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

SDG	L80783, L80818
PROJECT	GCC Rio Grande – Second Quarter 2023, Resource Hydrogeologic Services and GCC
LABORATORY	ACZ Laboratories, Steamboat Springs, CO
SAMPLE MATRIX	Water SAMPLING DATE: 5/30, 5/31/2023
ANALYSES REQUESTED	EPA 200.7 (metals by ICP, dissolved), EPA 200.8 (metals by ICPMS, dissolved), EPA 245.1 (mercury, dissolved), SM4500F-C (Fluoride), M353.2 (nitrate + nitrite as nitrogen, nitrite as nitrogen, nitrate as nitrogen); SM2540C (total dissolved solids); D516-02/-07/-11 -Sulfate by turbidimetry; SM4500Cl-E (Chloride)
SAMPLE NUMBER	MW-14, MW-13, MW-8, MW-7, MW-6, MW-12, MW-11, MW-2B, MW-9, MW-10

DATA REVIEWER: John Huntington

QA REVIEWER: Diane Short & Associates, Inc. INITIALS/DATE: ___DLS___7/24/2023

Telephone Logs included Yes____ No __X_
Contractual Violations Yes____ No __X_

The Contract Laboratory Program National Functional Guidelines for Inorganic Data Review 2016 (NFG) and the requested EPA Methods, Methods of Chemical Analysis of Water and Wastes (MCAWW) and Standard Methods (SM, current updates) have been referenced by the reviewer to perform this data validation review. The review includes evaluation of calibration, holding times and Quality Control (QC) for all samples; and 10% review of transcription and calculation algorithms from the raw data. Determining the exact analytical sequence was performed to verify that the frequencies of QC sample analyses were met, where applicable, on 10% of the data. General comments regarding the data/analytical quality are part of the review when raw data are submitted. The reports use Diane Short & Associates (DSA) validation qualifiers in the text and tables that include the compilation of the reasons for qualification and the associated values, as defined in each section for QC outliers. The United States Environmental Protection Agency (EPA) qualifiers have been provided. The DSA qualifiers, EPA qualifiers, and validation codes are included in the Electronic Data Deliverable (EDD). Note: those items in this report which have an asterisk (*) are specific to inductively coupled plasma-mass spectrometry (ICP-MS) and may include inductively coupled plasma-atomic emission spectroscopy (ICP-AES) as applicable.

I. DELIVERABLES

All deliverables were present as specified in the Statement of Work (SOW), SW-846, or in the project contract. This includes the Case Narrative.

Yes X No _____

Data were submitted for EPA 200.7 (16 metals by ICP, dissolved), EPA 200.8 (4 metals by ICPMS, dissolved), EPA 245.1 (mercury, dissolved), SM4500F-C (Fluoride), M353.2 (nitrate + nitrite as nitrogen, nitrite as nitrogen, nitrate as nitrogen); SM2540C (total dissolved solids); D516-02/-07/-11 -Sulfate by turbidimetry; SM4500Cl-E (Chloride). Note that for these SDGS, pH was not requested.

The data were validated at EPA Level III (EPA Stage 2B) with a minimum of 10% validated as EPA raw data review. Both second quarter SDGs are provided as level IV data packages.

The laboratory has reported detections to the MDL and has flagged results between the MDL and the PQL with a "B". This is noted because many laboratories use "J" instead of "B" for this purpose, so the meaning of this flag needs to be kept in mind when reviewing the data. The definition of lab flags is provided in the report in the Inorganic Reference section.

II. ANALYTICAL REPORT FORMS

A. The Analytical Report or Data Sheets are present and complete for all requested analyses.

Yes X No _____

B. Holding Times

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

Yes X No _____ N/A _____

Data are qualified from date of collection to analysis, as presented in the next section.

2. The method holding times were met for all analyses (time of sample collection to date of analysis per the holding times in the project QAPP).

Yes _____ No X

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

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

Qualifiers added are shown within the body of this report and in the qualified EDD.

CLIENTID	LABID	ANALYTE	RESULT mg/L	Lab Flag	MDL	PQL	DSA	EPA
MW-7	L80783-04	Residue, Filterable (TDS) @180C	5560	H	40	80	JH7	J-
MW-6	L80783-05	Residue, Filterable (TDS) @180C	5380	H	40	80	JH7	J-
MW-9	L80818-04	Residue, Filterable (TDS) @180C	4740	H	40	80	JH12	J-

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

Yes _____ No __X__ N/A _____

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

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

C. Chains of Custody (COC)

Chains of Custody (COC) were reviewed and all fields were complete, signatures were present, and cross outs were clean and initialed.

Yes __X__ No _____

All sample analyses were sent under a COC to ACZ Labs, Steamboat Springs, CO.

III. CALIBRATION AND STANDARDIZATION

1. Initial calibration, mass calibration, and resolution checks for both low and high mass isotopes were within 0.1 atomic mass unit (amu) of the true value. (*)

Yes __X__ No _____

All requisite instrument tuning or performance measures were done according to the method requirements. (*).

US EPA Tune Check Sample reports were provided in the raw data and reports indicated the tunes passed in all cases.

2. Mass calibration and resolution checks for both low and high mass isotopes produced a peak width of approximately 0.6 to 0.9 amu at 10% peak height. (*)

Yes __X__ No _____

3. Instrument Stability

A tuning solution was analyzed a minimum of four times, and the relative standard deviation (RSD) of absolute signals for all analytes was less than 5%. (*)

Yes __X__ No _____

B. Instrument Performance and Calibration Standards

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

Yes __X__ No _____

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

Yes __X__ No _____

Sequencing was performed to verify that the frequencies were met for client samples and for proper application of the qualifiers.

3. The CCV standard percent recovery results were within the required control limits of 90 – 110% (80 – 120 % for mercury, 75 – 125% for Se species)

Yes X No _____
All CCVs were within criteria.

4. The correlation coefficients met the ≥ 0.995 criterion, as applicable to the method for mercury.

Yes X No _____

IV. CONTRACT REQUIRED DETECTION LIMIT (CRDL) STANDARDS

1. The 2x CRDL standards were analyzed for metals as required in the QAPP.

Yes X No _____ N/A _____
A CRDL check is not required for Method 200.8. However, the laboratory initial calibration run each day has a low-level standard that is very near the reporting limit. This meets method requirements. The 200.7 method does include an RL Check standard that meets criteria.

2. The 2x CRDL standards were within the required control limits of 70 – 130% (ICP: 50 – 150% for Lead, Antimony, and Thallium; ICPMS: 50 – 150% for Cobalt, Manganese, and Zinc).

Yes X No _____
All CRDLs were within criteria.

V. INTERFERENCES

Isobaric Elemental and Molecular Interferences (* for ICP-MS)
The isotope selected was free of isobaric elemental and elemental interferences as measured by the Interference Check Sample Solutions A and AB (ICSA/ICSAB) for ICP-AES and ICP-MS.

Yes X No _____
Data are only qualified if the interfering analyte is present in the sample and at levels near the high end of the linear range of the instrument. For Method 200.7, the recovery of the spectral interference check standard (SIC) is reported in the QC as a recovery for each element analyzed. All are in control. Method 200.8 does not specify the use of interference check standards. The laboratory has used collision deactivation and accepted reagent gas technology to minimize interference for ICP/MS.

VI. LABORATORY REAGENT BLANK (LRB) OR PREPARATION BLANK

A. Blanks were prepared and analyzed at the required frequency of at least one per each set of samples.

Yes X No _____
The ICB is used as the method blank for metals. This is acceptable 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.

In SDG L80783, the selenium ICB has a low-level detection. In addition, several of the CCBs within the run

show similar low-level detections. One sample detected result has a level of selenium such as to require qualification. The result is qualified as UMB# from the ICB (method blank).

In SDG L80818, one ICB had a low-level detection of vanadium. The associated samples did not have detected levels of vanadium, so no qualifiers are required.

Wet chemistry methods have specific preparation blanks. These are either in control or so low relative to sample levels (such as for alkalinity) that they do not require qualification.

CLIENTID	LABID	ANALYTE	RESULT mg/L	Lab flag	MDL	PQL	DSA	EPA
MW-8	L80783-03	Selenium, dissolved	0.00090	B	0.0005	0.00125	UMB0.00012	UB

C. The source of contamination was corrected, and the samples were reanalyzed.

Yes _____ No _____ N/A __X__

VII. CALIBRATION BLANKS

The highest blank associated with any particular analyte is used for the qualification process and is the value entered after the DSA "B" blank-qualifier descriptor.

A. Calibration Blanks were prepared and analyzed at the required frequency after each set of 10 samples as required by the method.

Yes __X__ No _____
Sequencing was required to verify association with client samples.

B. The Calibration Blank results were within the required control limits or did not require data qualification.

Yes _____ No __X__ N/A _____
Analytes reported as contaminants in the Calibration Blanks are qualified with the DSA qualifier "UCB#," where # is the value of the blank. Such data are fully usable as non-detected values at the reported concentration or elevated reporting limit. Only detected data less than 10 × blank for metals and 5 × blank for other analyse are qualified.

In the second quarter data, CCB/ICB detections include selenium, magnesium, manganese, lead, potassium, and sodium. However, these are all associated with non-detects in samples or else with sample results > 10x the CCB level, with one exception. The sample shown below required qualification of lead for the associated CCB detection.

CLIENTID	LABID	ANALYTE	RESULT mg/L	Lab Flag	MDL	PQL	DSA	EPA
MW-12	L80818-01	Lead, dissolved	0.00028	B	0.0002	0.001	UCB0.00011	UB

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

Yes _____ No __X__ N/A _____

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

Yes _____ No _____ N/A __X__

VIII. INTERNAL STANDARD RESPONSES (*)

A. A minimum of three internal standards were present in all standards and blanks at identical levels.

Yes X No _____

B. The absolute response of each internal standard (IS) was within the required EPA control limits of 60 – 125%.

Yes X No _____
For the analytes reported.

C. Dilutions were performed as required by the method to minimize errors if the internal standard analyte is naturally present in a sample.

Yes _____ No _____ N/A X

D. If not, the appropriate test procedures were performed, and the required corrections made.

Yes _____ No _____ N/A X

IX. MATRIX SPIKES

A. Matrix Spike and Matrix Spike Duplicate (MS/MSD) samples were prepared and analyzed at one per every 20 or fewer samples for each matrix and each sampling event per day as required.

Yes X No _____
Matrix spikes, duplicates, and matrix spike duplicates were present. For wet chemistry, a matrix spike and a matrix duplicate are analyzed. The project manager will determine if the project frequency is met for these methods. Matrix spikes associated with this set of data are shown in the table below. It is recommended that the client collect Representative samples for each method and designate them to the laboratory to be used for the MS/MSDs. As these samples are collected quarterly, only 1 QC sample would be required per year.

Spiked Sample – L80783	Methods
MW-7	200.7 ICP, SM4500F-C, D516-02/-07/-11 - TURBIDIMETRIC
MW-13	200.8 ICPMS
Spiked Sample – L80818	
MW-9	SM4500F-C, 245.1 CVAA
MW-10	SM4500F-C

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

Yes X 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 __X__
Not required in this case.

D. The MS/MSD samples were client samples.

Yes __X__ No _____
MS/MSD analyses were also performed on client samples from other SDGs but are not pertinent for qualification.

X. MATRIX DUPLICATE

A. Matrix Duplicate samples were prepared and analyzed per every 20 samples for each matrix.

Yes __X__ No _____
Lab duplicates are present 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 L80783	Methods
MW-14	SM4500Cl-E
Parent Sample SDG L80818	
MW-9	SM2320B - alkalinity
MW-10	SM2540C

B. The MS/MSD or MD relative percent difference (RPD) values were within the required control limit of ≤ 20 RPD for water samples or ≤ 35% RPD for soil samples. If either of the MD results is less than 5x RL, the RPD is not used. In that case the difference between the results is evaluated and the QC limit is the difference between the original and the duplicate results (± 1x RL for water samples or ± 2x RL for soil samples). If the parent sample result is greater than 4 x the spike concentration, the MS/MSD is not evaluated. Only detected results are qualified for MS/MSD RPD outliers. Only those MS/MSDs with parent samples in these projects are considered.

Yes __X__ No _____
Data are qualified with the DSA qualifier JD#, where # is the value of the RPD for the associated MD or MS/MSD analyses, when there are outliers. In this case there are no qualifiers.

XI. LABORATORY CONTROL SAMPLE

A. Laboratory Control Samples (LCS) were prepared and analyzed per every 20 samples for each matrix.

Yes __X__ No _____

B. The LCS recoveries were within the required control limits of 80 – 120% for metals and for wet chemistry analyses 85 – 115% .

Yes __X__ No _____
All LCS analyses were within criteria.

XII. FIELD QC

A. Field QC samples were identified.

Yes __X__ No _____
For second quarter samples, sample MW-2B is a blind duplicate of sample MW-11.

B. Field duplicates were within the guidance limit of < 30% RPD for water samples or < 50% RPD for soil samples. If values are less than 5x RL, the water limit is ± 1x RL or the soil limit is ± 2x RL.

Yes _____ No __X__ N/A _____

Field duplicates for both first and second quarter were in control except for dissolved selenium in the second quarter data. Results are qualified as JFD#, where # is the observed RPD.

CLIENTID	LABID	ANALYTE	RESULT mg/L	Lab flag	MDL	PQL	DSA	EPA
MW-11	L80818-02	Selenium, dissolved	0.0386		0.0002	0.0005	JFD181	J
MW-2B	L80818-03	Selenium, dissolved	0.00188		0.0002	0.0005	JFD181	J

XIII. SERIAL DILUTION

A. Serial Dilutions were analyzed for every 20 samples if the analyte concentrations were greater than 50x IDL.

Yes __X__ No _____ N/A _____

Analyte concentrations are too low to require serial dilutions.

B. The percent difference (% D) criteria of ± 10% were met.

Yes _____ No _____ N/A __X__

When outliers are present, data are qualified with the DSA qualifier JE#, where # is the %D. Data could be biased, usually high, due to non-linear matrix or chemical effects.

XIV. CALCULATIONS

A. Data calculations were checked when required, and significant figures were correctly reported.

Yes __X__ No _____

Over 25% of the data were checked from the raw data to the EDD values for each method and each SDG.

As part of this review for the second quarter, the raw data for selenium by ICPMS in samples MW-11 and MW-2B (field duplicate of MW-11) was examined. These samples were both analyzed initially on 6/14, and subsequently reanalyzed on 6/16 and 6/20. Sample MW-2B was analyzed again on 6/21.

The initial run of these two samples gave results of 0.048 mg/L and 0.037 mg/L, which if used would have met field duplicate criteria. There was a detection of selenium in the ending CCB, which presumably is the reason for the reanalysis. Bracketing CCVs are in control. The closing CCB is too low to have required qualification of either sample. However, the internal standard recovery for Se was out of limits, which is likely the main reason that the samples were reanalyzed.

The samples were then reanalyzed on 6/16 again with similar results, but the closing CCB also had a selenium detection which would have required qualification. The samples were again analyzed on 6/20.

The 6/20 analysis gave usable results for sample MW-11 and that is the result used. However, the run for sample MW-2B gave an RSD for the selenium result that was out of limits (replicate measurements), and so it was reanalyzed on 6/21, with that result being reported.

It appears that the laboratory had considerable difficulty getting data for selenium that met criteria in these samples. This is likely due to some matrix interference that limits the reproducibility and accuracy of the selenium responses. Selenium results are likely biased to some degree in these samples, probably high. No qualifier is added since reported results do meet method criteria and the laboratory has taken all appropriate action.

