0:22			U	U	mg/L				0	20	RA
WG591986CCV2	CCV	06/27/24 0:24	WI240626-5	2		2.007	mg/L	100	90	110			
WG591986CCB2	CCB	06/27/24 0:27				U	mg/L		-0.02	0.02			
WG591986CCV3	CCV	06/27/24 0:41	WI240626-5	2		2.007	mg/L	100	90	110			
WG591986CCB3	CCB	06/27/24 0:44				U	mg/L		-0.02	0.02			

Nitrite as N

EPA 353.2

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG591986													
WG591986ICV	ICV	06/26/24 23:52	WI240403-6	.608		.61	mg/L	100	90	110			
WG591986ICB	ICB	06/26/24 23:53				U	mg/L		-0.01	0.01			
WG591986PQV	PQV	06/26/24 23:57	WI240228-18	.05		.063	mg/L	126	70	130			
WG591986LFB	LFB	06/26/24 23:58	WI240228-17	1		1.041	mg/L	104	90	110			
WG591986CCV1	CCV	06/27/24 0:07	WI240626-5	1		1.007	mg/L	101	90	110			
WG591986CCB1	CCB	06/27/24 0:10				U	mg/L		-0.01	0.01			
L88581-01AS	AS	06/27/24 0:20	WI240228-17	1	U	.991	mg/L	99	90	110			
L88581-02DUP	DUP	06/27/24 0:22			U	U	mg/L				0	20	RA
WG591986CCV2	CCV	06/27/24 0:24	WI240626-5	1		1.008	mg/L	101	90	110			
WG591986CCB2	CCB	06/27/24 0:27				U	mg/L		-0.01	0.01			
WG591986CCV3	CCV	06/27/24 0:41	WI240626-5	1		.97	mg/L	97	90	110			
WG591986CCB3	CCB	06/27/24 0:44				U	mg/L		-0.01	0.01			

Potassium, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592979													
WG592979ICV	ICV	07/13/24 2:30	II240710-5	20		19.04	mg/L	95	95	105			
WG592979ICB	ICB	07/13/24 2:36				U	mg/L		-1.5	1.5			
WG592979PQV	PQV	07/13/24 2:39	II240624-6	1.002		.86	mg/L	86	70	130			
WG592979SIC	SIC	07/13/24 2:42	II240705-2	1.002		.84	mg/L	84	80	120			
WG592979LFB	LFB	07/13/24 2:48	II240702-3	99.96008		101.8	mg/L	102	85	115			
WG592979CCV1	CCV	07/13/24 3:18	II240710-1	10		9.84	mg/L	98	90	110			
WG592979CCB1	CCB	07/13/24 3:21				U	mg/L		-1.5	1.5			
L88539-14AS	AS	07/13/24 3:51	II240702-3	99.96008	.93	103.3	mg/L	102	85	115			
WG592979CCV2	CCV	07/13/24 3:54	II240710-1	10		9.87	mg/L	99	90	110			
WG592979CCB2	CCB	07/13/24 3:57				U	mg/L		-1.5	1.5			
L88539-14ASD	ASD	07/13/24 4:00	II240702-3	99.96008	.93	101.6	mg/L	101	85	115	2	20	
WG592979CCV3	CCV	07/13/24 4:15	II240710-1	10		9.52	mg/L	95	90	110			
WG592979CCB3	CCB	07/13/24 4:18				U	mg/L		-1.5	1.5			

GCC

ACZ Project ID: **L88585**

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

SM 2540 C-2011

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592065													
WG592065PBW	PBW	06/27/24 14:15				U	mg/L		-20	20			
WG592065LCSW	LCSW	06/27/24 14:17	PCN626715	1000		978	mg/L	98	80	120			
L88602-04DUP	DUP	06/27/24 14:46			250	270	mg/L				8	10	

Selenium, dissolved

EPA 200.8

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592244													
WG592244ICV	ICV	07/01/24 13:45	MS240613-12	.05		.05151	mg/L	103	90	110			
WG592244ICB	ICB	07/01/24 13:48				U	mg/L		-0.00022	0.00022			
WG592244LFB	LFB	07/01/24 13:50	MS240613-7	.05005		.05045	mg/L	101	85	115			
WG592244CCV1	CCV	07/01/24 14:08	MS240421-5	.1001		.10279	mg/L	103	90	110			
WG592244CCB1	CCB	07/01/24 14:11				.00013	mg/L		-0.0003	0.0003			
WG592244CCV2	CCV	07/01/24 14:34	MS240421-5	.1001		.10047	mg/L	100	90	110			
WG592244CCB2	CCB	07/01/24 14:36				.00011	mg/L		-0.0003	0.0003			
L88555-03AS	AS	07/01/24 14:41	MS240613-7	.05005	.0004	.05611	mg/L	111	70	130			
L88555-03ASD	ASD	07/01/24 14:43	MS240613-7	.05005	.0004	.05792	mg/L	115	70	130	3	20	
WG592244CCV3	CCV	07/01/24 14:50	MS240421-5	.1001		.09996	mg/L	100	90	110			
WG592244CCB3	CCB	07/01/24 14:52				.0001	mg/L		-0.0003	0.0003			

Sodium, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592979													
WG592979ICV	ICV	07/13/24 2:30	II240710-5	100		97.71	mg/L	98	95	105			
WG592979ICB	ICB	07/13/24 2:36				U	mg/L		-0.6	0.6			
WG592979PQV	PQV	07/13/24 2:39	II240624-6	1.005		1.08	mg/L	107	70	130			
WG592979SIC	SIC	07/13/24 2:42	II240705-2	1.005		1.08	mg/L	107	80	120			
WG592979LFB	LFB	07/13/24 2:48	II240702-3	99.97238		103.4	mg/L	103	85	115			
WG592979CCV1	CCV	07/13/24 3:18	II240710-1	50		50.68	mg/L	101	90	110			
WG592979CCB1	CCB	07/13/24 3:21				U	mg/L		-0.6	0.6			
L88539-14AS	AS	07/13/24 3:51	II240702-3	99.97238	8.6	111.5	mg/L	103	85	115			
WG592979CCV2	CCV	07/13/24 3:54	II240710-1	50		50.91	mg/L	102	90	110			
WG592979CCB2	CCB	07/13/24 3:57				U	mg/L		-0.6	0.6			
L88539-14ASD	ASD	07/13/24 4:00	II240702-3	99.97238	8.6	112	mg/L	103	85	115	0	20	
WG592979CCV3	CCV	07/13/24 4:15	II240710-1	50		49.79	mg/L	100	90	110			
WG592979CCB3	CCB	07/13/24 4:18				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: **L88585**

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

ASTM D516-07/-11/-16

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592200													
WG592200ICV	ICV	07/01/24 10:25	WI240624-7	20.02		22.1	mg/L	110	85	115			
WG592200ICB	ICB	07/01/24 10:25				1.4	mg/L		-2.5	2.5			
WG592200CCV1	CCV	07/01/24 10:38	WI240618-1	25		28.5	mg/L	114	85	115			
WG592200CCB1	CCB	07/01/24 10:38				U	mg/L		-2.5	2.5			
WG592200CCV3	CCV	07/01/24 10:45	WI240618-1	25		27	mg/L	108	85	115			
WG592200CCB3	CCB	07/01/24 10:45				U	mg/L		-2.5	2.5			
WG592200CCV4	CCV	07/01/24 10:50	WI240618-1	25		27.3	mg/L	109	85	115			
WG592200CCB4	CCB	07/01/24 10:50				U	mg/L		-2.5	2.5			
WG592200CCV7	CCV	07/01/24 11:01	WI240618-1	25		26.9	mg/L	108	85	115			
WG592200CCB7	CCB	07/01/24 11:02				U	mg/L		-2.5	2.5			
WG592200CCV8	CCV	07/01/24 11:06	WI240618-1	25		27.1	mg/L	108	85	115			
WG592200CCB8	CCB	07/01/24 11:06				U	mg/L		-2.5	2.5			
WG592200LFB	LFB	07/01/24 11:10	WI240618-2	10		10.9	mg/L	109	85	115			
WG592200CCV9	CCV	07/01/24 11:11	WI240618-1	25		27.2	mg/L	109	85	115			
WG592200CCB9	CCB	07/01/24 11:11				U	mg/L		-2.5	2.5			
L88589-01AS	AS	07/01/24 11:12	SO4TURB5X	10	31.4	43.5	mg/L	121	85	115			M1
L88589-01ASD	ASD	07/01/24 11:13	SO4TURB5X	10	31.4	40.8	mg/L	94	85	115	6	20	
WG592200CCV10	CCV	07/01/24 11:14	WI240618-1	25		27.1	mg/L	108	85	115			
WG592200CCB10	CCB	07/01/24 11:14				U	mg/L		-2.5	2.5			
WG592200CCV11	CCV	07/01/24 11:23	WI240618-1	25		28.6	mg/L	114	85	115			
WG592200CCB11	CCB	07/01/24 11:24				U	mg/L		-2.5	2.5			
WG592200CCV12	CCV	07/01/24 11:24	WI240618-1	25		27.1	mg/L	108	85	115			
WG592200CCB12	CCB	07/01/24 11:25				U	mg/L		-2.5	2.5			

Vanadium, dissolved

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG593097													
WG593097ICV	ICV	07/17/24 18:17	II240710-5	2		1.95	mg/L	98	95	105			
WG593097ICB	ICB	07/17/24 18:22				.0088	mg/L		-0.015	0.015			
WG593097PQV	PQV	07/17/24 18:24	II240716-1	.025025		.027	mg/L	108	70	130			
WG593097SIC	SIC	07/17/24 18:26	II240705-2	.1001		.094	mg/L	94	80	120			
WG593097LFB	LFB	07/17/24 18:30	II240702-3	.5005		.501	mg/L	100	85	115			
WG593097CCV1	CCV	07/17/24 18:52	II240710-1	1		.988	mg/L	99	90	110			
WG593097CCB1	CCB	07/17/24 18:54				U	mg/L		-0.03	0.03			
WG593097CCV2	CCV	07/17/24 19:17	II240710-1	1		.974	mg/L	97	90	110			
WG593097CCB2	CCB	07/17/24 19:20				U	mg/L		-0.03	0.03			
L88585-01AS	AS	07/17/24 19:26	II240702-3	.5005	U	.482	mg/L	96	85	115			
L88585-01ASD	ASD	07/17/24 19:28	II240702-3	.5005	U	.468	mg/L	94	85	115	3	20	
WG593097CCV3	CCV	07/17/24 19:32	II240710-1	1		.983	mg/L	98	90	110			
WG593097CCB3	CCB	07/17/24 19:35				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: **L88585**

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

EPA 200.7

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG592979													
WG592979ICV	ICV	07/13/24 2:30	II240710-5	2		1.913	mg/L	96	95	105			
WG592979ICB	ICB	07/13/24 2:36				U	mg/L		-0.06	0.06			
WG592979PQV	PQV	07/13/24 2:39	II240624-6	.0502		.05	mg/L	100	70	130			
WG592979SIC	SIC	07/13/24 2:42	II240705-2	.1004		.097	mg/L	97	80	120			
WG592979LFB	LFB	07/13/24 2:48	II240702-3	.50045		.528	mg/L	106	85	115			
WG592979CCV1	CCV	07/13/24 3:18	II240710-1	1		1.033	mg/L	103	90	110			
WG592979CCB1	CCB	07/13/24 3:21				.025	mg/L		-0.06	0.06			
L88539-14AS	AS	07/13/24 3:51	II240702-3	.50045	.384	.784	mg/L	80	85	115			M2
WG592979CCV2	CCV	07/13/24 3:54	II240710-1	1		1.088	mg/L	109	90	110			
WG592979CCB2	CCB	07/13/24 3:57				.056	mg/L		-0.06	0.06			
L88539-14ASD	ASD	07/13/24 4:00	II240702-3	.50045	.384	.676	mg/L	58	85	115	15	20	M2
WG592979CCV3	CCV	07/13/24 4:15	II240710-1	1		1.008	mg/L	101	90	110			
WG592979CCB3	CCB	07/13/24 4:18				.025	mg/L		-0.06	0.06			

GCC Rio Grande

ACZ Project ID: **L88585**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L88585-01	WG592119	Chloride	SM 4500-Cl E-2011	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).
	WG591986	Nitrate/Nitrite as N	EPA 353.2	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	EPA 353.2	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).
	WG592200	Sulfate	ASTM D516-07/-11/-16	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG592979	Zinc, dissolved	EPA 200.7	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.

GCC Rio Grande

ACZ Project ID: **L88585**

No certification qualifiers associated with this analysis

GCC Rio Grande

ACZ Project ID: L88585

Date Received: 06/26/2024 10:50

Received By:

Date Printed: 6/27/2024

Receipt Verification

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

Samples/Containers

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

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?
NA42212	0.9	<=6.0	15	Yes

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s) but was thawed by receipt at ACZ.

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

GCC Rio Grande

ACZ Project ID: L88585

Date Received: 06/26/2024 10:50

Received By:

Date Printed: 6/27/2024

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).



Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:

GCC_RGPP-20240606-1314032001-18368776889

Form Name:

Wells - GCC Pueblo Compliance Water Sampling

Submitter Name:

Amy Rodrigues | amy.rodrigues

Date Sent on Device:

Jun 6, 2024 10:51:43 AM MDT

SITE INFORMATION

Location

Project Site

GCC Rio Grande Pueblo Plant

Sample ID

MW-5

Water present to measure/sample?

No

Is the water present within 0.25 feet of the well TD?

No

Dry Well

Yes

Misc

Site Photo



SAMPLING DETAILS

Weather	Partly Sunny
Air Temperature (°F)	59
Date	May 15, 2024
Time	9:52:00 AM MDT

Sampler

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



Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number: GCC_RGPP-20240607-1314032001-18368931789	Form Name: Wells - GCC Pueblo Compliance Water Sampling
Submitter Name: Amy Rodrigues amy.rodrigues	Date Sent on Device: Jun 7, 2024 12:56:51 PM MDT

SITE INFORMATION

Location

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

Wellhead Stick-Up from Ground Level	2.52
Reference Point to Depth to Water Level	
Reference Point (ft)	
Static Depth to Water (ft)	32.14
Well Total Depth (ft below top of casing)	56.4
Depth to Water below ground Surface (ft)	29.62
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	May 14, 2024 9:30:00 AM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Partly Sunny
Air Temperature (°F)	68
Date	May 15, 2024
Time	1:05:00 PM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	May 15, 2024 12:58:00 PM MDT
Sample Temperature (°C)	16.76
Specific Conductivity (µS/cm)	5083.89
pH (S.U.)	6.94
Oxygen Reduction Potential (mV)	-62.97
Dissolved Oxygen (mg/L)	2.30
Flow Rate (gpm)	0.05

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	May 15, 2024 1:02:00 PM MDT
Sample Temperature (°C)	16.30
Specific Conductivity (µS/cm)	5069.79
pH (S.U.)	6.89
Oxygen Reduction Potential (mV)	-44.51
Dissolved Oxygen (mg/L)	1.13
Flow Rate (gpm)	0.05

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	May 15, 2024 1:05:00 PM MDT
Sample Temperature (°C)	16.30
Specific Conductivity (µS/cm)	4960.00
pH (S.U.)	6.89
Oxygen Reduction Potential (mV)	-35.24
Dissolved Oxygen (mg/L)	1.04
Flow Rate (gpm)	0.05

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	32.38
Was flow rate measured?	Flow Rate was measured.
Static Flow Rate (gpm)	0.05
Total Purged (gal)	1.25
Are you sure? This purge value seems out of the expected purge requirement.	Yes
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	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-6 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-6
Sample Date/Time	May 15, 2024 1:05:00 PM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

LAB SAMPLE

2 OF 3

Details

Method of Sample Collection	MW-6 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-2B
Sample Date/Time	May 15, 2024 12:00:00 PM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Duplicate

LAB SAMPLE

3 OF 3

Details

Method of Sample Collection	MW-6 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	Method Blank
Sample Date/Time	May 15, 2024 1:00:00 PM MDT
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: GCC_RGPP-20240611-1314032001-18369350958	Form Name: Wells - GCC Pueblo Compliance Water Sampling
Submitter Name: Amy Rodrigues amy.rodrigues	Date Sent on Device: Jun 11, 2024 9:19:27 AM MDT

SITE INFORMATION

Location

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

Wellhead Stick-Up from Ground Level	2.66
Reference Point to Depth to Water Level	
Reference Point (ft)	
Static Depth to Water (ft)	30.46
Well Total Depth (ft below top of casing)	56.1
Depth to Water below ground Surface (ft)	27.80
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	May 14, 2024 9:30:00 AM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Partly Sunny
Air Temperature (°F)	68
Date	May 15, 2024
Time	1:38:00 PM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	May 15, 2024 1:32:00 PM MDT
Sample Temperature (°C)	16.09
Specific Conductivity (µS/cm)	4810.60
pH (S.U.)	7.09
Oxygen Reduction Potential (mV)	-19.66
Dissolved Oxygen (mg/L)	2.19
Flow Rate (gpm)	0.05