B. Appropriate dilution factors were applied to the calculated sample concentrations.

Yes __X__ No _____

C. Data were acceptable for the total versus dissolved and the cation/ anion balance.
Yes _X__ No ___NA_____
Total metals were not requested, so the total vs dissolved check cannot be performed.
For the second quarter data set, the laboratory reported the cation-anion balance. It is in control for all samples.

XV. OVERALL ASSESSMENT OF THE CASE

The laboratory has complied with the requested methods and the data is considered fully useable for project purposes with consideration of the following qualifications or comments.

Data were submitted for EPA 200.7 (16 metals by ICP, dissolved), EPA 200.8 (4 metals by ICPMS, dissolved), EPA 245.1 (mercury, dissolved), SM4500F-C (Fluoride), M353.2 (nitrate + nitrite as nitrogen, nitrite as nitrogen, nitrate as nitrogen); SM2540C (total dissolved solids); D516-02/-07/-11 -Sulfate by turbidimetry; SM4500Cl-E (Chloride). Note that for these SDGS, pH was not requested. Note 12 ICP metals for 3rd quarter.

The data were validated at EPA Level III (EPA Stage 2B) with a minimum of 10% validated as EPA raw data review. Both second quarter SDGs are provided as level IV data packages.

The laboratory has reported detections to the MDL and has flagged results between the MDL and the PQL with a "B". This is noted because many laboratories use "J" instead of "B" for this purpose, so the meaning of this flag needs to be kept in mind when reviewing the data. The definition of lab flags are provided in the laboratory report in the Inorganic Reference section.

Holding Times

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

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

Qualifiers added are shown within the body of this report and in the qualified EDD.

Method Blanks

For metals analysis, the ICB is used as the preparation blank. In SDG L80783, the selenium ICB has a low-level detection. In addition, several of the CCBs within the run show similar low-level detections. One sample detected result has a level of selenium such as to require qualification. The result is qualified as UMB# from the ICB (method blank).

In SDG L80818, one ICB had a low-level detection of vanadium. The associated samples did not have detected levels of vanadium, so no qualifiers are required.

Wet chemistry methods have specific preparation blanks. These are either in control or so low relative to sample levels (such as for alkalinity) that they do not require qualification.

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 × blank for metals and 5 × blank for other analyse are qualified.

In the second quarter data, CCB/ICB detections include selenium, magnesium, manganese, lead, potassium, and sodium. However, these are all associated with non-detects in samples or else with sample results > 10x the CCB level, with one exception. The sample shown in the body of this report required qualification of lead for the associated CCB detection..

Matrix Spikes, Matrix Spike Duplicates, and Matrix Duplicates

Matrix spikes, duplicates, and matrix spike duplicates were present. For wet chemistry, a matrix spike and a matrix duplicate are analyzed. 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 within the body of this report. It is recommended that the client collect Representative samples for each method and designate them to the laboratory to be used for the MS/MSDs. As these samples are collected quarterly, only 1 QC sample would be required per year.

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.

Field QC

For second quarter samples, sample MW-2B is a blind duplicate of sample MW-11.

Field duplicates for both first and second quarter were in control except for dissolved selenium in the second quarter data. Results are qualified as JFD#, where # is the observed RPD.

Calculations

As part of this review for the second quarter, the raw data for selenium by ICPMS in samples MW-11 and MW-2B (field duplicate of MW-11) was examined. These samples were both analyzed initially on 6/14, and subsequently reanalyzed on 6/16 and 6/20. Sample MW-2B was analyzed again on 6/21.

The initial run of these two samples gave results of 0.048 mg/L and 0.037 mg/L, which if used would have met field duplicate criteria. There was a detection of selenium in the ending CCB, which presumably is the reason for the reanalysis. Bracketing CCVs are in control. The closing CCB is too low to have required qualification of either sample. However, the internal standard recovery for Se was out of limits, which is likely the main reason that the samples were reanalyzed.

The samples were then reanalyzed on 6/16 again with similar results, but the closing CCB also had a selenium detection which would have required qualification. The samples were again analyzed on 6/20.

The 6/20 analysis gave usable results for sample MW-11 and that is the result used. However, the run for sample MW-2B gave an RSD for the selenium result that was out of limits (replicate measurements), and so it was reanalyzed on 6/21, with that result being reported.

It appears that the laboratory had considerable difficulty getting data for selenium that met criteria in these samples. This is likely due to some matrix interference that limits the reproducibility and accuracy of the selenium responses. Selenium results are likely biased to some degree in these samples, probably high. No qualifier is added since reported results do meet method criteria and the laboratory has taken all appropriate action.

TABLE OF QUALIFIED DATA

CLIENTID	LABID	ANALYTE	RESULT mg/L	Lab Flag	MDL	PQL	DSA	EPA
MW-7	L80783-04	Residue, Filterable (TDS) @180C	5560	H	40	80	JH7	J-
MW-6	L80783-05	Residue, Filterable (TDS) @180C	5380	H	40	80	JH7	J-
MW-9	L80818-04	Residue, Filterable (TDS) @180C	4740	H	40	80	JH12	J-
MW-8	L80783-03	Selenium, dissolved	0.00090	B	0.0005	0.00125	UMB0.00012	UB
MW-12	L80818-01	Lead, dissolved	0.00028	B	0.0002	0.001	UCB0.00011	UB
MW-11	L80818-02	Selenium, dissolved	0.0386		0.0002	0.0005	JFD181	J
MW-2B	L80818-03	Selenium, dissolved	0.00188		0.0002	0.0005	JFD181	J

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

Analytical Report

June 28, 2023

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

cc: Landon Beck

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

Project ID: 183230
ACZ Project ID: L80818

Amy Veek:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on June 01, 2023. This project has been assigned to ACZ's project number, L80818. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L80818. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

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

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

All samples and sub-samples associated with this project will be disposed of after June 27, 2024. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

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

Sue Webber has reviewed and approved this report.

GCC Rio Grande

June 28, 2023

Project ID: 183230
ACZ Project ID: L80818

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 5 groundwater samples from GCC Rio Grande on June 1, 2023. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L80818. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

All analyses were performed within EPA recommended holding times except for parameters flagged with an "H2" requiring re-analysis after the hold time had expired.

Sample Analysis

These samples were analyzed for inorganic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports.

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

ACZ Sample ID: ***L80818-01***
Date Sampled: *05/31/23 09:02*
Date Received: *06/01/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/08/23 16:07	keh1
Arsenic, dissolved	M200.8 ICP-MS	2	0.00203			mg/L	0.0004	0.002	06/14/23 15:35	kja
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 3:03	keh1
Boron, dissolved	M200.7 ICP	1	0.890			mg/L	0.03	0.1	06/07/23 3:03	keh1
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U		mg/L	0.0001	0.0005	06/14/23 15:35	kja
Calcium, dissolved	M200.7 ICP	1	21.0			mg/L	0.1	0.5	06/07/23 3:03	keh1
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 3:03	keh1
Cobalt, dissolved	M200.8 ICP-MS	2	0.000372	B		mg/L	0.0001	0.0005	06/14/23 15:35	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U	*	mg/L	0.01	0.05	06/08/23 16:07	keh1
Iron, dissolved	M200.7 ICP	1	0.299			mg/L	0.06	0.15	06/07/23 3:03	keh1
Lead, dissolved	M200.8 ICP-MS	2	0.00028	B		mg/L	0.0002	0.001	06/14/23 15:35	kja
Lithium, dissolved	M200.7 ICP	1	0.212			mg/L	0.008	0.04	06/07/23 3:03	keh1
Magnesium, dissolved	M200.7 ICP	1	8.70			mg/L	0.2	1	06/07/23 3:03	keh1
Manganese, dissolved	M200.7 ICP	1	0.102		*	mg/L	0.01	0.05	06/07/23 3:03	keh1
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/08/23 11:55	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	06/07/23 3:03	keh1
Potassium, dissolved	M200.7 ICP	1	3.94			mg/L	0.2	1	06/07/23 3:03	keh1
Selenium, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.0005	06/16/23 16:12	kja
Sodium, dissolved	M200.7 ICP	1	958			mg/L	0.2	1	06/07/23 3:03	keh1
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	06/07/23 3:03	keh1
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 3:03	keh1

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

ACZ Sample ID: ***L80818-01***
Date Sampled: *05/31/23 09:02*
Date Received: *06/01/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	629		*	mg/L	2	20	06/13/23 0:00	emk
Carbonate as CaCO3		1	8.5	B	*	mg/L	2	20	06/13/23 0:00	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	06/13/23 0:00	emk
Total Alkalinity		1	638		*	mg/L	2	20	06/13/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-2.2			%			06/28/23 0:00	calc
Sum of Anions			46			meq/L			06/28/23 0:00	calc
Sum of Cations			44.0			meq/L			06/28/23 0:00	calc
Chloride	SM4500Cl-E	25	1070		*	mg/L	25	50	06/06/23 15:13	aps
Fluoride	SM4500F-C	1	1.81		*	mg/L	0.15	0.35	06/20/23 17:06	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		88			mg/L	0.2	5	06/28/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	06/28/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	06/02/23 2:15	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	06/02/23 2:15	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	2530		*	mg/L	20	40	06/06/23 12:44	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	159		*	mg/L	5	25	06/20/23 10:38	aps
TDS (calculated)	Calculation		2610			mg/L			06/28/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.97						06/28/23 0:00	calc

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

ACZ Sample ID: ***L80818-02***
Date Sampled: *05/31/23 09:41*
Date Received: *06/01/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/08/23 16:11	keh1
Arsenic, dissolved	M200.8 ICP-MS	1	0.00025	B		mg/L	0.0002	0.001	06/14/23 15:37	kja
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 3:06	keh1
Boron, dissolved	M200.7 ICP	1	0.484			mg/L	0.03	0.1	06/07/23 3:06	keh1
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U		mg/L	0.00005	0.00025	06/14/23 15:37	kja
Calcium, dissolved	M200.7 ICP	1	46.4			mg/L	0.1	0.5	06/07/23 3:06	keh1
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 3:06	keh1
Cobalt, dissolved	M200.8 ICP-MS	1	0.000077	B		mg/L	0.00005	0.00025	06/14/23 15:37	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U	*	mg/L	0.01	0.05	06/08/23 16:11	keh1
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	06/07/23 3:06	keh1
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/14/23 15:37	kja
Lithium, dissolved	M200.7 ICP	1	0.170			mg/L	0.008	0.04	06/07/23 3:06	keh1
Magnesium, dissolved	M200.7 ICP	1	29.2			mg/L	0.2	1	06/07/23 3:06	keh1
Manganese, dissolved	M200.7 ICP	1	0.020	B	*	mg/L	0.01	0.05	06/07/23 3:06	keh1
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	06/08/23 11:56	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	06/07/23 3:06	keh1
Potassium, dissolved	M200.7 ICP	1	3.73			mg/L	0.2	1	06/07/23 3:06	keh1
Selenium, dissolved	M200.8 ICP-MS	2	0.0386		*	mg/L	0.0002	0.0005	06/20/23 18:11	kja
Sodium, dissolved	M200.7 ICP	1	563			mg/L	0.2	1	06/07/23 3:06	keh1
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	06/07/23 3:06	keh1
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 3:06	keh1

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

ACZ Sample ID: ***L80818-02***
Date Sampled: *05/31/23 09:41*
Date Received: *06/01/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	898		*	mg/L	2	20	06/13/23 0:00	emk
Carbonate as CaCO3		1	<2	U	*	mg/L	2	20	06/13/23 0:00	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	06/13/23 0:00	emk
Total Alkalinity		1	898		*	mg/L	2	20	06/13/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-1.6			%			06/28/23 0:00	calc
Sum of Anions			31			meq/L			06/28/23 0:00	calc
Sum of Cations			30			meq/L			06/28/23 0:00	calc
Chloride	SM4500Cl-E	5	138		*	mg/L	5	10	06/06/23 15:14	aps
Fluoride	SM4500F-C	1	0.87		*	mg/L	0.15	0.35	06/20/23 17:09	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		236			mg/L	0.2	5	06/28/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	06/28/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	06/02/23 2:16	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	06/02/23 2:16	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	1700		*	mg/L	20	40	06/06/23 12:47	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	25	424		*	mg/L	25	125	06/20/23 11:03	aps
TDS (calculated)	Calculation		1750			mg/L			06/28/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.97						06/28/23 0:00	calc

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

ACZ Sample ID: ***L80818-03***
Date Sampled: *05/31/23 10:41*
Date Received: *06/01/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/07/23 13:19	keh1
Arsenic, dissolved	M200.8 ICP-MS	1	0.00022	B		mg/L	0.0002	0.001	06/14/23 15:39	kja
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 13:19	keh1
Boron, dissolved	M200.7 ICP	1	0.476			mg/L	0.03	0.1	06/07/23 13:19	keh1
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U		mg/L	0.00005	0.00025	06/14/23 15:39	kja
Calcium, dissolved	M200.7 ICP	1	46.4			mg/L	0.1	0.5	06/07/23 13:19	keh1
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 13:19	keh1
Cobalt, dissolved	M200.8 ICP-MS	1	0.000070	B		mg/L	0.00005	0.00025	06/14/23 15:39	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 13:19	keh1
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	06/07/23 13:19	keh1
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/14/23 15:39	kja
Lithium, dissolved	M200.7 ICP	1	0.173			mg/L	0.008	0.04	06/07/23 13:19	keh1
Magnesium, dissolved	M200.7 ICP	1	29.1			mg/L	0.2	1	06/07/23 13:19	keh1
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 13:19	keh1
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	06/08/23 11:57	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	06/07/23 13:19	keh1
Potassium, dissolved	M200.7 ICP	1	3.33			mg/L	0.2	1	06/07/23 13:19	keh1
Selenium, dissolved	M200.8 ICP-MS	2	0.00188			mg/L	0.0002	0.0005	06/21/23 17:36	kja
Sodium, dissolved	M200.7 ICP	1	549			mg/L	0.2	1	06/07/23 13:19	keh1
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	06/07/23 13:19	keh1
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 13:19	keh1

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

ACZ Sample ID: ***L80818-03***
Date Sampled: *05/31/23 10:41*
Date Received: *06/01/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	898		*	mg/L	2	20	06/13/23 0:00	emk
Carbonate as CaCO3		1	3.3	B	*	mg/L	2	20	06/13/23 0:00	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	06/13/23 0:00	emk
Total Alkalinity		1	902		*	mg/L	2	20	06/13/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-3.3			%			06/28/23 0:00	calc
Sum of Anions			31			meq/L			06/28/23 0:00	calc
Sum of Cations			29			meq/L			06/28/23 0:00	calc
Chloride	SM4500Cl-E	5	142		*	mg/L	5	10	06/06/23 15:14	aps
Fluoride	SM4500F-C	1	0.86		*	mg/L	0.15	0.35	06/20/23 17:13	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		236			mg/L	0.2	5	06/28/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	06/28/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	06/02/23 2:22	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	06/02/23 2:22	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	1700		*	mg/L	20	40	06/06/23 12:49	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	25	423		*	mg/L	25	125	06/20/23 11:03	aps
TDS (calculated)	Calculation		1740			mg/L			06/28/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.98						06/28/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-9