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	May 15, 2024 1:35:00 PM MDT
Sample Temperature (°C)	15.82
Specific Conductivity (µS/cm)	4894.20
pH (S.U.)	7.09
Oxygen Reduction Potential (mV)	14.14
Dissolved Oxygen (mg/L)	1.98
Flow Rate (gpm)	0.05

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	May 15, 2024 1:38:00 PM MDT
Sample Temperature (°C)	15.82
Specific Conductivity (µS/cm)	4875.80
pH (S.U.)	7.08
Oxygen Reduction Potential (mV)	9.52
Dissolved Oxygen (mg/L)	1.95
Flow Rate (gpm)	0.05

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	31.97
Was flow rate measured?	Flow Rate was measured.
Static 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
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Sampler's Signature

Key Rodriguez

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE

1 OF 1

Details

Method of Sample Collection	MW-7 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-7
Sample Date/Time	May 15, 2024 1:38:00 PM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING

1 OF 3

Bottle Details

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

SAMPLE HANDLING		2 OF 3
Bottle Details		
ACZ Labs Bottle Sticker	White	
Bottle Volume (mL)	250	
Bottle Composition	Poly	
Bottle Quantity	1	
Field-Filtered to 0.45 µm (Yes/No)	Yes	
Preservative (Type)	Raw/None	
Analysis	Wet Chemistry - no preservative, field-filtered	

SAMPLE HANDLING		3 OF 3
Bottle Details		
ACZ Labs Bottle Sticker	Green PC	
Bottle Volume (mL)	125	
Bottle Composition	Poly	
Bottle Quantity	1	
Field-Filtered to 0.45 µm (Yes/No)	Yes	
Preservative (Type)	Nitric Acid	
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered	



Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number: GCC_RGPP-20240611-1314032001-18369366136	Form Name: Wells - GCC Pueblo Compliance Water Sampling
Submitter Name: Amy Rodrigues amy.rodrigues	Date Sent on Device: Jun 11, 2024 9:25:14 AM MDT

SITE INFORMATION

Location

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

Wellhead Stick-Up from Ground Level	2.16
Reference Point to Depth to Water Level	
Reference Point (ft)	
Static Depth to Water (ft)	31.12
Well Total Depth (ft below top of casing)	65.65
Depth to Water below ground Surface (ft)	28.96
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	May 14, 2024 9:30:00 AM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Partly Sunny
Air Temperature (°F)	68
Date	May 15, 2024
Time	2:16:00 PM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	May 15, 2024 2:10:00 PM MDT
Sample Temperature (°C)	16.12
Specific Conductivity (µS/cm)	5093.35
pH (S.U.)	7.16
Oxygen Reduction Potential (mV)	-148.44
Dissolved Oxygen (mg/L)	2.19
Flow Rate (gpm)	0.06

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	May 15, 2024 2:13:00 PM MDT
Sample Temperature (°C)	16.07
Specific Conductivity (µS/cm)	5117.49
pH (S.U.)	7.14
Oxygen Reduction Potential (mV)	-151.97
Dissolved Oxygen (mg/L)	2.12
Flow Rate (gpm)	0.06

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	May 15, 2024 2:16:00 PM MDT
Sample Temperature (°C)	16.02
Specific Conductivity (µS/cm)	5102.91
pH (S.U.)	7.14
Oxygen Reduction Potential (mV)	-153.71
Dissolved Oxygen (mg/L)	1.93
Flow Rate (gpm)	0.06

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	36.72
Was flow rate measured?	Flow Rate was measured.
Static Flow Rate (gpm)	0.06
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
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Sampler's Signature



SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE

1 OF 1

Details

Method of Sample Collection	MW-8 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-8
Sample Date/Time	May 15, 2024 2:16:00 PM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING

1 OF 3

Bottle Details

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

SAMPLE HANDLING		2 OF 3
Bottle Details		
ACZ Labs Bottle Sticker	White	
Bottle Volume (mL)	250	
Bottle Composition	Poly	
Bottle Quantity	1	
Field-Filtered to 0.45 µm (Yes/No)	Yes	
Preservative (Type)	Raw/None	
Analysis	Wet Chemistry - no preservative, field-filtered	

SAMPLE HANDLING		3 OF 3
Bottle Details		
ACZ Labs Bottle Sticker	Green PC	
Bottle Volume (mL)	125	
Bottle Composition	Poly	
Bottle Quantity	1	
Field-Filtered to 0.45 µm (Yes/No)	Yes	
Preservative (Type)	Nitric Acid	
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered	



Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number: GCC_RGPP-20240611-1314032001-18369375423	Form Name: Wells - GCC Pueblo Compliance Water Sampling
Submitter Name: Amy Rodrigues amy.rodrigues	Date Sent on Device: Jun 11, 2024 11:25:16 AM MDT

SITE INFORMATION

Location

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

Wellhead Stick-Up from Ground Level	2.08
Reference Point to Depth to Water Level	
Reference Point (ft)	
Static Depth to Water (ft)	26.92
Well Total Depth (ft below top of casing)	42.23
Depth to Water below ground Surface (ft)	24.84
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	May 14, 2024 9:30:00 AM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	78
Date	May 20, 2024
Time	12:58:00 PM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time #1	May 20, 2024 12:52:00 PM MDT
Flow Rate (gpm) #1	0.03
Sample Temperature (°C)	19.56
Specific Conductivity (µS/cm)	5382.15
pH (S.U.)	6.83
Oxygen Reduction Potential (mV)	-99.94
Dissolved Oxygen (mg/L)	3.10

Micro-Purge Stabilization Parameters #2

Parameter Date/Time #2	May 20, 2024 12:55:00 AM MDT
Flow Rate (gpm) #2	0.03
Sample Temperature (°C)	19.52
Specific Conductivity (µS/cm)	5391.18
pH (S.U.)	6.82
Oxygen Reduction Potential (mV)	-96.07
Dissolved Oxygen (mg/L)	2.90

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time #3	May 20, 2024 12:58:00 PM MDT
Flow Rate (gpm) #3	0.03
Sample Temperature (°C)	18.51
Specific Conductivity (µS/cm)	5325.96
pH (S.U.)	6.82
Oxygen Reduction Potential (mV)	-87.95
Dissolved Oxygen (mg/L)	2.38

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	28.06
Was flow rate measured?	Flow Rate was measured.
Static Flow Rate (gpm)	0.03
Total Purged (gal)	0.45
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

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

[Handwritten Signature]

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE

1 OF 1

Details

Method of Sample Collection	MW-9 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-9
Sample Date/Time	May 20, 2024 12:58:00 PM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING

1 OF 3

Bottle Details

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

SAMPLE HANDLING		2 OF 3
Bottle Details		
ACZ Labs Bottle Sticker	White	
Bottle Volume (mL)	250	
Bottle Composition	Poly	
Bottle Quantity	1	
Field-Filtered to 0.45 µm (Yes/No)	Yes	
Preservative (Type)	Raw/None	
Analysis	Wet Chemistry - no preservative, field-filtered	

SAMPLE HANDLING		3 OF 3
Bottle Details		
ACZ Labs Bottle Sticker	Green PC	
Bottle Volume (mL)	125	
Bottle Composition	Poly	
Bottle Quantity	1	
Field-Filtered to 0.45 µm (Yes/No)	Yes	
Preservative (Type)	Nitric Acid	
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered	



Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number: GCC_RGPP-20240611-1314032001-18369383191	Form Name: Wells - GCC Pueblo Compliance Water Sampling
Submitter Name: Amy Rodrigues amy.rodrigues	Date Sent on Device: Jun 11, 2024 11:40:36 AM MDT

SITE INFORMATION

Location

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

Wellhead Stick-Up from Ground Level	2.24
Reference Point to Depth to Water Level	
Reference Point (ft)	
Static Depth to Water (ft)	26.04
Well Total Depth (ft below top of casing)	82.55
Depth to Water below ground Surface (ft)	23.80
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	May 14, 2024 9:30:00 AM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	73
Date	May 20, 2024
Time	1:41:00 PM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time #1	May 20, 2024 1:35:00 PM MDT
Flow Rate (gpm) #1	0.05
Sample Temperature (°C)	19.02
Specific Conductivity (µS/cm)	4101.21
pH (S.U.)	7.73
Oxygen Reduction Potential (mV)	-148.68
Dissolved Oxygen (mg/L)	1.64