ACZ Sample ID: ***L80818-04***
Date Sampled: *05/31/23 10:48*
Date Received: *06/01/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.052	B		mg/L	0.05	0.25	06/07/23 13:23	keh1
Arsenic, dissolved	M200.8 ICP-MS	5	<0.001	U		mg/L	0.001	0.005	06/14/23 15:41	kja
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 13:23	keh1
Boron, dissolved	M200.7 ICP	1	1.39			mg/L	0.03	0.1	06/07/23 13:23	keh1
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U		mg/L	0.00025	0.00125	06/14/23 15:41	kja
Calcium, dissolved	M200.7 ICP	1	415			mg/L	0.1	0.5	06/07/23 13:23	keh1
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 13:23	keh1
Cobalt, dissolved	M200.8 ICP-MS	5	0.00252			mg/L	0.00025	0.00125	06/14/23 15:41	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 13:23	keh1
Iron, dissolved	M200.7 ICP	1	1.39			mg/L	0.06	0.15	06/07/23 13:23	keh1
Lead, dissolved	M200.8 ICP-MS	5	<0.0005	U		mg/L	0.0005	0.0025	06/14/23 15:41	kja
Lithium, dissolved	M200.7 ICP	1	0.407			mg/L	0.008	0.04	06/07/23 13:23	keh1
Magnesium, dissolved	M200.7 ICP	1	161			mg/L	0.2	1	06/07/23 13:23	keh1
Manganese, dissolved	M200.7 ICP	1	0.454			mg/L	0.01	0.05	06/07/23 13:23	keh1
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	06/08/23 11:58	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	06/07/23 13:23	keh1
Potassium, dissolved	M200.7 ICP	1	8.87			mg/L	0.2	1	06/07/23 13:23	keh1
Selenium, dissolved	M200.8 ICP-MS	5	<0.0005	U		mg/L	0.0005	0.00125	06/21/23 17:37	kja
Sodium, dissolved	M200.7 ICP	1	820			mg/L	0.2	1	06/07/23 13:23	keh1
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	06/07/23 13:23	keh1
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 13:23	keh1

GCC Rio Grande
Project ID: 183230
Sample ID: MW-9

ACZ Sample ID: ***L80818-04***
Date Sampled: *05/31/23 10:48*
Date Received: *06/01/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	407		*	mg/L	2	20	06/13/23 0:00	emk
Carbonate as CaCO3		1	<2	U	*	mg/L	2	20	06/13/23 0:00	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	06/13/23 0:00	emk
Total Alkalinity		1	407		*	mg/L	2	20	06/13/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-2.8			%			06/28/23 0:00	calc
Sum of Anions			74			meq/L			06/28/23 0:00	calc
Sum of Cations			70			meq/L			06/28/23 0:00	calc
Chloride	SM4500Cl-E	1	49.4		*	mg/L	1	2	06/06/23 14:19	aps
Fluoride	SM4500F-C	1	0.35		*	mg/L	0.15	0.35	06/20/23 17:17	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		1700			mg/L	0.2	5	06/28/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	06/28/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	06/02/23 2:23	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	06/02/23 2:23	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	4740	H	*	mg/L	40	80	06/19/23 12:22	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	120	3050		*	mg/L	120	600	06/20/23 11:03	aps
TDS (calculated)	Calculation		4750			mg/L			06/28/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.00						06/28/23 0:00	calc

GCC Rio Grande
Project ID: 183230
Sample ID: MW-10

ACZ Sample ID: ***L80818-05***
Date Sampled: *05/31/23 11:24*
Date Received: *06/01/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/07/23 13:26	keh1
Arsenic, dissolved	M200.8 ICP-MS	2	0.00138	B		mg/L	0.0004	0.002	06/14/23 15:43	kja
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 13:26	keh1
Boron, dissolved	M200.7 ICP	1	1.35			mg/L	0.03	0.1	06/07/23 13:26	keh1
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U		mg/L	0.0001	0.0005	06/14/23 15:43	kja
Calcium, dissolved	M200.7 ICP	1	37.5			mg/L	0.1	0.5	06/07/23 13:26	keh1
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 13:26	keh1
Cobalt, dissolved	M200.8 ICP-MS	2	<0.0001	U		mg/L	0.0001	0.0005	06/14/23 15:43	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 13:26	keh1
Iron, dissolved	M200.7 ICP	1	0.406			mg/L	0.06	0.15	06/07/23 13:26	keh1
Lead, dissolved	M200.8 ICP-MS	2	<0.0002	U		mg/L	0.0002	0.001	06/14/23 15:43	kja
Lithium, dissolved	M200.7 ICP	1	0.299			mg/L	0.008	0.04	06/07/23 13:26	keh1
Magnesium, dissolved	M200.7 ICP	1	11.8			mg/L	0.2	1	06/07/23 13:26	keh1
Manganese, dissolved	M200.7 ICP	1	0.021	B		mg/L	0.01	0.05	06/07/23 13:26	keh1
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	06/08/23 11:59	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	06/07/23 13:26	keh1
Potassium, dissolved	M200.7 ICP	1	5.57			mg/L	0.2	1	06/07/23 13:26	keh1
Selenium, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.0005	06/21/23 17:39	kja
Sodium, dissolved	M200.7 ICP	2	1230			mg/L	0.4	2	06/09/23 10:27	keh1
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	06/07/23 13:26	keh1
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 13:26	keh1

GCC Rio Grande
Project ID: 183230
Sample ID: MW-10

ACZ Sample ID: ***L80818-05***
Date Sampled: *05/31/23 11:24*
Date Received: *06/01/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	713		*	mg/L	2	20	06/13/23 0:00	emk
Carbonate as CaCO3		1	15.4	B	*	mg/L	2	20	06/13/23 0:00	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	06/13/23 0:00	emk
Total Alkalinity		1	729		*	mg/L	2	20	06/13/23 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-2.6			%			06/28/23 0:00	calc
Sum of Anions			60			meq/L			06/28/23 0:00	calc
Sum of Cations			57			meq/L			06/28/23 0:00	calc
Chloride	SM4500Cl-E	5	399		*	mg/L	5	10	06/06/23 15:15	aps
Fluoride	SM4500F-C	1	1.18		*	mg/L	0.15	0.35	06/16/23 13:22	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		142			mg/L	0.2	5	06/28/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	06/28/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	06/02/23 2:24	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	06/02/23 2:24	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	3740		*	mg/L	40	80	06/06/23 12:57	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	50	1640		*	mg/L	50	250	06/20/23 10:49	aps
TDS (calculated)	Calculation		3770			mg/L			06/28/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.99						06/28/23 0:00	calc

Report Header Explanations

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

QC Sample Types

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

QC Sample Type Explanations

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

ACZ Qualifiers (Qual)

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

Method References

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

Comments

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

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

REP001.03.15.02

GCC

ACZ Project ID: ***L80818***

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

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG568055													
WG568055PBW1	PBW	06/13/23 17:29				3.8	mg/L		-20	20			
WG568055LCSW3	LCSW	06/13/23 17:49	WC230612-1	820.0001		852.9	mg/L	104	90	110			
WG568055PQV2	PQV	06/13/23 18:00	WC220630-7	20		24.1	mg/L	121	50	150			
L80818-05DUP	DUP	06/13/23 22:00			729	730.3	mg/L				0	20	
WG568055LCSW6	LCSW	06/13/23 22:20	WC230612-1	820.0001		845.6	mg/L	103	90	110			
WG568055PBW2	PBW	06/13/23 22:30				3.8	mg/L		-20	20			
WG568055LCSW9	LCSW	06/14/23 1:53	WC230612-1	820.0001		855.9	mg/L	104	90	110			
WG568055PBW3	PBW	06/14/23 2:03				3.9	mg/L		-20	20			
WG568055LCSW12	LCSW	06/14/23 6:31	WC230612-1	820.0001		849.7	mg/L	104	90	110			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	2		1.948	mg/L	97	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.15	0.15			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	.2525		.278	mg/L	110	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	202.2525		201.6	mg/L	100	1	200			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	1.01		1.075	mg/L	106	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	1.01	U	1.102	mg/L	109	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	1.01	U	1.132	mg/L	112	85	115	3	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	1		.997	mg/L	100	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.15	0.15			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	1		.997	mg/L	100	90	110			
WG567519CCB2	CCB	06/07/23 14:24				U	mg/L		-0.15	0.15			
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	1		1.007	mg/L	101	90	110			
WG567519CCB3	CCB	06/07/23 14:47				U	mg/L		-0.15	0.15			
WG567622													
WG567622ICV	ICV	06/08/23 14:32	II230516-3	2		1.935	mg/L	97	95	105			
WG567622ICB	ICB	06/08/23 14:38				U	mg/L		-0.15	0.15			
WG567622PQV	PQV	06/08/23 14:41	II230516-2	.2525		.24	mg/L	95	70	130			
WG567622SIC	SIC	06/08/23 14:44	II230601-2	202.2525		199	mg/L	98	1	200			
WG567622LFB	LFB	06/08/23 14:51	II230530-2	1.01		1.015	mg/L	100	85	115			
WG567622CCV1	CCV	06/08/23 15:23	II230525-1	1		.924	mg/L	92	90	110			
WG567622CCB1	CCB	06/08/23 15:26				U	mg/L		-0.15	0.15			
L80802-15AS	AS	06/08/23 15:39	II230530-2	1.01	U	1.01	mg/L	100	85	115			
L80802-15ASD	ASD	06/08/23 15:42	II230530-2	1.01	U	.989	mg/L	98	85	115	2	20	
WG567622CCV2	CCV	06/08/23 16:01	II230525-1	1		.946	mg/L	95	90	110			
WG567622CCB2	CCB	06/08/23 16:04				U	mg/L		-0.15	0.15			
WG567622CCV3	CCV	06/08/23 16:20	II230525-1	1		.947	mg/L	95	90	110			
WG567622CCB3	CCB	06/08/23 16:23				U	mg/L		-0.15	0.15			

GCC

ACZ Project ID: ***L80818***

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

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG568134													
WG568134ICV	ICV	06/14/23 15:26	MS230410-7	.05		.05248	mg/L	105	90	110			
WG568134ICB	ICB	06/14/23 15:28				U	mg/L		-0.00044	0.00044			
WG568134LFB	LFB	06/14/23 15:30	MS230605-2	.0501		.05065	mg/L	101	85	115			
WG568134CCV1	CCV	06/14/23 15:44	MS230606-3	.1002		.10806	mg/L	108	90	110			
WG568134CCB1	CCB	06/14/23 15:46				U	mg/L		-0.0006	0.0006			
L80820-01AS	AS	06/14/23 15:50	MS230605-2	.0501	.00034	.06179	mg/L	123	70	130			
L80820-01ASD	ASD	06/14/23 15:52	MS230605-2	.0501	.00034	.0616	mg/L	122	70	130	0	20	
WG568134CCV2	CCV	06/14/23 16:06	MS230606-3	.1002		.10668	mg/L	106	90	110			
WG568134CCB2	CCB	06/14/23 16:08				U	mg/L		-0.0006	0.0006			
WG568134CCV3	CCV	06/14/23 16:23	MS230606-3	.1002		.10723	mg/L	107	90	110			
WG568134CCB3	CCB	06/14/23 16:25				U	mg/L		-0.0006	0.0006			

Beryllium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567513													
WG567513ICV	ICV	06/07/23 1:17	II230516-3	2		1.985	mg/L	99	95	105			
WG567513ICB	ICB	06/07/23 1:23				U	mg/L		-0.03	0.03			
WG567513PQV	PQV	06/07/23 1:26	II230516-2	.05005		.053	mg/L	106	70	130			
WG567513SIC	SIC	06/07/23 1:30	II230601-2	.1001		.103	mg/L	103	80	120			
WG567513LFB	LFB	06/07/23 1:36	II230530-2	.5005		.507	mg/L	101	85	115			
WG567513CCV1	CCV	06/07/23 2:08	II230525-1	1		.978	mg/L	98	90	110			
WG567513CCB1	CCB	06/07/23 2:11				U	mg/L		-0.03	0.03			
L80802-15AS	AS	06/07/23 2:27	II230530-2	.5005	U	.511	mg/L	102	85	115			
L80802-15ASD	ASD	06/07/23 2:30	II230530-2	.5005	U	.509	mg/L	102	85	115	0	20	
WG567513CCV2	CCV	06/07/23 2:47	II230525-1	1		.985	mg/L	99	90	110			
WG567513CCB2	CCB	06/07/23 2:50				U	mg/L		-0.03	0.03			
WG567513CCV3	CCV	06/07/23 3:09	II230525-1	1		.96	mg/L	96	90	110			
WG567513CCB3	CCB	06/07/23 3:12				U	mg/L		-0.03	0.03			
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	2		1.961	mg/L	98	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.03	0.03			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	.05005		.056	mg/L	112	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	.1001		.105	mg/L	105	80	120			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	.5005		.517	mg/L	103	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	.5005	U	.521	mg/L	104	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	.5005	U	.513	mg/L	102	85	115	2	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	1		.989	mg/L	99	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.03	0.03			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	1		1.001	mg/L	100	90	110			
WG567519CCB2	CCB	06/07/23 14:24				U	mg/L		-0.03	0.03			
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	1		.986	mg/L	99	90	110			
WG567519CCB3	CCB	06/07/23 14:47				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L80818***

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

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567513													
WG567513ICV	ICV	06/07/23 1:17	II230516-3	2		2.035	mg/L	102	95	105			
WG567513ICB	ICB	06/07/23 1:23				U	mg/L		-0.09	0.09			
WG567513PQV	PQV	06/07/23 1:26	II230516-2	.1001		.105	mg/L	105	70	130			
WG567513SIC	SIC	06/07/23 1:30	II230601-2	.1001		.104	mg/L	104	80	120			
WG567513LFB	LFB	06/07/23 1:36	II230530-2	.5005		.509	mg/L	102	85	115			
WG567513CCV1	CCV	06/07/23 2:08	II230525-1	1		1.022	mg/L	102	90	110			
WG567513CCB1	CCB	06/07/23 2:11				U	mg/L		-0.09	0.09			
L80802-15AS	AS	06/07/23 2:27	II230530-2	.5005	U	.549	mg/L	110	85	115			
L80802-15ASD	ASD	06/07/23 2:30	II230530-2	.5005	U	.541	mg/L	108	85	115	1	20	
WG567513CCV2	CCV	06/07/23 2:47	II230525-1	1		1.012	mg/L	101	90	110			
WG567513CCB2	CCB	06/07/23 2:50				U	mg/L		-0.09	0.09			
WG567513CCV3	CCV	06/07/23 3:09	II230525-1	1		1.011	mg/L	101	90	110			
WG567513CCB3	CCB	06/07/23 3:12				U	mg/L		-0.09	0.09			
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	2		2.03	mg/L	102	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.09	0.09			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	.1001		.107	mg/L	107	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	.1001		.098	mg/L	98	80	120			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	.5005		.506	mg/L	101	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	.5005	U	.542	mg/L	108	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	.5005	U	.532	mg/L	106	85	115	2	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	1		1.022	mg/L	102	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.09	0.09			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	1		1.016	mg/L	102	90	110			
WG567519CCB2	CCB	06/07/23 14:24				U	mg/L		-0.09	0.09			
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	1		1.024	mg/L	102	90	110			
WG567519CCB3	CCB	06/07/23 14:47				U	mg/L		-0.09	0.09			