Micro-Purge Stabilization Parameters #2

Parameter Date/Time #2	May 20, 2024 1:38:00 PM MDT
Flow Rate (gpm) #2	0.05
Sample Temperature (°C)	18.25
Specific Conductivity (µS/cm)	4493.66
pH (S.U.)	7.75
Oxygen Reduction Potential (mV)	-142.16
Dissolved Oxygen (mg/L)	1.62

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time #3	May 20, 2024 1:41:00 AM MDT
Flow Rate (gpm) #3	0.05
Sample Temperature (°C)	17.90
Specific Conductivity (µS/cm)	4423.13
pH (S.U.)	7.76
Oxygen Reduction Potential (mV)	-137.07
Dissolved Oxygen (mg/L)	1.56

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	31.76
Was flow rate measured?	Flow Rate was measured.
Static 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
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Sampler's Signature



SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE

1 OF 1

Details

Method of Sample Collection	MW-10 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-10
Sample Date/Time	May 20, 2024 1:41:00 AM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING

1 OF 3

Bottle Details

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

SAMPLE HANDLING2 OF 3

Bottle Details

ACZ Labs Bottle Sticker

Bottle Volume (mL)

Bottle Composition

Bottle Quantity

Field-Filtered to 0.45 μm (Yes/No)

Preservative (Type)

Analysis

White

250

Poly

1

Yes

Raw/None

Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING3 OF 3

Bottle Details

ACZ Labs Bottle Sticker

Bottle Volume (mL)

Bottle Composition

Bottle Quantity

Field-Filtered to 0.45 μm (Yes/No)

Preservative (Type)

Analysis

Green PC

125

Poly

1

Yes

Nitric Acid

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



Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number: GCC_RGPP-20240611-1314032001-18369362643	Form Name: Wells - GCC Pueblo Compliance Water Sampling
Submitter Name: Amy Rodrigues amy.rodrigues	Date Sent on Device: Jun 11, 2024 9:39:21 AM MDT

SITE INFORMATION

Location

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

Wellhead Stick-Up from Ground Level	2.18
Reference Point to Depth to Water Level	
Reference Point (ft)	
Static Depth to Water (ft)	53.34
Well Total Depth (ft below top of casing)	72.68
Depth to Water below ground Surface (ft)	51.16
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	May 14, 2024 9:30:00 AM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	63
Date	May 20, 2024
Time	9:32:00 AM MDT
Comments	Issue with aquatroll reading during sampling. Could not get consistent measurements despite multiple attempts at resetting instrument.

Micro-Purge Stabilization Parameters #1

Parameter Date/Time #1	May 20, 2024 9:26:00 AM MDT
Flow Rate (gpm) #1	0.06
Sample Temperature (°C)	27.36
Are you sure? This value seems very unlikely based on past data.	Yes

Sample Temperature - Out of Range	Suspect specific probe malfunction for this parameter
Specific Conductivity (µS/cm)	0.00
Are you sure? This value seems very unlikely based on past data.	Yes
Specific Conductivity - Out of Range	Suspect specific probe malfunction for this parameter
pH (S.U.)	8.97
Oxygen Reduction Potential (mV)	-245.99
Dissolved Oxygen (mg/L)	6.43

Micro-Purge Stabilization Parameters #2

Parameter Date/Time #2	May 20, 2024 9:29:00 AM MDT
Flow Rate (gpm) #2	0.06
Sample Temperature (°C)	27.68
Are you sure? This value seems very unlikely based on past data.	Yes
Sample Temperature - Out of Range	Suspect specific probe malfunction for this parameter
Specific Conductivity (µS/cm)	0.00
Are you sure? This value seems very unlikely based on past data.	Yes
Specific Conductivity - Out of Range	Suspect specific probe malfunction for this parameter
pH (S.U.)	8.63
Oxygen Reduction Potential (mV)	-284.52
Dissolved Oxygen (mg/L)	6.35

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time #3	May 20, 2024 9:32:00 AM MDT
Flow Rate (gpm) #3	0.06
Sample Temperature (°C)	27.86
Are you sure? This value seems very unlikely based on past data.	Yes
Sample Temperature - Out of Range	Suspect specific probe malfunction for this parameter
Specific Conductivity (µS/cm)	0.00
Are you sure? This value seems very unlikely based on past data.	Yes

Specific Conductivity - Out of Range	Suspect specific probe malfunction for this parameter
pH (S.U.)	7.77
Oxygen Reduction Potential (mV)	-1400.00
Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect specific probe malfunction for this parameter
Dissolved Oxygen (mg/L)	6.17

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	54.50
Was flow rate measured?	Flow Rate was measured.
Static 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
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Details	
Method of Sample Collection	MW-11 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-11
Sample Date/Time	May 20, 2024 9:32:00 AM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling	
SAMPLE HANDLING1 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 HANDLING2 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 HANDLING3 OF 3	
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Bottle Details

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



Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number: GCC_RGPP-20240611-1314032001-18369362794	Form Name: Wells - GCC Pueblo Compliance Water Sampling
Submitter Name: Amy Rodrigues amy.rodrigues	Date Sent on Device: Jun 11, 2024 9:46:14 AM MDT

SITE INFORMATION

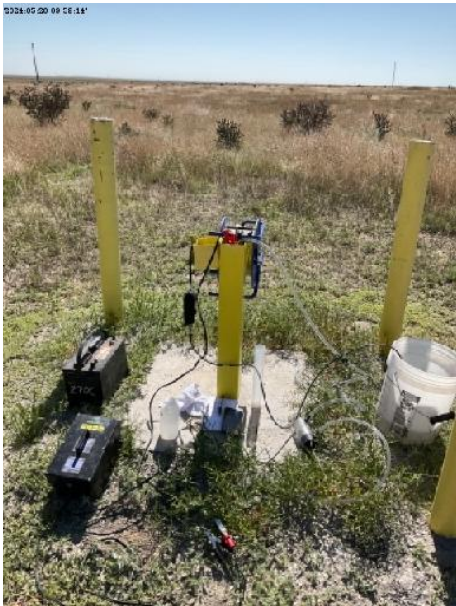
Location

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

Wellhead Stick-Up from Ground Level	2.29
Reference Point to Depth to Water Level	
Reference Point (ft)	
Static Depth to Water (ft)	58.90
Well Total Depth (ft below top of casing)	88.8
Depth to Water below ground Surface (ft)	56.61
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	May 14, 2024 9:30:00 AM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	63
Date	May 20, 2024
Time	10:34:00 AM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time #1	May 20, 2024 10:27:00 AM MDT
Flow Rate (gpm) #1	0.05
Sample Temperature (°C)	17.41
Specific Conductivity (µS/cm)	4631.88
pH (S.U.)	7.68
Oxygen Reduction Potential (mV)	-154.32
Dissolved Oxygen (mg/L)	2.03

Micro-Purge Stabilization Parameters #2

Parameter Date/Time #2	May 20, 2024 10:31:00 AM MDT
Flow Rate (gpm) #2	0.05
Sample Temperature (°C)	17.73
Specific Conductivity (µS/cm)	4610.41
pH (S.U.)	7.68
Oxygen Reduction Potential (mV)	-150.85
Dissolved Oxygen (mg/L)	1.84

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time #3	May 20, 2024 10:34:00 AM MDT
Flow Rate (gpm) #3	0.05
Sample Temperature (°C)	17.86
Specific Conductivity (µS/cm)	4591.34
pH (S.U.)	7.68
Oxygen Reduction Potential (mV)	-145.44
Dissolved Oxygen (mg/L)	1.73

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	64.58
Was flow rate measured?	Flow Rate was measured.
Static 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
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Sampler's Signature

Cory Rodriguez

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE

1 OF 1

Details

Method of Sample Collection	MW-12 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-12
Sample Date/Time	May 20, 2024 10:34:00 AM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING

1 OF 3

Bottle Details

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

SAMPLE HANDLING		2 OF 3
Bottle Details		
ACZ Labs Bottle Sticker	White	
Bottle Volume (mL)	250	
Bottle Composition	Poly	
Bottle Quantity	1	
Field-Filtered to 0.45 µm (Yes/No)	Yes	
Preservative (Type)	Raw/None	
Analysis	Wet Chemistry - no preservative, field-filtered	

SAMPLE HANDLING		3 OF 3
Bottle Details		
ACZ Labs Bottle Sticker	Green PC	
Bottle Volume (mL)	125	
Bottle Composition	Poly	
Bottle Quantity	1	
Field-Filtered to 0.45 µm (Yes/No)	Yes	
Preservative (Type)	Nitric Acid	
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered	



Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number: GCC_RGPP-20240606-1314032001-18368787072	Form Name: Wells - GCC Pueblo Compliance Water Sampling
Submitter Name: Amy Rodrigues amy.rodrigues	Date Sent on Device: Jun 6, 2024 11:00:58 AM MDT

SITE INFORMATION

Location

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

Wellhead Stick-Up from Ground Level	2.19
Reference Point to Depth to Water Level	
Reference Point (ft)	
Static Depth to Water (ft)	107.82
Well Total Depth (ft below top of casing)	177.88
Depth to Water below ground Surface (ft)	105.63
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	May 14, 2024 9:30:00 AM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Partly Sunny
Air Temperature (°F)	59
Date	May 15, 2024
Time	10:57:00 AM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	May 15, 2024 10:51:00 AM MDT
Sample Temperature (°C)	17.34
Specific Conductivity (µS/cm)	4038.69
pH (S.U.)	7.85
Oxygen Reduction Potential (mV)	-204.77
Dissolved Oxygen (mg/L)	1.81
Flow Rate (gpm)	0.04

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	May 15, 2024 10:54:00 AM MDT
Sample Temperature (°C)	17.28
Specific Conductivity (µS/cm)	4000.56
pH (S.U.)	7.86
Oxygen Reduction Potential (mV)	-207.98
Dissolved Oxygen (mg/L)	1.80
Flow Rate (gpm)	0.04

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	May 15, 2024 10:57:00 AM MDT
Sample Temperature (°C)	16.82
Specific Conductivity (µS/cm)	4019.09
pH (S.U.)	7.91
Oxygen Reduction Potential (mV)	-213.06
Dissolved Oxygen (mg/L)	1.22
Flow Rate (gpm)	0.04

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	115.95
Was flow rate measured?	Flow Rate was measured.
Static Flow Rate (gpm)	0.04
Total Purged (gal)	1.50
Geographic Sample Location	latitude: altitude: longitude: [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

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

Amy Rodriguez

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE

1 OF 1

Details

Method of Sample Collection	MW-13 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-13
Sample Date/Time	May 15, 2024 10:57:00 AM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING

1 OF 3

Bottle Details

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

SAMPLE HANDLING		2 OF 3
Bottle Details		
ACZ Labs Bottle Sticker	White	
Bottle Volume (mL)	250	
Bottle Composition	Poly	
Bottle Quantity	1	
Field-Filtered to 0.45 µm (Yes/No)	Yes	
Preservative (Type)	Raw/None	
Analysis	Wet Chemistry - no preservative, field-filtered	

SAMPLE HANDLING		3 OF 3
Bottle Details		
ACZ Labs Bottle Sticker	Green PC	
Bottle Volume (mL)	125	
Bottle Composition	Poly	
Bottle Quantity	1	
Field-Filtered to 0.45 µm (Yes/No)	Yes	
Preservative (Type)	Nitric Acid	
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered	



Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number: GCC_RGPP-20240606-1314032001-18368787192	Form Name: Wells - GCC Pueblo Compliance Water Sampling
Submitter Name: Amy Rodrigues amy.rodrigues	Date Sent on Device: Jun 6, 2024 11:10:22 AM MDT

SITE INFORMATION

Location

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

Wellhead Stick-Up from Ground Level	2.11
Reference Point to Depth to Water Level	
Reference Point (ft)	
Static Depth to Water (ft)	98.34
Well Total Depth (ft below top of casing)	207.83
Depth to Water below ground Surface (ft)	96.23
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	May 14, 2024 9:30:00 AM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Partly Sunny
Air Temperature (°F)	60
Date	May 15, 2024
Time	11:43:00 AM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	May 15, 2024 11:37:00 AM MDT
Sample Temperature (°C)	16.15
Specific Conductivity (µS/cm)	6813.04
pH (S.U.)	7.60
Oxygen Reduction Potential (mV)	-107.03
Dissolved Oxygen (mg/L)	0.91
Flow Rate (gpm)	0.05

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	May 15, 2024 11:40:00 AM MDT
Sample Temperature (°C)	16.34
Specific Conductivity (µS/cm)	6807.33
pH (S.U.)	7.59
Oxygen Reduction Potential (mV)	-104.60
Dissolved Oxygen (mg/L)	0.90
Flow Rate (gpm)	0.05

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	May 15, 2024 11:43:00 AM MDT
Sample Temperature (°C)	16.36
Specific Conductivity (µS/cm)	6596.04
pH (S.U.)	7.57
Oxygen Reduction Potential (mV)	-106.45
Dissolved Oxygen (mg/L)	0.91
Flow Rate (gpm)	0.05

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	110.39
Was flow rate measured?	Flow Rate was measured.
Static Flow Rate (gpm)	0.05
Total Purged (gal)	1.50
Geographic Sample Location	3201 Lime Rd, Pueblo, CO 81004, USA latitude: 38.16532113364529 altitude: 1535.413 longitude: -104.61228200079387 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

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

[Handwritten Signature]

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE

1 OF 1

Details

Method of Sample Collection	MW-14 – Dedicated QED SS Well Wizard T1300 low-flow bladder pump
Lab Sample Name	MW-14
Sample Date/Time	May 15, 2024 11:43:00 AM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING

1 OF 3

Bottle Details

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

SAMPLE HANDLING		2 OF 3
Bottle Details		
ACZ Labs Bottle Sticker	White	
Bottle Volume (mL)	250	
Bottle Composition	Poly	
Bottle Quantity	1	
Field-Filtered to 0.45 µm (Yes/No)	Yes	
Preservative (Type)	Raw/None	
Analysis	Wet Chemistry - no preservative, field-filtered	

SAMPLE HANDLING		3 OF 3
Bottle Details		
ACZ Labs Bottle Sticker	Green PC	
Bottle Volume (mL)	125	
Bottle Composition	Poly	
Bottle Quantity	1	
Field-Filtered to 0.45 µm (Yes/No)	Yes	
Preservative (Type)	Nitric Acid	
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered	



Dev Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:

GCC_RGPP-20240625-1314032001-18371001609

Form Name:

Dev Wells - GCC Pueblo Compliance Water Sampling

Submitter Name:

Amy Rodrigues | amy.rodrigues

Date Sent on Device:

Jun 25, 2024 12:43:15 PM MDT

SITE INFORMATION

Location

Project Site

GCC Rio Grande Pueblo Plant

Sample ID

MW-15

Water present to measure/sample?

No

Is the water present within 0.25 feet of the well TD?

No

Dry Well

Yes

Misc

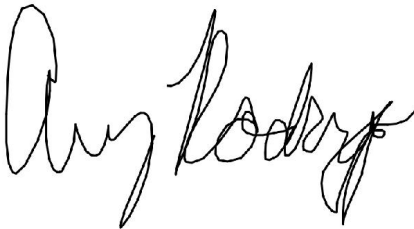
Site Photo



SAMPLING DETAILS

Weather	Partly Sunny
Air Temperature (°F)	82
Date	Jun 11, 2024
Time	1:32:00 PM MDT

Sampler

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



Dev Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:

GCC_RGPP-20240625-1314032001-18371001606

Form Name:

Dev Wells - GCC Pueblo Compliance Water Sampling

Submitter Name:

Amy Rodrigues | amy.rodrigues

Date Sent on Device:

Jun 25, 2024 12:42:51 PM MDT

SITE INFORMATION

Location

Project Site

GCC Rio Grande Pueblo Plant

Sample ID

MW-16

Water present to measure/sample?

No

Is the water present within 0.25 feet of the well TD?

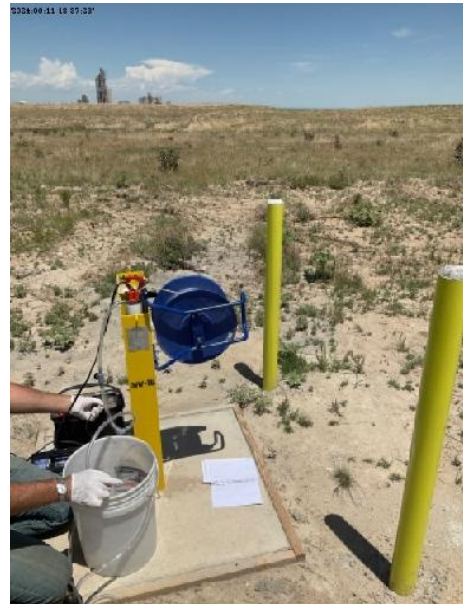
Yes

Dry Well

Yes

Misc

Site Photo



SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	82
Date	Jun 25, 2024
Time	10:40:00 AM MDT
Comments	Sampling was attempted and the minimum purge of 0.4 gallons was achieved on 6/11/2024. Water level then dropped below pump level and well went dry so a sample was not able to be taken . We came back to well on 6/25/2024 to see if well recovered enough to sample. The well recovered some but not enough to provide for a sample.

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



Dev Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:

GCC_RGPP-20240625-1314032001-18371001612

Form Name:

Dev Wells - GCC Pueblo Compliance Water Sampling

Submitter Name:

Amy Rodrigues | amy.rodrigues

Date Sent on Device:

Jun 25, 2024 12:43:29 PM MDT

SITE INFORMATION

Location

Project Site

GCC Rio Grande Pueblo Plant

Sample ID

MW-17

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	Partly Sunny
Air Temperature (°F)	82
Date	Jun 11, 2024
Time	12:55:00 PM MDT

Sampler

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



Dev Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number: GCC_RGPP-20240625-1314032001-18371029945	Form Name: Dev Wells - GCC Pueblo Compliance Water Sampling
Submitter Name: Amy Rodrigues amy.rodrigues	Date Sent on Device: Jun 25, 2024 2:36:49 PM MDT

SITE INFORMATION

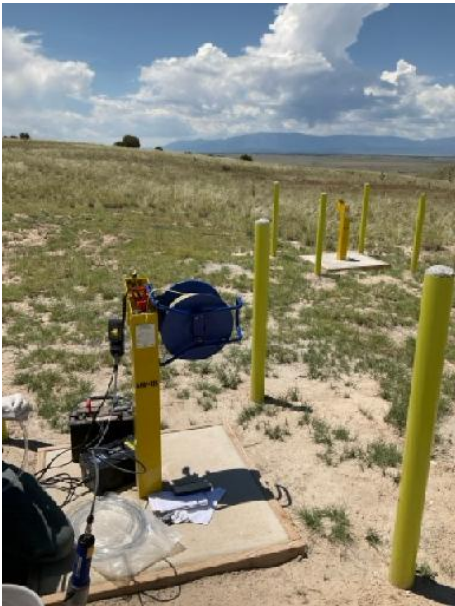
Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-18
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	2.87
Reference Point to Depth to Water Level	
Reference Point (ft)	
Static Depth to Water (ft)	38.69
Well Total Depth (ft below top of casing)	55.74
Depth to Water below ground Surface (ft)	35.82
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:	Jun 3, 2024 2:30:00 PM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Partly Sunny
Air Temperature (°F)	82
Date	Jun 11, 2024
Time	1:11:00 PM MDT

Micro-Purge Stabilization Parameters #1

Purge Start Time	Jun 11, 2024 12:30:00 PM MDT
Date/Time #1	Jun 11, 2024 1:05:00 PM MDT
Flow Rate (gpm) #1	0.03
Calculated Purge Volume (gal) #1	1.05
Sample Temperature (°C)	19.13
Specific Conductivity (µS/cm)	1057.25
pH (S.U.)	7.59

Oxygen Reduction Potential (mV)	-49.28
Dissolved Oxygen (mg/L)	0.92

Micro-Purge Stabilization Parameters #2

Date/Time #2	Jun 11, 2024 1:08:00 PM MDT
Flow Rate (gpm) #2	0.03
Sample Temperature (°C)	19.07
Specific Conductivity (µS/cm)	1044.99
pH (S.U.)	7.59
Oxygen Reduction Potential (mV)	-41.78
Dissolved Oxygen (mg/L)	0.89

Micro-Purge Stabilization Parameters #3 (FINAL)

Date/Time #3	Jun 11, 2024 1:11:00 PM MDT
Flow Rate (gpm) #3	0.03
Sample Temperature (°C)	18.91
Specific Conductivity (µS/cm)	1040.96
pH (S.U.)	7.58
Oxygen Reduction Potential (mV)	-35.50
Dissolved Oxygen (mg/L)	0.87

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	39.90
Was flow rate measured?	Flow Rate was measured.
Static Flow Rate (gpm)	0.03
Total Purged (gal)	1.25
Are you sure? This purge value seems out of the expected purge requirement.	Yes
Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.129346315063295 altitude: 1535.0208 longitude: -104.60638720806844 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name

Sampler's Signature

Amy Rodrigues – GCC Pueblo Environmental Engineer



SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE

1 OF 1

Details

Method of Sample Collection

Lab Sample Name

Sample Date/Time

Lab Suite

Number of Bottles/Containers

Lab Sample Type

MW-18 – Dedicated Proactive Environmental
SS Sample Champ XL 12-volt low-flow
submersible pump

MW-18

Jun 11, 2024 1:11:00 PM MDT

GW-Compliance

3

Normal

Sample Handling

SAMPLE HANDLING

1 OF 3

Bottle Details

ACZ Labs Bottle Sticker

Bottle Volume (mL)

Bottle Composition

Bottle Quantity

Field-Filtered to 0.45 µm (Yes/No)

Preservative (Type)

None

500

Poly

1

No

Raw/None

Dev Wells - GCC Pueblo Compliance Water Sampling

PAGE 4 OF 5

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	



Dev Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number: GCC_RGPP-20240625-1314032001-18371036243	Form Name: Dev Wells - GCC Pueblo Compliance Water Sampling
Submitter Name: Amy Rodrigues amy.rodrigues	Date Sent on Device: Jun 25, 2024 2:51:39 PM MDT

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-19
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	2.74
Reference Point to Depth to Water Level	
Reference Point (ft)	
Static Depth to Water (ft)	12.42
Well Total Depth (ft below top of casing)	75.01
Depth to Water below ground Surface (ft)	9.68
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:	Jun 3, 2024 2:30:00 PM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Cloudy
Air Temperature (°F)	74
Date	Jun 10, 2024
Time	3:23:00 PM MDT

Micro-Purge Stabilization Parameters #1

Purge Start Time	Jun 10, 2024 3:03:00 PM MDT
Date/Time #1	Jun 10, 2024 3:17:00 PM MDT
Flow Rate (gpm) #1	0.03
Calculated Purge Volume (gal) #1	0.42
Sample Temperature (°C)	18.30
Specific Conductivity (µS/cm)	1719.72
pH (S.U.)	8.07

Oxygen Reduction Potential (mV)	-127.55
---------------------------------	---------

Dissolved Oxygen (mg/L)	2.76
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Micro-Purge Stabilization Parameters #2

Date/Time #2	Jun 10, 2024 3:20:00 PM MDT
--------------	-----------------------------

Flow Rate (gpm) #2	0.03
--------------------	------

Sample Temperature (°C)	18.16
-------------------------	-------

Specific Conductivity (µS/cm)	1712.26
-------------------------------	---------

pH (S.U.)	8.08
-----------	------

Oxygen Reduction Potential (mV)	-120.97
---------------------------------	---------

Dissolved Oxygen (mg/L)	2.61
-------------------------	------

Micro-Purge Stabilization Parameters #3 (FINAL)

Date/Time #3	Jun 10, 2024 3:23:00 PM MDT
--------------	-----------------------------

Flow Rate (gpm) #3	0.03
--------------------	------

Sample Temperature (°C)	17.99
-------------------------	-------

Specific Conductivity (µS/cm)	1710.15
-------------------------------	---------

pH (S.U.)	8.09
-----------	------

Oxygen Reduction Potential (mV)	-115.39
---------------------------------	---------

Dissolved Oxygen (mg/L)	2.35
-------------------------	------

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
--------------------------------------	---

Depth to Water (ft TOC)	12.67
-------------------------	-------

Was flow rate measured?	Flow Rate was measured.
-------------------------	-------------------------

Static Flow Rate (gpm)	0.03
------------------------	------

Total Purged (gal)	0.60
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Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.129346315063295 altitude: 1535.0208 longitude: -104.60638720806844 [viewMap]
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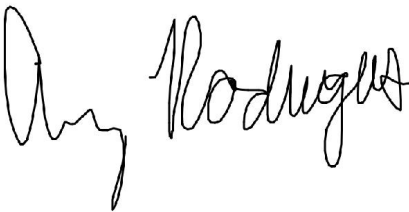
Sample(s) collected for laboratory analysis?	Yes
--	-----

Sampler

Sampler Name

Sampler's Signature

Amy Rodrigues – GCC Pueblo Environmental Engineer



SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE

1 OF 1

Details

Method of Sample Collection

Lab Sample Name

Sample Date/Time

Lab Suite

Number of Bottles/Containers

Lab Sample Type

MW-19 – Dedicated Proactive Environmental
SS Sample Champ XL 12-volt low-flow
submersible pump