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG568134													
WG568134ICV	ICV	06/14/23 15:26	MS230410-7	.05		.051863	mg/L	104	90	110			
WG568134ICB	ICB	06/14/23 15:28				U	mg/L		-0.00011	0.00011			
WG568134LFB	LFB	06/14/23 15:30	MS230605-2	.05005		.05256	mg/L	105	85	115			
WG568134CCV1	CCV	06/14/23 15:44	MS230606-3	.1001		.100178	mg/L	100	90	110			
WG568134CCB1	CCB	06/14/23 15:46				U	mg/L		-0.00015	0.00015			
L80820-01AS	AS	06/14/23 15:50	MS230605-2	.05005	.00578	.057012	mg/L	102	70	130			
L80820-01ASD	ASD	06/14/23 15:52	MS230605-2	.05005	.00578	.056403	mg/L	101	70	130	1	20	
WG568134CCV2	CCV	06/14/23 16:06	MS230606-3	.1001		.099793	mg/L	100	90	110			
WG568134CCB2	CCB	06/14/23 16:08				U	mg/L		-0.00015	0.00015			
WG568134CCV3	CCV	06/14/23 16:23	MS230606-3	.1001		.09992	mg/L	100	90	110			
WG568134CCB3	CCB	06/14/23 16:25				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: ***L80818***

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

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567513													
WG567513ICV	ICV	06/07/23 1:17	II230516-3	100		98.69	mg/L	99	95	105			
WG567513ICB	ICB	06/07/23 1:23				U	mg/L		-0.3	0.3			
WG567513PQV	PQV	06/07/23 1:26	II230516-2	.4999		.56	mg/L	112	70	130			
WG567513SIC	SIC	06/07/23 1:30	II230601-2	200.4599		197.9	mg/L	99	1	200			
WG567513LFB	LFB	06/07/23 1:36	II230530-2	67.98753		68.47	mg/L	101	85	115			
WG567513CCV1	CCV	06/07/23 2:08	II230525-1	50		48.27	mg/L	97	90	110			
WG567513CCB1	CCB	06/07/23 2:11				U	mg/L		-0.3	0.3			
L80802-15AS	AS	06/07/23 2:27	II230530-2	67.98753	63.3	130.2	mg/L	98	85	115			
L80802-15ASD	ASD	06/07/23 2:30	II230530-2	67.98753	63.3	128.7	mg/L	96	85	115	1	20	
WG567513CCV2	CCV	06/07/23 2:47	II230525-1	50		49.01	mg/L	98	90	110			
WG567513CCB2	CCB	06/07/23 2:50				U	mg/L		-0.3	0.3			
WG567513CCV3	CCV	06/07/23 3:09	II230525-1	50		48.22	mg/L	96	90	110			
WG567513CCB3	CCB	06/07/23 3:12				U	mg/L		-0.3	0.3			
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	100		99.05	mg/L	99	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.3	0.3			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	.4999		.5	mg/L	100	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	200.4599		199.3	mg/L	99	1	200			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	67.98753		70.02	mg/L	103	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	67.98753	140	202.8	mg/L	92	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	67.98753	140	204.6	mg/L	95	85	115	1	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	50		49.5	mg/L	99	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.3	0.3			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	50		49.29	mg/L	99	90	110			
WG567519CCB2	CCB	06/07/23 14:24				U	mg/L		-0.3	0.3			
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	50		49.3	mg/L	99	90	110			
WG567519CCB3	CCB	06/07/23 14:47				U	mg/L		-0.3	0.3			

GCC

ACZ Project ID: ***L80818***

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

Chloride SM4500Cl-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567509													
WG567509ICV	ICV	06/06/23 14:05	WI230501-8	55		53.34	mg/L	97	90	110			
WG567509ICB	ICB	06/06/23 14:05				U	mg/L						
WG567509LFB1	LFB	06/06/23 14:06	WI230202-6	30		29.19	mg/L	97	90	110			
WG567509CCV1	CCV	06/06/23 14:11	WI221021-5	49.95		48.44	mg/L	97	90	110			
WG567509CCB1	CCB	06/06/23 14:11				U	mg/L						
L80813-02DUP	DUP	06/06/23 14:15			9.77	10.37	mg/L				6	20	RA
WG567509CCV2	CCV	06/06/23 14:17	WI221021-5	49.95		52.27	mg/L	105	90	110			
WG567509CCB2	CCB	06/06/23 14:18				U	mg/L						
WG567509LFB2	LFB	06/06/23 14:21	WI230202-6	30		28.7	mg/L	96	90	110			
WG567509CCV3	CCV	06/06/23 14:23	WI221021-5	49.95		49.44	mg/L	99	90	110			
WG567509CCB3	CCB	06/06/23 14:24				U	mg/L						
WG567509CCV4	CCV	06/06/23 14:28	WI221021-5	49.95		51.51	mg/L	103	90	110			
WG567509CCB4	CCB	06/06/23 14:28				U	mg/L						
WG567509CCV9	CCV	06/06/23 15:10	WI221021-5	49.95		50.76	mg/L	102	90	110			
WG567509CCB9	CCB	06/06/23 15:11				U	mg/L						
L80813-01AS	AS	06/06/23 15:12	25XCL	30	940	951.15	mg/L	37	90	110			M3
WG567509CCV10	CCV	06/06/23 15:15	WI221021-5	49.95		50.63	mg/L	101	90	110			
WG567509CCB10	CCB	06/06/23 15:16				U	mg/L						

GCC

ACZ Project ID: ***L80818***

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

Chromium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567513													
WG567513ICV	ICV	06/07/23 1:17	II230516-3	2		1.973	mg/L	99	95	105			
WG567513ICB	ICB	06/07/23 1:23				U	mg/L		-0.06	0.06			
WG567513PQV	PQV	06/07/23 1:26	II230516-2	.05005		.059	mg/L	118	70	130			
WG567513SIC	SIC	06/07/23 1:30	II230601-2	.1001		.102	mg/L	102	80	120			
WG567513LFB	LFB	06/07/23 1:36	II230530-2	.5005		.506	mg/L	101	85	115			
WG567513CCV1	CCV	06/07/23 2:08	II230525-1	1		.996	mg/L	100	90	110			
WG567513CCB1	CCB	06/07/23 2:11				U	mg/L		-0.06	0.06			
L80802-15AS	AS	06/07/23 2:27	II230530-2	.5005	U	.512	mg/L	102	85	115			
L80802-15ASD	ASD	06/07/23 2:30	II230530-2	.5005	U	.506	mg/L	101	85	115	1	20	
WG567513CCV2	CCV	06/07/23 2:47	II230525-1	1		.993	mg/L	99	90	110			
WG567513CCB2	CCB	06/07/23 2:50				U	mg/L		-0.06	0.06			
WG567513CCV3	CCV	06/07/23 3:09	II230525-1	1		.97	mg/L	97	90	110			
WG567513CCB3	CCB	06/07/23 3:12				U	mg/L		-0.06	0.06			
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	2		1.967	mg/L	98	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.06	0.06			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	.05005		.047	mg/L	94	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	.1001		.094	mg/L	94	80	120			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	.5005		.504	mg/L	101	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	.5005	U	.507	mg/L	101	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	.5005	U	.499	mg/L	100	85	115	2	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	1		.993	mg/L	99	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.06	0.06			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	1		.995	mg/L	100	90	110			
WG567519CCB2	CCB	06/07/23 14:24				U	mg/L		-0.06	0.06			
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	1		.993	mg/L	99	90	110			
WG567519CCB3	CCB	06/07/23 14:47				U	mg/L		-0.06	0.06			

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG568134													
WG568134ICV	ICV	06/14/23 15:26	MS230410-7	.05		.050014	mg/L	100	90	110			
WG568134ICB	ICB	06/14/23 15:28				U	mg/L		-0.00011	0.00011			
WG568134LFB	LFB	06/14/23 15:30	MS230605-2	.05005		.051792	mg/L	103	85	115			
WG568134CCV1	CCV	06/14/23 15:44	MS230606-3	.1001		.098705	mg/L	99	90	110			
WG568134CCB1	CCB	06/14/23 15:46				U	mg/L		-0.00015	0.00015			
L80820-01AS	AS	06/14/23 15:50	MS230605-2	.05005	.000229	.049021	mg/L	97	70	130			
L80820-01ASD	ASD	06/14/23 15:52	MS230605-2	.05005	.000229	.048602	mg/L	97	70	130	1	20	
WG568134CCV2	CCV	06/14/23 16:06	MS230606-3	.1001		.100258	mg/L	100	90	110			
WG568134CCB2	CCB	06/14/23 16:08				U	mg/L		-0.00015	0.00015			
WG568134CCV3	CCV	06/14/23 16:23	MS230606-3	.1001		.099354	mg/L	99	90	110			
WG568134CCB3	CCB	06/14/23 16:25				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: ***L80818***

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

Copper, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	2		1.93	mg/L	97	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.03	0.03			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	.05005		.054	mg/L	108	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	.1001		.111	mg/L	111	80	120			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	.5005		.5	mg/L	100	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	.5005	.012	.503	mg/L	98	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	.5005	.012	.5	mg/L	98	85	115	1	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	1		.978	mg/L	98	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.03	0.03			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	1		.965	mg/L	97	90	110			
WG567519CCB2	CCB	06/07/23 14:24				U	mg/L		-0.03	0.03			
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	1		.97	mg/L	97	90	110			
WG567519CCB3	CCB	06/07/23 14:47				U	mg/L		-0.03	0.03			
WG567622													
WG567622ICV	ICV	06/08/23 14:32	II230516-3	2		1.935	mg/L	97	95	105			
WG567622ICB	ICB	06/08/23 14:38				U	mg/L		-0.03	0.03			
WG567622PQV	PQV	06/08/23 14:41	II230516-2	.05005		.054	mg/L	108	70	130			
WG567622SIC	SIC	06/08/23 14:44	II230601-2	.1001		.1	mg/L	100	80	120			
WG567622LFB	LFB	06/08/23 14:51	II230530-2	.5005		.484	mg/L	97	85	115			
WG567622CCV1	CCV	06/08/23 15:23	II230525-1	1		.969	mg/L	97	90	110			
WG567622CCB1	CCB	06/08/23 15:26				U	mg/L		-0.03	0.03			
L80802-15AS	AS	06/08/23 15:39	II230530-2	.5005	U	.406	mg/L	81	85	115			M2
L80802-15ASD	ASD	06/08/23 15:42	II230530-2	.5005	U	.406	mg/L	81	85	115	0	20	M2
WG567622CCV2	CCV	06/08/23 16:01	II230525-1	1		.957	mg/L	96	90	110			
WG567622CCB2	CCB	06/08/23 16:04				U	mg/L		-0.03	0.03			
WG567622CCV3	CCV	06/08/23 16:20	II230525-1	1		.966	mg/L	97	90	110			
WG567622CCB3	CCB	06/08/23 16:23				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L80818***

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

Fluoride SM4500F-C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG568335													
WG568335ICV	ICV	06/16/23 10:01	WC230614-1	2.002		1.9	mg/L	95	90	110			
WG568335ICB	ICB	06/16/23 10:07				U	mg/L		-0.3	0.3			
WG568335PQV	PQV	06/16/23 10:13	WC230522-7	.3514		.28	mg/L	80	70	130			
WG568335LFB1	LFB	06/16/23 10:18	WC221227-7	5.02		5.07	mg/L	101	90	110			
WG568335CCB1	CCB	06/16/23 11:35				U	mg/L		-0.3	0.3			
WG568335CCV2	CCV	06/16/23 12:36	WC230614-1	2.002		2.094	mg/L	105	90	110			
WG568335CCB2	CCB	06/16/23 12:43				U	mg/L		-0.3	0.3			
WG568335LFB2	LFB	06/16/23 13:17	WC221227-7	5.02		4.91	mg/L	98	90	110			
L80818-05AS	AS	06/16/23 13:27	WC221227-7	5.02	1.18	6.12	mg/L	98	90	110			
L80818-05ASD	ASD	06/16/23 13:32	WC221227-7	5.02	1.18	5.89	mg/L	94	90	110	4	20	
WG568335CCV3	CCV	06/16/23 13:44	WC230614-1	2.002		2.075	mg/L	104	90	110			
WG568335CCB3	CCB	06/16/23 13:50				U	mg/L		-0.3	0.3			
WG568335CCV4	CCV	06/16/23 14:53	WC230614-1	2.002		2.113	mg/L	106	90	110			
WG568335CCB4	CCB	06/16/23 14:59				U	mg/L		-0.3	0.3			
WG568335CCV5	CCV	06/16/23 15:59	WC230614-1	2.002		2.016	mg/L	101	90	110			
WG568335CCB5	CCB	06/16/23 16:06				U	mg/L		-0.3	0.3			
WG568443													
WG568443ICV	ICV	06/20/23 10:40	WC230614-1	2.002		2.01	mg/L	100	90	110			
WG568443ICB	ICB	06/20/23 10:47				U	mg/L		-0.3	0.3			
WG568572													
WG568572ICV	ICV	06/20/23 16:06	WC230614-1	2.002		2.09	mg/L	104	90	110			
WG568572ICB	ICB	06/20/23 16:14				U	mg/L		-0.3	0.3			
WG568572PQV	PQV	06/20/23 16:17	WC230522-7	.3514		.28	mg/L	80	70	130			
WG568572LFB1	LFB	06/20/23 16:21	WC221227-7	5.02		5.12	mg/L	102	90	110			
L80802-07AS	AS	06/20/23 16:27	WC221227-7	5.02	.21	5.41	mg/L	104	90	110			
L80802-07ASD	ASD	06/20/23 16:31	WC221227-7	5.02	.21	5.41	mg/L	104	90	110	0	20	
WG568572CCV1	CCV	06/20/23 16:54	WC230614-1	2.002		2.081	mg/L	104	90	110			
WG568572CCB1	CCB	06/20/23 17:02				U	mg/L		-0.3	0.3			
L80818-04AS	AS	06/20/23 17:20	WC221227-7	5.02	.35	5.33	mg/L	99	90	110			
L80818-04ASD	ASD	06/20/23 17:24	WC221227-7	5.02	.35	5.31	mg/L	99	90	110	0	20	
WG568572CCV2	CCV	06/20/23 17:45	WC230614-1	2.002		2.131	mg/L	106	90	110			
WG568572CCB2	CCB	06/20/23 17:52				U	mg/L		-0.3	0.3			
WG568572LFB2	LFB	06/20/23 18:17	WC221227-7	5.02		5.09	mg/L	101	90	110			
WG568572CCV3	CCV	06/20/23 18:35	WC230614-1	2.002		2.081	mg/L	104	90	110			
WG568572CCB3	CCB	06/20/23 18:40				U	mg/L		-0.3	0.3			
WG568572CCV4	CCV	06/20/23 19:23	WC230614-1	2.002		2.131	mg/L	106	90	110			
WG568572CCB4	CCB	06/20/23 19:31				U	mg/L		-0.3	0.3			
WG568572CCV5	CCV	06/20/23 20:13	WC230614-1	2.002		2.071	mg/L	103	90	110			
WG568572CCB5	CCB	06/20/23 20:21				U	mg/L		-0.3	0.3			