MW-19

Jun 10, 2024 3:23:00 PM MDT

GW-Compliance

3

Normal

Sample Handling

SAMPLE HANDLING

1 OF 3

Bottle Details

ACZ Labs Bottle Sticker

Bottle Volume (mL)

Bottle Composition

Bottle Quantity

Field-Filtered to 0.45 µm (Yes/No)

Preservative (Type)

None

500

Poly

1

No

Raw/None

Dev Wells - GCC Pueblo Compliance Water Sampling

PAGE 4 OF 5

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	



Dev Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number: GCC_RGPP-20240625-1314032001-18371034994	Form Name: Dev Wells - GCC Pueblo Compliance Water Sampling
Submitter Name: Amy Rodrigues amy.rodrigues	Date Sent on Device: Jun 25, 2024 3:20:44 PM MDT

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-20
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	2.75
Reference Point to Depth to Water Level	
Reference Point (ft)	
Static Depth to Water (ft)	48.08
Well Total Depth (ft below top of casing)	97.4
Depth to Water below ground Surface (ft)	45.33
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:	Jun 3, 2024 2:30:00 PM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Cloudy
Air Temperature (°F)	74
Date	Jun 10, 2024
Time	4:12:00 PM MDT

Micro-Purge Stabilization Parameters #1

Purge Start Time	Jun 10, 2024 3:47:00 PM MDT
Date/Time #1	Jun 10, 2024 4:06:00 PM MDT
Flow Rate (gpm) #1	0.03
Calculated Purge Volume (gal) #1	0.57
Sample Temperature (°C)	19.15
Specific Conductivity (µS/cm)	2847.54
pH (S.U.)	8.14

Oxygen Reduction Potential (mV)	-23.54
Dissolved Oxygen (mg/L)	2.25

Micro-Purge Stabilization Parameters #2

Date/Time #2	Jun 10, 2024 4:09:00 PM MDT
Flow Rate (gpm) #2	0.03
Sample Temperature (°C)	18.55
Specific Conductivity (µS/cm)	2883.92
pH (S.U.)	8.14
Oxygen Reduction Potential (mV)	-20.82
Dissolved Oxygen (mg/L)	2.07

Micro-Purge Stabilization Parameters #3 (FINAL)

Date/Time #3	Jun 10, 2024 4:12:00 PM MDT
Flow Rate (gpm) #3	0.03
Sample Temperature (°C)	18.86
Specific Conductivity (µS/cm)	2853.67
pH (S.U.)	8.14
Oxygen Reduction Potential (mV)	-21.87
Dissolved Oxygen (mg/L)	1.84

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	54.72
Was flow rate measured?	Flow Rate was measured.
Static Flow Rate (gpm)	0.03
Total Purged (gal)	0.75
Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.129332815131114 altitude: 1535.1738 longitude: -104.60635923680154 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name

Sampler's Signature

Amy Rodrigues – GCC Pueblo Environmental Engineer



SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE

1 OF 1

Details

Method of Sample Collection

MW-20 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump

Lab Sample Name

MW-20

Sample Date/Time

Jun 10, 2024 4:12:00 PM MDT

Lab Suite

GW-Compliance

Number of Bottles/Containers

3

Lab Sample Type

Normal

Sample Handling

SAMPLE HANDLING

1 OF 3

Bottle Details

ACZ Labs Bottle Sticker

None

Bottle Volume (mL)

500

Bottle Composition

Poly

Bottle Quantity

1

Field-Filtered to 0.45 µm (Yes/No)

No

Preservative (Type)

Raw/None

Analysis		Wet Chemistry - no preservative, no filtration
SAMPLE HANDLING		2 OF 3
Bottle Details		
ACZ Labs Bottle Sticker	White	
Bottle Volume (mL)	250	
Bottle Composition	Poly	
Bottle Quantity	1	
Field-Filtered to 0.45 µm (Yes/No)	Yes	
Preservative (Type)	Raw/None	
Analysis	Wet Chemistry - no preservative, field-filtered	
SAMPLE HANDLING		3 OF 3
Bottle Details		
ACZ Labs Bottle Sticker	Green PC	
Bottle Volume (mL)	125	
Bottle Composition	Poly	
Bottle Quantity	1	
Field-Filtered to 0.45 µm (Yes/No)	Yes	
Preservative (Type)	Nitric Acid	
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered	



Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number: GCC_RGPP-20240613-1314032001-18369744601	Form Name: Wells - GCC Pueblo Compliance Water Sampling
Submitter Name: Amy Rodrigues amy.rodrigues	Date Sent on Device: Jun 13, 2024 1:24:05 PM MDT

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-21
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)	2.6
Static Depth to Water (ft)	44.68
Well Total Depth (ft below top of casing)	124.88
Depth to Water below ground Surface (ft)	42.08
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:	Jun 3, 2024 2:30:00 PM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Cloudy
Air Temperature (°F)	74
Date	Jun 10, 2024
Time	10:56:00 AM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time #1	Jun 10, 2024 10:50:00 AM MDT
Flow Rate (gpm) #1	0.05
Sample Temperature (°C)	16.01
Specific Conductivity (µS/cm)	3207.39
pH (S.U.)	8.20
Oxygen Reduction Potential (mV)	-103.11
Dissolved Oxygen (mg/L)	1.10

Micro-Purge Stabilization Parameters #2

Parameter Date/Time #2	Jun 10, 2024 10:53:00 AM MDT
Flow Rate (gpm) #2	0.05
Sample Temperature (°C)	16.03
Specific Conductivity (µS/cm)	3209.43
pH (S.U.)	8.20
Oxygen Reduction Potential (mV)	-100.60
Dissolved Oxygen (mg/L)	1.00

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time #3	Jun 10, 2024 10:56:00 AM MDT
Flow Rate (gpm) #3	0.05
Sample Temperature (°C)	16.36
Specific Conductivity (µS/cm)	3209.07
pH (S.U.)	8.20
Oxygen Reduction Potential (mV)	-96.92
Dissolved Oxygen (mg/L)	0.91

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	44.70
Was flow rate measured?	Flow Rate was measured.
Static Flow Rate (gpm)	0.05
Total Purged (gal)	1.30
Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.12933140715829 altitude: 1535.1394 longitude: -104.60641170423354 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

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



SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE

1 OF 2

Details

Method of Sample Collection	MW-21 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-21
Sample Date/Time	Jun 10, 2024 10:56:00 AM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

LAB SAMPLE

2 OF 2

Details

Method of Sample Collection	MW-21 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-3B
Sample Date/Time	Jun 10, 2024 12:00:00 PM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Duplicate

Sample Handling

SAMPLE HANDLING		1 OF 3
Bottle Details		
ACZ Labs Bottle Sticker	None	
Bottle Volume (mL)	500	
Bottle Composition	Poly	
Bottle Quantity	1	
Field-Filtered to 0.45 µm (Yes/No)	No	
Preservative (Type)	Raw/None	
Analysis	Wet Chemistry - no preservative, no filtration	

SAMPLE HANDLING		2 OF 3
Bottle Details		
ACZ Labs Bottle Sticker	White	
Bottle Volume (mL)	250	
Bottle Composition	Poly	
Bottle Quantity	1	
Field-Filtered to 0.45 µm (Yes/No)	Yes	
Preservative (Type)	Raw/None	
Analysis	Wet Chemistry - no preservative, field-filtered	

SAMPLE HANDLING		3 OF 3
Bottle Details		
ACZ Labs Bottle Sticker	Green PC	
Bottle Volume (mL)	125	
Bottle Composition	Poly	
Bottle Quantity	1	
Field-Filtered to 0.45 µm (Yes/No)	Yes	
Preservative (Type)	Nitric Acid	
Analysis	Metals (dissolved including ICPMS) - nitric preserved, field-filtered	



Dev Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number: GCC_RGPP-20240625-1314032001-18371019893	Form Name: Dev Wells - GCC Pueblo Compliance Water Sampling
Submitter Name: Amy Rodrigues amy.rodrigues	Date Sent on Device: Jun 25, 2024 2:11:35 PM MDT

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-22
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	2.6
Reference Point to Depth to Water Level	
Reference Point (ft)	
Static Depth to Water (ft)	149.03
Well Total Depth (ft below top of casing)	155.15
Depth to Water below ground Surface (ft)	146.43
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:	Jun 3, 2024 2:30:00 PM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Sunny
Air Temperature (°F)	84
Date	Jun 25, 2024
Time	9:43:00 AM MDT

Micro-Purge Stabilization Parameters #1

Purge Start Time	Jun 25, 2024 9:23:00 AM MDT
Date/Time #1	Jun 25, 2024 9:37:00 AM MDT
Flow Rate (gpm) #1	0.06
Calculated Purge Volume (gal) #1	0.84
Sample Temperature (°C)	19.78
Specific Conductivity (µS/cm)	1154.34
pH (S.U.)	9.10

Are you sure? This value seems very unlikely based on past data. Yes

pH - Out of Range

Suspect conditions not observed before but I think the parameter value is accurate

Oxygen Reduction Potential (mV)

-26.69

Dissolved Oxygen (mg/L)

1.16

Micro-Purge Stabilization Parameters #2

Date/Time #2

Jun 25, 2024 9:40:00 AM MDT

Flow Rate (gpm) #2

0.06

Sample Temperature (°C)

21.24

Are you sure? This value seems very unlikely based on past data. Yes

Sample Temperature - Out of Range

Suspect specific probe malfunction for this parameter

Specific Conductivity (µS/cm)

0.37

Are you sure? This value seems very unlikely based on past data. Yes

Specific Conductivity - Out of Range

Suspect specific probe malfunction for this parameter

pH (S.U.)