GCC

ACZ Project ID: ***L80818***

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

Iron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567513													
WG567513ICV	ICV	06/07/23 1:17	II230516-3	2		1.927	mg/L	96	95	105			
WG567513ICB	ICB	06/07/23 1:23				U	mg/L		-0.18	0.18			
WG567513PQV	PQV	06/07/23 1:26	II230516-2	.1506		.159	mg/L	106	70	130			
WG567513SIC	SIC	06/07/23 1:30	II230601-2	200.9506		191.6	mg/L	95	1	200			
WG567513LFB	LFB	06/07/23 1:36	II230530-2	1.004		1.014	mg/L	101	85	115			
WG567513CCV1	CCV	06/07/23 2:08	II230525-1	1		.951	mg/L	95	90	110			
WG567513CCB1	CCB	06/07/23 2:11				U	mg/L		-0.18	0.18			
L80802-15AS	AS	06/07/23 2:27	II230530-2	1.004	U	.999	mg/L	100	85	115			
L80802-15ASD	ASD	06/07/23 2:30	II230530-2	1.004	U	.996	mg/L	99	85	115	0	20	
WG567513CCV2	CCV	06/07/23 2:47	II230525-1	1		.989	mg/L	99	90	110			
WG567513CCB2	CCB	06/07/23 2:50				U	mg/L		-0.18	0.18			
WG567513CCV3	CCV	06/07/23 3:09	II230525-1	1		.95	mg/L	95	90	110			
WG567513CCB3	CCB	06/07/23 3:12				U	mg/L		-0.18	0.18			
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	2		1.914	mg/L	96	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.18	0.18			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	.1506		.172	mg/L	114	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	200.9506		189.3	mg/L	94	1	200			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	1.004		1.013	mg/L	101	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	1.004	U	1.013	mg/L	101	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	1.004	U	1.002	mg/L	100	85	115	1	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	1		.959	mg/L	96	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.18	0.18			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	1		.969	mg/L	97	90	110			
WG567519CCB2	CCB	06/07/23 14:24				U	mg/L		-0.18	0.18			
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	1		.965	mg/L	97	90	110			
WG567519CCB3	CCB	06/07/23 14:47				U	mg/L		-0.18	0.18			

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG568134													
WG568134ICV	ICV	06/14/23 15:26	MS230410-7	.05		.0526	mg/L	105	90	110			
WG568134ICB	ICB	06/14/23 15:28				U	mg/L		-0.00022	0.00022			
WG568134LFB	LFB	06/14/23 15:30	MS230605-2	.05005		.05416	mg/L	108	85	115			
WG568134CCV1	CCV	06/14/23 15:44	MS230606-3	.25025		.24267	mg/L	97	90	110			
WG568134CCB1	CCB	06/14/23 15:46				.00011	mg/L		-0.0003	0.0003			
L80820-01AS	AS	06/14/23 15:50	MS230605-2	.05005	.00013	.05428	mg/L	108	70	130			
L80820-01ASD	ASD	06/14/23 15:52	MS230605-2	.05005	.00013	.05416	mg/L	108	70	130	0	20	
WG568134CCV2	CCV	06/14/23 16:06	MS230606-3	.25025		.25103	mg/L	100	90	110			
WG568134CCB2	CCB	06/14/23 16:08				U	mg/L		-0.0003	0.0003			
WG568134CCV3	CCV	06/14/23 16:23	MS230606-3	.25025		.25395	mg/L	101	90	110			
WG568134CCB3	CCB	06/14/23 16:25				.00011	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: ***L80818***

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

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567513													
WG567513ICV	ICV	06/07/23 1:17	II230516-3	2		1.9508	mg/L	98	95	105			
WG567513ICB	ICB	06/07/23 1:23				U	mg/L		-0.024	0.024			
WG567513PQV	PQV	06/07/23 1:26	II230516-2	.04012		.0427	mg/L	106	70	130			
WG567513SIC	SIC	06/07/23 1:30	II230601-2	.1003		.1042	mg/L	104	80	120			
WG567513LFB	LFB	06/07/23 1:36	II230530-2	1.003		.9701	mg/L	97	85	115			
WG567513CCV1	CCV	06/07/23 2:08	II230525-1	1		.961	mg/L	96	90	110			
WG567513CCB1	CCB	06/07/23 2:11				U	mg/L		-0.024	0.024			
L80802-15AS	AS	06/07/23 2:27	II230530-2	1.003	1	1.925	mg/L	92	85	115			
L80802-15ASD	ASD	06/07/23 2:30	II230530-2	1.003	1	1.916	mg/L	91	85	115	0	20	
WG567513CCV2	CCV	06/07/23 2:47	II230525-1	1		.955	mg/L	96	90	110			
WG567513CCB2	CCB	06/07/23 2:50				U	mg/L		-0.024	0.024			
WG567513CCV3	CCV	06/07/23 3:09	II230525-1	1		.932	mg/L	93	90	110			
WG567513CCB3	CCB	06/07/23 3:12				U	mg/L		-0.024	0.024			
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	2		1.9155	mg/L	96	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.024	0.024			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	.04012		.0461	mg/L	115	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	.1003		.1103	mg/L	110	80	120			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	1.003		.988	mg/L	99	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	1.003	.0138	1.018	mg/L	100	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	1.003	.0138	1.016	mg/L	100	85	115	0	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	1		.9671	mg/L	97	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.024	0.024			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	1		.9829	mg/L	98	90	110			
WG567519CCB2	CCB	06/07/23 14:24				U	mg/L		-0.024	0.024			
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	1		.9608	mg/L	96	90	110			
WG567519CCB3	CCB	06/07/23 14:47				U	mg/L		-0.024	0.024			

GCC

ACZ Project ID: ***L80818***

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

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567513													
WG567513ICV	ICV	06/07/23 1:17	II230516-3	100		98.42	mg/L	98	95	105			
WG567513ICB	ICB	06/07/23 1:23				U	mg/L		-0.6	0.6			
WG567513PQV	PQV	06/07/23 1:26	II230516-2	1.0023		1.03	mg/L	103	70	130			
WG567513SIC	SIC	06/07/23 1:30	II230601-2	201.4623		201.5	mg/L	100	1	200			
WG567513LFB	LFB	06/07/23 1:36	II230530-2	49.99752		50.13	mg/L	100	85	115			
WG567513CCV1	CCV	06/07/23 2:08	II230525-1	50		48.1	mg/L	96	90	110			
WG567513CCB1	CCB	06/07/23 2:11				U	mg/L		-0.6	0.6			
L80802-15AS	AS	06/07/23 2:27	II230530-2	49.99752	15.6	65.7	mg/L	100	85	115			
L80802-15ASD	ASD	06/07/23 2:30	II230530-2	49.99752	15.6	64.74	mg/L	98	85	115	1	20	
WG567513CCV2	CCV	06/07/23 2:47	II230525-1	50		50.65	mg/L	101	90	110			
WG567513CCB2	CCB	06/07/23 2:50				.58	mg/L		-0.6	0.6			
WG567513CCV3	CCV	06/07/23 3:09	II230525-1	50		48.24	mg/L	96	90	110			
WG567513CCB3	CCB	06/07/23 3:12				U	mg/L		-0.6	0.6			
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	100		99.64	mg/L	100	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.6	0.6			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	1.0023		.97	mg/L	97	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	201.4623		203.3	mg/L	101	1	200			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	49.99752		51.55	mg/L	103	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	49.99752	2.31	53.32	mg/L	102	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	49.99752	2.31	54.17	mg/L	104	85	115	2	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	50		49.39	mg/L	99	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.6	0.6			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	50		49.23	mg/L	98	90	110			
WG567519CCB2	CCB	06/07/23 14:24				U	mg/L		-0.6	0.6			
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	50		49.41	mg/L	99	90	110			
WG567519CCB3	CCB	06/07/23 14:47				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L80818***

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

Manganese, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567513													
WG567513ICV	ICV	06/07/23 1:17	II230516-3	2		1.953	mg/L	98	95	105			
WG567513ICB	ICB	06/07/23 1:23				U	mg/L		-0.03	0.03			
WG567513PQV	PQV	06/07/23 1:26	II230516-2	.0498		.05	mg/L	100	70	130			
WG567513SIC	SIC	06/07/23 1:30	II230601-2	49.9998		49.24	mg/L	98	1	200			
WG567513LFB	LFB	06/07/23 1:36	II230530-2	.4995		.507	mg/L	102	85	115			
WG567513CCV1	CCV	06/07/23 2:08	II230525-1	1		.97	mg/L	97	90	110			
WG567513CCB1	CCB	06/07/23 2:11				U	mg/L		-0.03	0.03			
L80802-15AS	AS	06/07/23 2:27	II230530-2	.4995	3.34	3.672	mg/L	66	85	115			M3
L80802-15ASD	ASD	06/07/23 2:30	II230530-2	.4995	3.34	3.672	mg/L	66	85	115	0	20	M3
WG567513CCV2	CCV	06/07/23 2:47	II230525-1	1		1.063	mg/L	106	90	110			
WG567513CCB2	CCB	06/07/23 2:50				.028	mg/L		-0.03	0.03			
WG567513CCV3	CCV	06/07/23 3:09	II230525-1	1		.965	mg/L	97	90	110			
WG567513CCB3	CCB	06/07/23 3:12				U	mg/L		-0.03	0.03			
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	2		1.922	mg/L	96	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.03	0.03			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	.0498		.052	mg/L	104	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	49.9998		49.06	mg/L	98	1	200			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	.4995		.512	mg/L	103	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	.4995	U	.519	mg/L	104	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	.4995	U	.508	mg/L	102	85	115	2	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	1		.974	mg/L	97	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.03	0.03			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	1		.995	mg/L	100	90	110			
WG567519CCB2	CCB	06/07/23 14:24				U	mg/L		-0.03	0.03			
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	1		.968	mg/L	97	90	110			
WG567519CCB3	CCB	06/07/23 14:47				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L80818***

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

Mercury, dissolved M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567662													
WG567662ICV	ICV	06/08/23 11:05	HG230530-3	.005		.00524	mg/L	105	95	105			
WG567662ICB	ICB	06/08/23 11:06				U	mg/L		-0.0002	0.0002			
WG567663													
WG567663CCV1	CCV	06/08/23 11:38	HG230530-3	.005		.00508	mg/L	102	90	110			
WG567663CCB1	CCB	06/08/23 11:39				U	mg/L		-0.0002	0.0002			
WG567663PQV	PQV	06/08/23 11:40	HG230530-5	.001001		.00092	mg/L	92	70	130			
WG567663LRB	LRB	06/08/23 11:41				U	mg/L		-0.00044	0.00044			
WG567663LFB	LFB	06/08/23 11:42	HG230530-6	.002002		.00196	mg/L	98	85	115			
L80687-01LFM	LFM	06/08/23 11:49	HG230530-6	.002002	U	.00197	mg/L	98	85	115			
WG567663CCV2	CCV	06/08/23 11:50	HG230530-3	.005		.00517	mg/L	103	90	110			
WG567663CCB2	CCB	06/08/23 11:51				U	mg/L		-0.0002	0.0002			
L80687-01LFMD	LFMD	06/08/23 11:52	HG230530-6	.002002	U	.0019	mg/L	95	85	115	4	20	
L80818-05LFM	LFM	06/08/23 12:00	HG230530-6	.002002	U	.00165	mg/L	82	85	115			M2
WG567663CCV3	CCV	06/08/23 12:01	HG230530-3	.005		.00507	mg/L	101	90	110			
WG567663CCB3	CCB	06/08/23 12:02				U	mg/L		-0.0002	0.0002			
L80818-05LFMD	LFMD	06/08/23 12:03	HG230530-6	.002002	U	.00168	mg/L	84	85	115	2	20	M2
WG567663CCV4	CCV	06/08/23 12:09	HG230530-3	.005		.00511	mg/L	102	90	110			
WG567663CCB4	CCB	06/08/23 12:10				U	mg/L		-0.0002	0.0002			

GCC

ACZ Project ID: ***L80818***

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

Nickel, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567513													
WG567513ICV	ICV	06/07/23 1:17	II230516-3	2.002		1.9525	mg/L	98	95	105			
WG567513ICB	ICB	06/07/23 1:23				U	mg/L		-0.024	0.024			
WG567513PQV	PQV	06/07/23 1:26	II230516-2	.04		.0428	mg/L	107	70	130			
WG567513SIC	SIC	06/07/23 1:30	II230601-2	.1		.0998	mg/L	100	80	120			
WG567513LFB	LFB	06/07/23 1:36	II230530-2	.5		.4982	mg/L	100	85	115			
WG567513CCV1	CCV	06/07/23 2:08	II230525-1	1.001		.996	mg/L	100	90	110			
WG567513CCB1	CCB	06/07/23 2:11				U	mg/L		-0.024	0.024			
L80802-15AS	AS	06/07/23 2:27	II230530-2	.5	U	.5084	mg/L	102	85	115			
L80802-15ASD	ASD	06/07/23 2:30	II230530-2	.5	U	.4974	mg/L	99	85	115	2	20	
WG567513CCV2	CCV	06/07/23 2:47	II230525-1	1.001		.993	mg/L	99	90	110			
WG567513CCB2	CCB	06/07/23 2:50				U	mg/L		-0.024	0.024			
WG567513CCV3	CCV	06/07/23 3:09	II230525-1	1.001		.9744	mg/L	97	90	110			
WG567513CCB3	CCB	06/07/23 3:12				U	mg/L		-0.024	0.024			
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	2.002		1.964	mg/L	98	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.024	0.024			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	.04		.0504	mg/L	126	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	.1		.1018	mg/L	102	80	120			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	.5		.5161	mg/L	103	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	.5	U	.5158	mg/L	103	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	.5	U	.5093	mg/L	102	85	115	1	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	1.001		1.016	mg/L	101	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.024	0.024			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	1.001		.9998	mg/L	100	90	110			
WG567519CCB2	CCB	06/07/23 14:24				U	mg/L		-0.024	0.024			
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	1.001		1.006	mg/L	100	90	110			
WG567519CCB3	CCB	06/07/23 14:47				U	mg/L		-0.024	0.024			

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

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567274													
WG567274CCV1	CCV	06/02/23 2:00	WI230531-7	2		1.998	mg/L	100	90	110			
WG567274CCB1	CCB	06/02/23 2:03				U	mg/L		-0.02	0.02			
L80755-01AS	AS	06/02/23 2:07	WI230228-3	2	U	2.009	mg/L	100	90	110			
L80755-02DUP	DUP	06/02/23 2:10			.209	.206	mg/L				1	20	
WG567274CCV2	CCV	06/02/23 2:17	WI230531-7	2		2.003	mg/L	100	90	110			
WG567274CCB2	CCB	06/02/23 2:20				U	mg/L		-0.02	0.02			
WG567274LFB	LFB	06/02/23 2:25	WI230228-3	2		2.066	mg/L	103	90	110			
WG567274CCV3	CCV	06/02/23 2:30	WI230531-7	2		2.005	mg/L	100	90	110			
WG567274CCB3	CCB	06/02/23 2:33				U	mg/L		-0.02	0.02			

GCC

ACZ Project ID: ***L80818***

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

Nitrite as N M353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567274													
WG567274CCV1	CCV	06/02/23 2:00	WI230531-7	1		.984	mg/L	98	90	110			
WG567274CCB1	CCB	06/02/23 2:03				U	mg/L		-0.01	0.01			
L80755-01AS	AS	06/02/23 2:07	WI230228-3	1	U	.998	mg/L	100	90	110			
L80755-02DUP	DUP	06/02/23 2:10			U	U	mg/L				0	20	RA
WG567274CCV2	CCV	06/02/23 2:17	WI230531-7	1		.992	mg/L	99	90	110			
WG567274CCB2	CCB	06/02/23 2:20				U	mg/L		-0.01	0.01			
WG567274LFB	LFB	06/02/23 2:25	WI230228-3	1		1.006	mg/L	101	90	110			
WG567274CCV3	CCV	06/02/23 2:30	WI230531-7	1		.979	mg/L	98	90	110			
WG567274CCB3	CCB	06/02/23 2:33				U	mg/L		-0.01	0.01			

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567513													
WG567513ICV	ICV	06/07/23 1:17	II230516-3	20		19.53	mg/L	98	95	105			
WG567513ICB	ICB	06/07/23 1:23				U	mg/L		-0.6	0.6			
WG567513PQV	PQV	06/07/23 1:26	II230516-2	1.005		1.08	mg/L	107	70	130			
WG567513SIC	SIC	06/07/23 1:30	II230601-2	1.005		.97	mg/L	97	80	120			
WG567513LFB	LFB	06/07/23 1:36	II230530-2	99.95693		99.06	mg/L	99	85	115			
WG567513CCV1	CCV	06/07/23 2:08	II230525-1	10		9.63	mg/L	96	90	110			
WG567513CCB1	CCB	06/07/23 2:11				U	mg/L		-0.6	0.6			
L80802-15AS	AS	06/07/23 2:27	II230530-2	99.95693	5.56	105.8	mg/L	100	85	115			
L80802-15ASD	ASD	06/07/23 2:30	II230530-2	99.95693	5.56	103.9	mg/L	98	85	115	2	20	
WG567513CCV2	CCV	06/07/23 2:47	II230525-1	10		9.77	mg/L	98	90	110			
WG567513CCB2	CCB	06/07/23 2:50				U	mg/L		-0.6	0.6			
WG567513CCV3	CCV	06/07/23 3:09	II230525-1	10		9.66	mg/L	97	90	110			
WG567513CCB3	CCB	06/07/23 3:12				U	mg/L		-0.6	0.6			
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	20		19.37	mg/L	97	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.6	0.6			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	1.005		1.07	mg/L	106	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	1.005		1.02	mg/L	101	80	120			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	99.95693		101.4	mg/L	101	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	99.95693	.44	103	mg/L	103	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	99.95693	.44	104.6	mg/L	104	85	115	2	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	10		9.81	mg/L	98	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.6	0.6			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	10		10.5	mg/L	105	90	110			
WG567519CCB2	CCB	06/07/23 14:24				.53	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L80818***

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

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567516													
WG567516PBW	PBW	06/06/23 12:00				U	mg/L		-20	20			
WG567516LCSW	LCSW	06/06/23 12:02	PCN625111	1000		986	mg/L	99	80	120			
L80814-02DUP	DUP	06/06/23 12:31			29300	29100	mg/L				1	10	
L80818-04DUP	DUP	06/06/23 12:54			4760	4760	mg/L				0	10	
WG568464													
WG568464PBW	PBW	06/19/23 11:30				U	mg/L		-20	20			N1
WG568464LCSW	LCSW	06/19/23 11:32	PCN625112	1000		1002	mg/L	100	80	120			
L81060-01DUP	DUP	06/19/23 12:30			128	130	mg/L				2	10	RA

GCC

ACZ Project ID: ***L80818***

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

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG568383													
WG568383ICV	ICV	06/16/23 15:40	MS230410-7	.05		.05129	mg/L	103	90	110			
WG568383ICB	ICB	06/16/23 15:42				U	mg/L		-0.00022	0.00022			
WG568383LFB	LFB	06/16/23 15:44	MS230605-2	.05005		.05055	mg/L	101	85	115			
L80755-02AS	AS	06/16/23 15:54	MS230605-2	.05005	U	.0486	mg/L	97	70	130			
L80755-02ASD	ASD	06/16/23 15:56	MS230605-2	.05005	U	.04928	mg/L	98	70	130	1	20	
WG568383CCV1	CCV	06/16/23 15:58	MS230606-3	.1001		.09453	mg/L	94	90	110			
WG568383CCB1	CCB	06/16/23 16:00				U	mg/L		-0.0003	0.0003			
WG568383CCV2	CCV	06/16/23 16:20	MS230606-3	.1001		.09203	mg/L	92	90	110			E6
WG568383CCB2	CCB	06/16/23 16:21				.0061	mg/L		-0.0003	0.0003			BE E6
WG568383CCV3	CCV	06/16/23 16:40	MS230606-3	.1001		.09464	mg/L	95	90	110			
WG568513													
WG568513ICV	ICV	06/20/23 17:35	MS230410-7	.05		.05079	mg/L	102	90	110			
WG568513ICB	ICB	06/20/23 17:36				U	mg/L		-0.00022	0.00022			
WG568513LFB	LFB	06/20/23 17:38	MS230605-2	.05005		.04952	mg/L	99	85	115			
WG568513CCV1	CCV	06/20/23 17:56	MS230606-3	.1001		.0999	mg/L	100	90	110			
WG568513CCB1	CCB	06/20/23 17:58				U	mg/L		-0.0003	0.0003			
WG568513CCV2	CCV	06/20/23 18:18	MS230606-3	.1001		.10334	mg/L	103	90	110			
WG568513CCB2	CCB	06/20/23 18:20				.0013	mg/L		-0.0003	0.0003			BB
L80887-01AS	AS	06/20/23 18:27	MS230605-2	.05005	.00165	.05507	mg/L	107	70	130			
L80887-01ASD	ASD	06/20/23 18:29	MS230605-2	.05005	.00165	.05551	mg/L	108	70	130	1	20	
WG568513CCV3	CCV	06/20/23 18:31	MS230606-3	.1001		.10119	mg/L	101	90	110			
WG568513CCB3	CCB	06/20/23 18:33				U	mg/L		-0.0003	0.0003			
WG568716													
WG568716ICV	ICV	06/21/23 17:08	MS230620-3	.05		.04928	mg/L	99	90	110			
WG568716ICB	ICB	06/21/23 17:10				U	mg/L		-0.00022	0.00022			
WG568716LFB	LFB	06/21/23 17:12	MS230605-2	.05005		.04804	mg/L	96	85	115			
L78333-21AS	AS	06/21/23 17:27	MS230605-2	.05005	U	.05411	mg/L	108	70	130			
L78333-21ASD	ASD	06/21/23 17:28	MS230605-2	.05005	U	.05633	mg/L	113	70	130	4	20	
WG568716CCV1	CCV	06/21/23 17:30	MS230616-2	.1001		.10172	mg/L	102	90	110			
WG568716CCB1	CCB	06/21/23 17:32				U	mg/L		-0.0003	0.0003			
WG568716CCV2	CCV	06/21/23 17:52	MS230616-2	.1001		.10056	mg/L	100	90	110			
WG568716CCB2	CCB	06/21/23 17:54				U	mg/L		-0.0003	0.0003			
L81022-02AS	AS	06/21/23 17:59	MS230605-2	.05005	U	.05497	mg/L	110	70	130			
L81022-02ASD	ASD	06/21/23 18:01	MS230605-2	.05005	U	.05385	mg/L	108	70	130	2	20	
WG568716CCV3	CCV	06/21/23 18:05	MS230616-2	.1001		.10243	mg/L	102	90	110			
WG568716CCB3	CCB	06/21/23 18:07				U	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: ***L80818***

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

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567513													
WG567513ICV	ICV	06/07/23 1:17	II230516-3	100		101	mg/L	101	95	105			
WG567513ICB	ICB	06/07/23 1:23				U	mg/L		-0.6	0.6			
WG567513PQV	PQV	06/07/23 1:26	II230516-2	1.000141		1.02	mg/L	102	70	130			
WG567513SIC	SIC	06/07/23 1:30	II230601-2	1.000141		.98	mg/L	98	80	120			
WG567513LFB	LFB	06/07/23 1:36	II230530-2	100.0094		101.3	mg/L	101	85	115			
WG567513CCV1	CCV	06/07/23 2:08	II230525-1	50		49.76	mg/L	100	90	110			
WG567513CCB1	CCB	06/07/23 2:11				U	mg/L		-0.6	0.6			
L80802-15AS	AS	06/07/23 2:27	II230530-2	100.0094	13.2	115.9	mg/L	103	85	115			
L80802-15ASD	ASD	06/07/23 2:30	II230530-2	100.0094	13.2	113.5	mg/L	100	85	115	2	20	
WG567513CCV2	CCV	06/07/23 2:47	II230525-1	50		50.23	mg/L	100	90	110			
WG567513CCB2	CCB	06/07/23 2:50				.25	mg/L		-0.6	0.6			
WG567513CCV3	CCV	06/07/23 3:09	II230525-1	50		50.34	mg/L	101	90	110			
WG567513CCB3	CCB	06/07/23 3:12				.51	mg/L		-0.6	0.6			
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	100		100.88	mg/L	101	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.6	0.6			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	1.000141		1.07	mg/L	107	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	1.000141		1.03	mg/L	103	80	120			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	100.0094		103	mg/L	103	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	100.0094	3.53	107.4	mg/L	104	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	100.0094	3.53	109.7	mg/L	106	85	115	2	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	50		50.53	mg/L	101	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.6	0.6			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	50		51.65	mg/L	103	90	110			
WG567519CCB2	CCB	06/07/23 14:24				.91	mg/L		-0.6	0.6			BB
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	50		54.64	mg/L	109	90	110			
WG567519CCB3	CCB	06/07/23 14:47				2.42	mg/L		-0.6	0.6			BB
WG567685													
WG567685ICV	ICV	06/09/23 9:20	II230516-3	100		101.55	mg/L	102	95	105			
WG567685ICB	ICB	06/09/23 9:26				U	mg/L		-0.6	0.6			
WG567685PQV	PQV	06/09/23 9:30	II230516-2	1.000141		1.05	mg/L	105	70	130			
WG567685SIC	SIC	06/09/23 9:33	II230601-2	1.000141		1.04	mg/L	104	80	120			
WG567685LFB	LFB	06/09/23 9:39	II230530-2	100.0094		99.7	mg/L	100	85	115			
WG567685CCV1	CCV	06/09/23 10:11	II230525-1	50		49.91	mg/L	100	90	110			
WG567685CCB1	CCB	06/09/23 10:14				U	mg/L		-0.6	0.6			
L80820-03AS	AS	06/09/23 10:34	II230530-2	100.0094	2.71	102.1	mg/L	99	85	115			
L80820-03ASD	ASD	06/09/23 10:37	II230530-2	100.0094	2.71	102.2	mg/L	99	85	115	0	20	
WG567685CCV2	CCV	06/09/23 10:50	II230525-1	50		50.41	mg/L	101	90	110			
WG567685CCB2	CCB	06/09/23 10:53				.37	mg/L		-0.6	0.6			
WG567685CCV3	CCV	06/09/23 11:13	II230525-1	50		50.73	mg/L	101	90	110			
WG567685CCB3	CCB	06/09/23 11:16				.42	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L80818***

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

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

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG568399													
WG568399ICB	ICB	06/20/23 9:51				U	mg/L		-3	3			
WG568399ICV	ICV	06/20/23 9:51	WI230619-7	20		20.6	mg/L	103	90	110			
WG568399CCV1	CCV	06/20/23 10:03	WI230619-6	25		25	mg/L	100	90	110			
WG568399CCB1	CCB	06/20/23 10:03				U	mg/L		-3	3			
WG568399LFB	LFB	06/20/23 10:03	WI230119-9	10		10.7	mg/L	107	90	110			
L71601-68AS	AS	06/20/23 10:03	WI230119-9	10	U	10.9	mg/L	109	90	110			
L71602-68DUP	DUP	06/20/23 10:03			3.6	3.5	mg/L				3	20	RA
WG568399CCV2	CCV	06/20/23 10:06	WI230619-6	25		24.9	mg/L	100	90	110			
WG568399CCB2	CCB	06/20/23 10:06				U	mg/L		-3	3			
WG568399CCV3	CCV	06/20/23 10:07	WI230619-6	25		24.1	mg/L	96	90	110			
WG568399CCB3	CCB	06/20/23 10:07				U	mg/L		-3	3			
WG568399CCV4	CCV	06/20/23 10:09	WI230619-6	25		24.6	mg/L	98	90	110			
WG568399CCB4	CCB	06/20/23 10:09				U	mg/L		-3	3			
WG568399CCV5	CCV	06/20/23 10:38	WI230619-6	25		24.9	mg/L	100	90	110			
WG568399CCB5	CCB	06/20/23 10:38				U	mg/L		-3	3			
WG568399CCV6	CCV	06/20/23 10:40	WI230619-6	25		25.1	mg/L	100	90	110			
WG568399CCB6	CCB	06/20/23 10:40				U	mg/L		-3	3			
WG568399CCV7	CCV	06/20/23 10:43	WI230619-6	25		25	mg/L	100	90	110			
WG568399CCB7	CCB	06/20/23 10:43				U	mg/L		-3	3			
WG568399CCV8	CCV	06/20/23 10:49	WI230619-6	25		25.1	mg/L	100	90	110			
WG568399CCB8	CCB	06/20/23 10:49				U	mg/L		-3	3			
WG568399CCV9	CCV	06/20/23 11:03	WI230619-6	25		24.8	mg/L	99	90	110			
WG568399CCB9	CCB	06/20/23 11:03				U	mg/L		-3	3			
WG568399CCV10	CCV	06/20/23 11:05	WI230619-6	25		24.9	mg/L	100	90	110			
WG568399CCB10	CCB	06/20/23 11:05				U	mg/L		-3	3			

GCC

ACZ Project ID: ***L80818***

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

Vanadium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567513													
WG567513ICV	ICV	06/07/23 1:17	II230516-3	2		1.995	mg/L	100	95	105			
WG567513ICB	ICB	06/07/23 1:23				U	mg/L		-0.015	0.015			
WG567513PQV	PQV	06/07/23 1:26	II230516-2	.025025		.022	mg/L	88	70	130			
WG567513SIC	SIC	06/07/23 1:30	II230601-2	.1001		.098	mg/L	98	80	120			
WG567513LFB	LFB	06/07/23 1:36	II230530-2	.5005		.5029	mg/L	100	85	115			
WG567513CCV1	CCV	06/07/23 2:08	II230525-1	1		.977	mg/L	98	90	110			
WG567513CCB1	CCB	06/07/23 2:11				U	mg/L		-0.03	0.03			
L80802-15AS	AS	06/07/23 2:27	II230530-2	.5005	U	.5087	mg/L	102	85	115			
L80802-15ASD	ASD	06/07/23 2:30	II230530-2	.5005	U	.495	mg/L	99	85	115	3	20	
WG567513CCV2	CCV	06/07/23 2:47	II230525-1	1		.982	mg/L	98	90	110			
WG567513CCB2	CCB	06/07/23 2:50				U	mg/L		-0.03	0.03			
WG567513CCV3	CCV	06/07/23 3:09	II230525-1	1		.977	mg/L	98	90	110			
WG567513CCB3	CCB	06/07/23 3:12				U	mg/L		-0.03	0.03			
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	2		1.985	mg/L	99	95	105			
WG567519ICB	ICB	06/07/23 12:57				.0065	mg/L		-0.015	0.015			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	.025025		.027	mg/L	108	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	.1001		.105	mg/L	105	80	120			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	.5005		.5132	mg/L	103	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	.5005	U	.5135	mg/L	103	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	.5005	U	.527	mg/L	105	85	115	3	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	1		.994	mg/L	99	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.03	0.03			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	1		.991	mg/L	99	90	110			
WG567519CCB2	CCB	06/07/23 14:24				U	mg/L		-0.03	0.03			
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	1		.992	mg/L	99	90	110			
WG567519CCB3	CCB	06/07/23 14:47				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L80818***