6.36

Oxygen Reduction Potential (mV)

166.27

Dissolved Oxygen (mg/L)

3.44

Micro-Purge Stabilization Parameters #3 (FINAL)

Date/Time #3

Jun 25, 2024 9:43:00 AM MDT

Flow Rate (gpm) #3

0.06

Sample Temperature (°C)

19.91

Specific Conductivity (µS/cm)

1121.55

pH (S.U.)

9.10

Oxygen Reduction Potential (mV)

-22.17

Dissolved Oxygen (mg/L)

1.13

Purge and Sampling

Water level measured at sample time?

Depth to Water (ft TOC) measured at Sample Time

Depth to Water (ft TOC)

150.63

Was flow rate measured?

Flow Rate was measured.

Static Flow Rate (gpm)

0.05

Total Purged (gal)	1.25
Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.1297781991543 altitude: 1534.6409 longitude: -104.60730083360708 [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
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Details

Method of Sample Collection	MW-22 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-22
Sample Date/Time	Jun 25, 2024 9:43:00 AM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING	1 OF 3
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Bottle Details

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

SAMPLE HANDLING

2 OF 3

Bottle Details

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

SAMPLE HANDLING

3 OF 3

Bottle Details

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



Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number: GCC_RGPP-20240614-1314032001-18369854244	Form Name: Wells - GCC Pueblo Compliance Water Sampling
Submitter Name: Amy Rodrigues amy.rodrigues	Date Sent on Device: Jun 14, 2024 8:59:41 AM MDT

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-23
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	2.8
Reference Point to Depth to Water Level	
Reference Point (ft)	
Static Depth to Water (ft)	71.41
Well Total Depth (ft below top of casing)	80
Depth to Water below ground Surface (ft)	68.61
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:	Jun 3, 2024 2:30:00 PM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Cloudy
Air Temperature (°F)	74
Date	Jun 10, 2024
Time	12:21:00 PM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time #1	Jun 10, 2024 12:16:00 PM MDT
Flow Rate (gpm) #1	0.05
Sample Temperature (°C)	18.43
Specific Conductivity (µS/cm)	728.52
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.)	8.27
Oxygen Reduction Potential (mV)	-99.70
Dissolved Oxygen (mg/L)	1.82

Micro-Purge Stabilization Parameters #2

Parameter Date/Time #2	Jun 10, 2024 12:19:00 PM MDT
Flow Rate (gpm) #2	0.05
Sample Temperature (°C)	18.39
Specific Conductivity (µS/cm)	705.70
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.)	8.25
Oxygen Reduction Potential (mV)	-100.21
Dissolved Oxygen (mg/L)	1.70

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time #3	Jun 10, 2024 12:21:00 PM MDT
Flow Rate (gpm) #3	0.05
Sample Temperature (°C)	17.38
Specific Conductivity (µS/cm)	713.06
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.)	8.26
Oxygen Reduction Potential (mV)	-100.06
Dissolved Oxygen (mg/L)	1.55

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	73.83
Was flow rate measured?	Flow Rate was measured.
Static Flow Rate (gpm)	0.05

Total Purged (gal)	0.75
Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.129330084596035 altitude: 1535.3137 longitude: -104.6063914122925 [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
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Details

Method of Sample Collection	MW-23 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-23
Sample Date/Time	Jun 10, 2024 12:21:00 PM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING	1 OF 3
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Bottle Details

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

SAMPLE HANDLING

2 OF 3

Bottle Details

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

SAMPLE HANDLING

3 OF 3

Bottle Details

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



Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number: GCC_RGPP-20240614-1314032001-18369854326	Form Name: Wells - GCC Pueblo Compliance Water Sampling
Submitter Name: Amy Rodrigues amy.rodrigues	Date Sent on Device: Jun 14, 2024 9:06:47 AM MDT

SITE INFORMATION

Location

Project Site	GCC Rio Grande Pueblo Plant
Sample ID	MW-24
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)	2.8
Static Depth to Water (ft)	103.26
Well Total Depth (ft below top of casing)	113
Depth to Water below ground Surface (ft)	100.46
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:	Jun 3, 2024 2:30:00 PM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Cloudy
Air Temperature (°F)	74
Date	Jun 10, 2024
Time	1:02:00 PM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time #1	Jun 10, 2024 12:56:00 PM MDT
Flow Rate (gpm) #1	0.05
Sample Temperature (°C)	17.60
Specific Conductivity (µS/cm)	746.60
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.)	9.45
Are you sure? This value seems very unlikely based on past data.	Yes
pH - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Oxygen Reduction Potential (mV)	-103.49
Dissolved Oxygen (mg/L)	1.28

Micro-Purge Stabilization Parameters #2

Parameter Date/Time #2	Jun 10, 2024 12:59:00 PM MDT
Flow Rate (gpm) #2	0.05
Sample Temperature (°C)	17.76
Specific Conductivity (µS/cm)	738.48
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.)	9.40
Are you sure? This value seems very unlikely based on past data.	Yes
pH - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Oxygen Reduction Potential (mV)	-97.34
Dissolved Oxygen (mg/L)	1.17

Micro-Purge Stabilization Parameters #3 (FINAL)

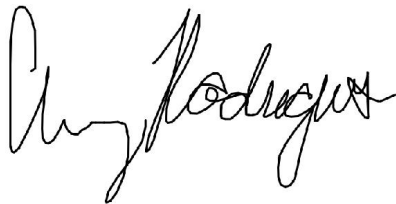
Parameter Date/Time #3	Jun 10, 2024 1:02:00 PM MDT
Flow Rate (gpm) #3	0.05
Sample Temperature (°C)	18.25
Specific Conductivity (µS/cm)	720.43
Are you sure? This value seems very unlikely based on past data.	Yes
Specific Conductivity - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
pH (S.U.)	9.34
Are you sure? This value seems very unlikely based on past data.	Yes

pH - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Oxygen Reduction Potential (mV)	-90.04
Dissolved Oxygen (mg/L)	1.03

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	106.12
Was flow rate measured?	Flow Rate was measured.
Static Flow Rate (gpm)	0.05
Total Purged (gal)	1.25
Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.129330084596035 altitude: 1535.3137 longitude: -104.6063914122925 [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
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Details

Method of Sample CollectionMW-24 – Dedicated Proactive Environmental
SS Sample Champ XL 12-volt low-flow
submersible pump**Lab Sample Name**

MW-24

Sample Date/Time

Jun 10, 2024 1:02:00 PM MDT

Lab Suite

GW-Compliance

Number of Bottles/Containers

3

Lab Sample Type

Normal

Sample Handling

SAMPLE HANDLING

1 OF 3

Bottle Details**ACZ Labs Bottle Sticker**

None

Bottle Volume (mL)

500

Bottle Composition

Poly

Bottle Quantity

1

Field-Filtered to 0.45 µm (Yes/No)

No

Preservative (Type)

Raw/None

Analysis

Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING

2 OF 3

Bottle Details**ACZ Labs Bottle Sticker**

White

Bottle Volume (mL)

250

Bottle Composition

Poly

Bottle Quantity

1

Field-Filtered to 0.45 µm (Yes/No)

Yes

Preservative (Type)

Raw/None

Analysis

Wet Chemistry - no preservative, field-filtered

SAMPLE HANDLING

3 OF 3

Bottle Details**ACZ Labs Bottle Sticker**

Green PC

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