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

Zinc, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567513													
WG567513ICV	ICV	06/07/23 1:17	II230516-3	2		1.957	mg/L	98	95	105			
WG567513ICB	ICB	06/07/23 1:23				U	mg/L		-0.06	0.06			
WG567513PQV	PQV	06/07/23 1:26	II230516-2	.05005		.062	mg/L	124	70	130			
WG567513SIC	SIC	06/07/23 1:30	II230601-2	.1001		.1	mg/L	100	80	120			
WG567513LFB	LFB	06/07/23 1:36	II230530-2	.50045		.524	mg/L	105	85	115			
WG567513CCV1	CCV	06/07/23 2:08	II230525-1	1		.981	mg/L	98	90	110			
WG567513CCB1	CCB	06/07/23 2:11				U	mg/L		-0.06	0.06			
L80802-15AS	AS	06/07/23 2:27	II230530-2	.50045	U	.531	mg/L	106	85	115			
L80802-15ASD	ASD	06/07/23 2:30	II230530-2	.50045	U	.522	mg/L	104	85	115	2	20	
WG567513CCV2	CCV	06/07/23 2:47	II230525-1	1		1.013	mg/L	101	90	110			
WG567513CCB2	CCB	06/07/23 2:50				U	mg/L		-0.06	0.06			
WG567513CCV3	CCV	06/07/23 3:09	II230525-1	1		.968	mg/L	97	90	110			
WG567513CCB3	CCB	06/07/23 3:12				U	mg/L		-0.06	0.06			
WG567519													
WG567519ICV	ICV	06/07/23 12:51	II230516-3	2		1.95	mg/L	98	95	105			
WG567519ICB	ICB	06/07/23 12:57				U	mg/L		-0.06	0.06			
WG567519PQV	PQV	06/07/23 13:00	II230516-2	.05005		.057	mg/L	114	70	130			
WG567519SIC	SIC	06/07/23 13:04	II230601-2	.1001		.095	mg/L	95	80	120			
WG567519LFB	LFB	06/07/23 13:10	II230530-2	.50045		.53	mg/L	106	85	115			
L80820-02AS	AS	06/07/23 13:36	II230530-2	.50045	.279	.774	mg/L	99	85	115			
L80820-02ASD	ASD	06/07/23 13:39	II230530-2	.50045	.279	.788	mg/L	102	85	115	2	20	
WG567519CCV1	CCV	06/07/23 13:42	II230525-1	1		.979	mg/L	98	90	110			
WG567519CCB1	CCB	06/07/23 13:45				U	mg/L		-0.06	0.06			
WG567519CCV2	CCV	06/07/23 14:21	II230525-1	1		.98	mg/L	98	90	110			
WG567519CCB2	CCB	06/07/23 14:24				U	mg/L		-0.06	0.06			
WG567519CCV3	CCV	06/07/23 14:44	II230525-1	1		.983	mg/L	98	90	110			
WG567519CCB3	CCB	06/07/23 14:47				U	mg/L		-0.06	0.06			

GCC Rio Grande ACZ Project ID: ***L80818***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L80818-01	WG568055	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG567509	Chloride	SM4500Cl-E	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500Cl-E	Q6	Sample was received above recommended temperature.
			SM4500Cl-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG567622	Copper, dissolved	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG568572	Fluoride	SM4500F-C	Q6	Sample was received above recommended temperature.
	WG568055	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG567513	Manganese, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567274	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
		Nitrite as N	M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG567516	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RO	The duplicate originally assigned to this sample was not used for precision assessment because residue density did not meet method limits. Another duplicate in the batch was used to assess precision. Method required duplicate frequency was not met.
	WG568383	Selenium, dissolved	M200.8 ICP-MS	BE	Target analyte in continuing calibration blank (CCB) at or above the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			M200.8 ICP-MS	IA	Internal standard recovery exceeded the acceptance limits. Concentration of associated target analyte(s) in the sample is < MDL.
	WG568399	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG568055	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

GCC Rio Grande ACZ Project ID: ***L80818***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L80818-02	WG568055	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG567509	Chloride	SM4500Cl-E	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500Cl-E	Q6	Sample was received above recommended temperature.
			SM4500Cl-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG567622	Copper, dissolved	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG568572	Fluoride	SM4500F-C	Q6	Sample was received above recommended temperature.
	WG568055	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG567513	Manganese, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567663	Mercury, dissolved	M245.1 CVAA	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567274	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
		Nitrite as N	M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG567516	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RO	The duplicate originally assigned to this sample was not used for precision assessment because residue density did not meet method limits. Another duplicate in the batch was used to assess precision. Method required duplicate frequency was not met.
	WG568513	Selenium, dissolved	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
			M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG568399	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG568055	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

GCC Rio Grande ACZ Project ID: ***L80818***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L80818-03	WG568055	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG567509	Chloride	SM4500Cl-E	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500Cl-E	Q6	Sample was received above recommended temperature.
			SM4500Cl-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG568572	Fluoride	SM4500F-C	Q6	Sample was received above recommended temperature.
	WG568055	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG567663	Mercury, dissolved	M245.1 CVAA	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567274	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
		Nitrite as N	M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG567516	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RO	The duplicate originally assigned to this sample was not used for precision assessment because residue density did not meet method limits. Another duplicate in the batch was used to assess precision. Method required duplicate frequency was not met.
	WG568399	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG568055	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

GCC Rio Grande ACZ Project ID: ***L80818***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L80818-04	WG568055	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG567509	Chloride	SM4500Cl-E	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500Cl-E	Q6	Sample was received above recommended temperature.
			SM4500Cl-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG568572	Fluoride	SM4500F-C	Q6	Sample was received above recommended temperature.
	WG568055	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG567663	Mercury, dissolved	M245.1 CVAA	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567274	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
		Nitrite as N	M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG568464	Residue, Filterable (TDS) @180C	SM2540C	H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG568399	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG568055	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

GCC Rio Grande ACZ Project ID: ***L80818***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L80818-05	WG568055	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG567509	Chloride	SM4500Cl-E	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500Cl-E	Q6	Sample was received above recommended temperature.
			SM4500Cl-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG568335	Fluoride	SM4500F-C	Q6	Sample was received above recommended temperature.
	WG568055	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG567663	Mercury, dissolved	M245.1 CVAA	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567274	Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
		Nitrite as N	M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG567516	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RO	The duplicate originally assigned to this sample was not used for precision assessment because residue density did not meet method limits. Another duplicate in the batch was used to assess precision. Method required duplicate frequency was not met.
	WG568716	Selenium, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
			M200.8 ICP-MS	DB	Sample required dilution due to low bias result.
			M200.8 ICP-MS	EA	Concentration estimated. Analytical result was less than the negative MDL due to matrix interferences.
	WG568399	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG568055	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Certification Qualifiers

GCC Rio Grande ACZ Project ID: ***L80818***

No certification qualifiers associated with this analysis

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

Sample Receipt

GCC Rio Grande
183230

ACZ Project ID: L80818
Date Received: 06/01/2023 13:03
Received By:
Date Printed: 6/2/2023

Receipt Verification

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

Samples/Containers

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

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
4086	9.2	<=6.0	15	Yes

Was ice present in the shipment container(s)?

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

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

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

Sample Receipt

GCC Rio Grande
183230

ACZ Project ID: L80818
Date Received: 06/01/2023 13:03
Received By:
Date Printed: 6/2/2023

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L80818

CHAIN of CUSTODY

Report to:

Name: Amy Veek
Company: GCC Rio Grande Inc
E-mail: aveek@gcc.com
Address: 3372 Lime Road, Pueblo CO 81004
Telephone: 719-647-6861

Copy of Report to:

Name: Landon Beck
Company: Resource Hydrogeologic
E-mail: lbeck@resourcehydrogeologic.com
Telephone: (970) 459-4865

Invoice to:

Name: Amy Veek
Company: GCC Rio Grande Inc
E-mail: aveek@gcc.com
Address: 3372 Lime Road, Pueblo CO 81004
Telephone: 719-647-6861

Copy of Invoice to:

Name:
Company:
E-mail:
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes No ✓

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: David Bemis **Sampler's Site Information** **State** CO **Zip code** 81004 **Time Zone** MDT

***Sampler's Signature:** [signature]

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: GW-COMPLIANCE
PO#: 183230
Reporting state for compliance testing:
Check box if samples include NRC licensed material?

ANALYSES REQUESTED (attach list or use quote number)

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	GW-COmpliance
MW-12	5/31/2023 09:02	GW	3	✓
MW-11	5/31/2023 09:41	GW	3	✓
MW-2B	5/31/2023 10:41	GW	3	✓
MW-9	5/31/2023 10:48	GW	3	✓
MW-10	5/31/2023 11:24	GW	3	✓

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
[signature] Landon Beck	13:12	[signature] Landon Beck	5/31/23 1312
[signature]	1415	[signature]	6/1/23 1303

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

L80818 Chain of Custod

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

Analytical Report

June 26, 2023

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

cc: Landon Beck

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

Project ID: 183230
ACZ Project ID: L80783

Amy Veek:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on May 31, 2023. This project has been assigned to ACZ's project number, L80783. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L80783. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

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

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

All samples and sub-samples associated with this project will be disposed of after June 25, 2024. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

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

Sue Webber has reviewed and approved this report.

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

Case Narrative

GCC Rio Grande

June 26, 2023

Project ID: 183230
ACZ Project ID: L80783

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 5 groundwater samples from GCC Rio Grande on May 31, 2023. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L80783. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

All analyses were performed within EPA recommended holding times except for parameters flagged with an "H2" requiring re-analysis after the hold time had expired.

Sample Analysis

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

1. The below is from WG568035, Qualifier: N1, Applies to: L80783-04 and -05/TOTAL DISSOLVED SOLIDS - Method required dry cycles in 180'C oven for at least 1 hour. Samples were in the 180'C oven for a dry cycle less than 1 hour. All quality controls were passing and sample constant weights obtained.

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

ACZ Sample ID: ***L80783-01***
Date Sampled: *05/30/23 10:54*
Date Received: *05/31/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.053	B		mg/L	0.05	0.25	06/07/23 3:39	keh1
Arsenic, dissolved	M200.8 ICP-MS	5	0.00408	B		mg/L	0.001	0.005	06/13/23 16:43	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 3:39	keh1
Boron, dissolved	M200.7 ICP	1	1.21			mg/L	0.03	0.1	06/07/23 3:39	keh1
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U		mg/L	0.00025	0.00125	06/13/23 16:43	gjl/scp
Calcium, dissolved	M200.7 ICP	1	17.1		*	mg/L	0.1	0.5	06/07/23 3:39	keh1
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 3:39	keh1
Cobalt, dissolved	M200.8 ICP-MS	5	0.000622	B		mg/L	0.00025	0.00125	06/13/23 16:43	gjl/scp
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 3:39	keh1
Iron, dissolved	M200.7 ICP	1	0.678			mg/L	0.06	0.15	06/07/23 3:39	keh1
Lead, dissolved	M200.8 ICP-MS	5	0.00084	B		mg/L	0.0005	0.0025	06/13/23 16:43	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.495			mg/L	0.008	0.04	06/07/23 3:39	keh1
Magnesium, dissolved	M200.7 ICP	1	5.47			mg/L	0.2	1	06/07/23 3:39	keh1
Manganese, dissolved	M200.7 ICP	1	0.035	B	*	mg/L	0.01	0.05	06/07/23 3:39	keh1
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/06/23 11:02	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	06/07/23 3:39	keh1
Potassium, dissolved	M200.7 ICP	1	5.01			mg/L	0.2	1	06/07/23 3:39	keh1
Selenium, dissolved	M200.8 ICP-MS	20	<0.002	U	*	mg/L	0.002	0.005	06/19/23 17:21	gjl/scp
Sodium, dissolved	M200.7 ICP	2	1770			mg/L	0.4	2	06/07/23 21:49	keh1
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	06/07/23 3:39	keh1
Zinc, dissolved	M200.7 ICP	1	0.063			mg/L	0.02	0.05	06/07/23 3:39	keh1

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

ACZ Sample ID: ***L80783-01***
Date Sampled: *05/30/23 10:54*
Date Received: *05/31/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	1490			mg/L	2	20	06/10/23 0:00	jck
Carbonate as CaCO3		1	<2	U		mg/L	2	20	06/10/23 0:00	jck
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	06/10/23 0:00	jck
Total Alkalinity		1	1490			mg/L	2	20	06/10/23 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-4.8			%			06/26/23 0:00	calc
Sum of Anions			87			meq/L			06/26/23 0:00	calc
Sum of Cations			79			meq/L			06/26/23 0:00	calc
Chloride	SM4500Cl-E	25	1730		*	mg/L	25	50	06/06/23 17:13	aps
Fluoride	SM4500F-C	1	2.61			mg/L	0.15	0.35	06/15/23 18:29	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		65			mg/L	0.2	5	06/26/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	06/26/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U		mg/L	0.02	0.1	06/01/23 0:20	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	06/01/23 0:20	pjb
Residue, Filterable (TDS) @180C	SM2540C	5	4710		*	mg/L	100	200	06/05/23 12:37	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	50	414		*	mg/L	50	250	06/15/23 12:39	aps
TDS (calculated)	Calculation		4850			mg/L			06/26/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.97						06/26/23 0:00	calc

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

ACZ Sample ID: ***L80783-02***
Date Sampled: *05/30/23 12:57*
Date Received: *05/31/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/07/23 3:42	keh1
Arsenic, dissolved	M200.8 ICP-MS	2	0.00044	B		mg/L	0.0004	0.002	06/13/23 16:45	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 3:42	keh1
Boron, dissolved	M200.7 ICP	1	1.04			mg/L	0.03	0.1	06/07/23 3:42	keh1
Cadmium, dissolved	M200.8 ICP-MS	2	0.000123	B		mg/L	0.0001	0.0005	06/13/23 16:45	gjl/scp
Calcium, dissolved	M200.7 ICP	1	6.22		*	mg/L	0.1	0.5	06/07/23 3:42	keh1
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 3:42	keh1
Cobalt, dissolved	M200.8 ICP-MS	2	0.000220	B		mg/L	0.0001	0.0005	06/13/23 16:45	gjl/scp
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 3:42	keh1
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	06/07/23 3:42	keh1
Lead, dissolved	M200.8 ICP-MS	2	0.00043	B		mg/L	0.0002	0.001	06/13/23 16:45	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.276			mg/L	0.008	0.04	06/07/23 3:42	keh1
Magnesium, dissolved	M200.7 ICP	1	1.82			mg/L	0.2	1	06/07/23 3:42	keh1
Manganese, dissolved	M200.7 ICP	1	<0.01	U	*	mg/L	0.01	0.05	06/07/23 3:42	keh1
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/06/23 11:03	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	06/07/23 3:42	keh1
Potassium, dissolved	M200.7 ICP	1	2.93			mg/L	0.2	1	06/07/23 3:42	keh1
Selenium, dissolved	M200.8 ICP-MS	10	<0.001	U	*	mg/L	0.001	0.0025	06/19/23 17:23	gjl/scp
Sodium, dissolved	M200.7 ICP	2	1050			mg/L	0.4	2	06/07/23 21:52	keh1
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	06/07/23 3:42	keh1
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 3:42	keh1

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

ACZ Sample ID: ***L80783-02***
Date Sampled: *05/30/23 12:57*
Date Received: *05/31/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	1380			mg/L	2	20	06/10/23 0:00	jck
Carbonate as CaCO3		1	74.9			mg/L	2	20	06/10/23 0:00	jck
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	06/10/23 0:00	jck
Total Alkalinity		1	1450			mg/L	2	20	06/10/23 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-2.1			%			06/26/23 0:00	calc
Sum of Anions			49			meq/L			06/26/23 0:00	calc
Sum of Cations			47			meq/L			06/26/23 0:00	calc
Chloride	SM4500Cl-E	25	654		*	mg/L	25	50	06/06/23 17:15	aps
Fluoride	SM4500F-C	1	5.79			mg/L	0.15	0.35	06/15/23 18:34	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		23.0			mg/L	0.2	5	06/26/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	06/26/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.02	U		mg/L	0.02	0.1	06/01/23 0:26	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	06/01/23 0:26	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	2640		*	mg/L	40	80	06/05/23 12:40	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	63.7		*	mg/L	5	25	06/15/23 12:39	aps
TDS (calculated)	Calculation		2670			mg/L			06/26/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.99						06/26/23 0:00	calc

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

ACZ Sample ID: ***L80783-03***
Date Sampled: *05/30/23 13:55*
Date Received: *05/31/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/07/23 3:45	keh1
Arsenic, dissolved	M200.8 ICP-MS	5	0.00146	B		mg/L	0.001	0.005	06/13/23 16:52	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 3:45	keh1
Boron, dissolved	M200.7 ICP	1	0.930			mg/L	0.03	0.1	06/07/23 3:45	keh1
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U		mg/L	0.00025	0.00125	06/13/23 16:52	gjl/scp
Calcium, dissolved	M200.7 ICP	1	60.1		*	mg/L	0.1	0.5	06/07/23 3:45	keh1
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 3:45	keh1
Cobalt, dissolved	M200.8 ICP-MS	5	0.000306	B		mg/L	0.00025	0.00125	06/13/23 16:52	gjl/scp
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/07/23 3:45	keh1
Iron, dissolved	M200.7 ICP	1	1.02			mg/L	0.06	0.15	06/07/23 3:45	keh1
Lead, dissolved	M200.8 ICP-MS	5	<0.0005	U		mg/L	0.0005	0.0025	06/13/23 16:52	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.418			mg/L	0.008	0.04	06/07/23 3:45	keh1
Magnesium, dissolved	M200.7 ICP	1	25.3			mg/L	0.2	1	06/07/23 3:45	keh1
Manganese, dissolved	M200.7 ICP	1	0.190		*	mg/L	0.01	0.05	06/07/23 3:45	keh1
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/06/23 14:49	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	06/07/23 3:45	keh1
Potassium, dissolved	M200.7 ICP	1	5.45			mg/L	0.2	1	06/07/23 3:45	keh1
Selenium, dissolved	M200.8 ICP-MS	5	0.00090	B		mg/L	0.0005	0.00125	06/13/23 16:52	gjl/scp
Sodium, dissolved	M200.7 ICP	2	1280			mg/L	0.4	2	06/07/23 21:55	keh1
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	06/07/23 3:45	keh1
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/07/23 3:45	keh1

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

ACZ Sample ID: ***L80783-03***
Date Sampled: *05/30/23 13:55*
Date Received: *05/31/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	1400			mg/L	2	20	06/10/23 0:00	jck
Carbonate as CaCO3		1	<2	U		mg/L	2	20	06/10/23 0:00	jck
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	06/10/23 0:00	jck
Total Alkalinity		1	1400			mg/L	2	20	06/10/23 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-3.1			%			06/26/23 0:00	calc
Sum of Anions			66			meq/L			06/26/23 0:00	calc
Sum of Cations			62			meq/L			06/26/23 0:00	calc
Chloride	SM4500Cl-E	5	288		*	mg/L	5	10	06/06/23 17:15	aps
Fluoride	SM4500F-C	1	0.89			mg/L	0.15	0.35	06/15/23 18:40	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		254			mg/L	0.2	5	06/26/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		0.989			mg/L	0.02	0.1	06/26/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	0.989			mg/L	0.02	0.1	06/01/23 0:27	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	06/01/23 0:27	pjb
Residue, Filterable (TDS) @180C	SM2540C	50	4000		*	mg/L	1000	2000	06/05/23 12:43	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	50	1430		*	mg/L	50	250	06/15/23 12:39	aps
TDS (calculated)	Calculation		3940			mg/L			06/26/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.02						06/26/23 0:00	calc

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

ACZ Sample ID: ***L80783-04***
Date Sampled: *05/30/23 14:46*
Date Received: *05/31/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/06/23 20:04	wtc
Arsenic, dissolved	M200.8 ICP-MS	5	<0.001	U		mg/L	0.001	0.005	06/13/23 16:54	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/06/23 20:04	wtc
Boron, dissolved	M200.7 ICP	1	0.166			mg/L	0.03	0.1	06/06/23 20:04	wtc
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U		mg/L	0.00025	0.00125	06/13/23 16:54	gjl/scp
Calcium, dissolved	M200.7 ICP	1	466		*	mg/L	0.1	0.5	06/06/23 20:04	wtc
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/06/23 20:04	wtc
Cobalt, dissolved	M200.8 ICP-MS	5	0.00207			mg/L	0.00025	0.00125	06/13/23 16:54	gjl/scp
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/06/23 20:04	wtc
Iron, dissolved	M200.7 ICP	1	0.092	B		mg/L	0.06	0.15	06/06/23 20:04	wtc
Lead, dissolved	M200.8 ICP-MS	5	<0.0005	U		mg/L	0.0005	0.0025	06/13/23 16:54	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.453			mg/L	0.008	0.04	06/06/23 20:04	wtc
Magnesium, dissolved	M200.7 ICP	1	519		*	mg/L	0.2	1	06/06/23 20:04	wtc
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/06/23 20:04	wtc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/06/23 14:50	mlh
Nickel, dissolved	M200.7 ICP	1	0.0227	B		mg/L	0.008	0.04	06/06/23 20:04	wtc
Potassium, dissolved	M200.7 ICP	1	13.1			mg/L	0.2	1	06/06/23 20:04	wtc
Selenium, dissolved	M200.8 ICP-MS	5	0.0981			mg/L	0.0005	0.00125	06/13/23 16:54	gjl/scp
Sodium, dissolved	M200.7 ICP	1	360			mg/L	0.2	1	06/06/23 20:04	wtc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	06/06/23 20:04	wtc
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/06/23 20:04	wtc

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

ACZ Sample ID: ***L80783-04***
Date Sampled: *05/30/23 14:46*
Date Received: *05/31/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	358			mg/L	2	20	06/10/23 0:00	jck
Carbonate as CaCO3		1	<2	U		mg/L	2	20	06/10/23 0:00	jck
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	06/10/23 0:00	jck
Total Alkalinity		1	358			mg/L	2	20	06/10/23 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.6			%			06/26/23 0:00	calc
Sum of Anions			81			meq/L			06/26/23 0:00	calc
Sum of Cations			82.0			meq/L			06/26/23 0:00	calc
Chloride	SM4500Cl-E	1	47.2		*	mg/L	1	2	06/06/23 17:16	aps
Fluoride	SM4500F-C	1	0.41		*	mg/L	0.15	0.35	06/15/23 18:51	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		3300			mg/L	0.2	5	06/26/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		8.66			mg/L	0.1	0.5	06/26/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	5	8.66			mg/L	0.1	0.5	06/01/23 0:35	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	06/01/23 0:28	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	5560	H	*	mg/L	40	80	06/13/23 15:05	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	120	3470		*	mg/L	120	600	06/15/23 12:41	aps
TDS (calculated)	Calculation		5090			mg/L			06/26/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.09						06/26/23 0:00	calc

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

ACZ Sample ID: ***L80783-05***
Date Sampled: *05/30/23 15:15*
Date Received: *05/31/23*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/06/23 20:14	wtc
Arsenic, dissolved	M200.8 ICP-MS	5	<0.001	U		mg/L	0.001	0.005	06/13/23 16:57	gjl/scp
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/06/23 20:14	wtc
Boron, dissolved	M200.7 ICP	1	0.239			mg/L	0.03	0.1	06/06/23 20:14	wtc
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U		mg/L	0.00025	0.00125	06/13/23 16:57	gjl/scp
Calcium, dissolved	M200.7 ICP	1	398		*	mg/L	0.1	0.5	06/06/23 20:14	wtc
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/06/23 20:14	wtc
Cobalt, dissolved	M200.8 ICP-MS	5	0.0541			mg/L	0.00025	0.00125	06/13/23 16:57	gjl/scp
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/06/23 20:14	wtc
Iron, dissolved	M200.7 ICP	1	1.12			mg/L	0.06	0.15	06/06/23 20:14	wtc
Lead, dissolved	M200.8 ICP-MS	5	<0.0005	U		mg/L	0.0005	0.0025	06/13/23 16:57	gjl/scp
Lithium, dissolved	M200.7 ICP	1	0.462			mg/L	0.008	0.04	06/06/23 20:14	wtc
Magnesium, dissolved	M200.7 ICP	1	421		*	mg/L	0.2	1	06/06/23 20:14	wtc
Manganese, dissolved	M200.7 ICP	1	0.656			mg/L	0.01	0.05	06/06/23 20:14	wtc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/06/23 14:51	mlh
Nickel, dissolved	M200.7 ICP	1	0.0895			mg/L	0.008	0.04	06/06/23 20:14	wtc
Potassium, dissolved	M200.7 ICP	1	10.5			mg/L	0.2	1	06/06/23 20:14	wtc
Selenium, dissolved	M200.8 ICP-MS	5	0.00323			mg/L	0.0005	0.00125	06/13/23 16:57	gjl/scp
Sodium, dissolved	M200.7 ICP	1	566			mg/L	0.2	1	06/06/23 20:14	wtc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	06/06/23 20:14	wtc
Zinc, dissolved	M200.7 ICP	1	0.028	B		mg/L	0.02	0.05	06/06/23 20:14	wtc

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

ACZ Sample ID: ***L80783-05***
Date Sampled: *05/30/23 15:15*
Date Received: *05/31/23*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	493			mg/L	2	20	06/10/23 0:00	jck
Carbonate as CaCO3		1	<2	U		mg/L	2	20	06/10/23 0:00	jck
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	06/10/23 0:00	jck
Total Alkalinity		1	493			mg/L	2	20	06/10/23 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			1.3			%			06/26/23 0:00	calc
Sum of Anions			78			meq/L			06/26/23 0:00	calc
Sum of Cations			80			meq/L			06/26/23 0:00	calc
Chloride	SM4500Cl-E	1	74.6		*	mg/L	1	2	06/06/23 17:16	aps
Fluoride	SM4500F-C	1	0.52		*	mg/L	0.15	0.35	06/15/23 19:06	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		2730			mg/L	0.2	5	06/26/23 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		0.321			mg/L	0.02	0.1	06/26/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated Cadmium Reduction	1	0.361			mg/L	0.02	0.1	06/01/23 0:29	pjb
Nitrite as N	M353.2 - Automated Cadmium Reduction	1	0.040	B	*	mg/L	0.01	0.05	06/01/23 0:29	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	5380	H	*	mg/L	40	80	06/13/23 15:07	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	120	3150		*	mg/L	120	600	06/15/23 12:41	aps
TDS (calculated)	Calculation		4920			mg/L			06/26/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.09						06/26/23 0:00	calc

Report Header Explanations

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

QC Sample Types

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

QC Sample Type Explanations

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

ACZ Qualifiers (Qual)

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

Method References

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

Comments

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

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

GCC

ACZ Project ID: ***L80783***

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

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567812													
WG567812PBW1	PBW	06/09/23 19:25				U	mg/L		-20	20			
WG567812LCSW3	LCSW	06/09/23 19:45	WC230601-3	820.0001		845.1	mg/L	103	90	110			
WG567812LCSW6	LCSW	06/09/23 23:50	WC230601-3	820.0001		870.9	mg/L	106	90	110			
WG567812PBW2	PBW	06/10/23 0:00				3.8	mg/L		-20	20			
L80785-01DUP	DUP	06/10/23 4:00			670	683.1	mg/L				2	20	
WG567812LCSW9	LCSW	06/10/23 4:21	WC230601-3	820.0001		872.9	mg/L	106	90	110			
WG567812PBW3	PBW	06/10/23 4:31				4.1	mg/L		-20	20			
WG567812LCSW12	LCSW	06/10/23 8:27	WC230601-3	820.0001		881.7	mg/L	108	90	110			
WG567812PBW4	PBW	06/10/23 8:37				4.7	mg/L		-20	20			
WG567812LCSW15	LCSW	06/10/23 12:20	WC230601-3	820.0001		878.8	mg/L	107	90	110			
WG567812PBW5	PBW	06/10/23 12:31				5.1	mg/L		-20	20			
WG567812LCSW18	LCSW	06/10/23 14:34	WC230601-3	820.0001		878.1	mg/L	107	90	110			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	2		1.961	mg/L	98	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.15	0.15			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	.2525		.238	mg/L	94	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	202.2525		207.7	mg/L	103	1	200			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	1.01		1.032	mg/L	102	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	1.01	U	1.114	mg/L	110	85	115			
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	1.01	U	1.122	mg/L	111	85	115	1	20	
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	1		.972	mg/L	97	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.15	0.15			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	1		.965	mg/L	97	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.15	0.15			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	1		.963	mg/L	96	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.15	0.15			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	2		1.974	mg/L	99	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.15	0.15			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	.2525		.254	mg/L	101	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	202.2525		208.2	mg/L	103	1	200			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	1.01		1.05	mg/L	104	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	1		.961	mg/L	96	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.15	0.15			
L80771-01AS	AS	06/07/23 3:08	II230530-2	1.01	.128	1.231	mg/L	109	85	115			
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	1.01	.128	1.224	mg/L	109	85	115	1	20	
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	1		.983	mg/L	98	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.15	0.15			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	1		.961	mg/L	96	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.15	0.15			

GCC

ACZ Project ID: ***L80783***

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

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567869													
WG567869ICV	ICV	06/13/23 16:36	MS230410-7	.05		.04775	mg/L	96	90	110			
WG567869ICB	ICB	06/13/23 16:38				U	mg/L		-0.00044	0.00044			
WG567869LFB	LFB	06/13/23 16:40	MS230605-2	.0501		.04806	mg/L	96	85	115			
L80783-02AS	AS	06/13/23 16:47	MS230605-2	.1002	.00044	.09215	mg/L	92	70	130			
L80783-02ASD	ASD	06/13/23 16:50	MS230605-2	.1002	.00044	.09151	mg/L	91	70	130	1	20	
WG567869CCV1	CCV	06/13/23 17:04	MS230606-3	.1002		.09867	mg/L	98	90	110			
WG567869CCB1	CCB	06/13/23 17:06				U	mg/L		-0.0006	0.0006			
WG567869CCV2	CCV	06/13/23 17:27	MS230606-3	.1002		.1007	mg/L	100	90	110			
WG567869CCB2	CCB	06/13/23 17:30				U	mg/L		-0.0006	0.0006			
WG567869CCV3	CCV	06/13/23 17:48	MS230606-3	.1002		.10208	mg/L	102	90	110			
WG567869CCB3	CCB	06/13/23 17:51				U	mg/L		-0.0006	0.0006			

Beryllium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	2		1.945	mg/L	97	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.03	0.03			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	.05005		.052	mg/L	104	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	.1001		.099	mg/L	99	80	120			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	.5005		.493	mg/L	99	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	.5005	U	.475	mg/L	95	85	115			
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	.5005	U	.478	mg/L	96	85	115	1	20	
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	1		.971	mg/L	97	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.03	0.03			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	1		.957	mg/L	96	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.03	0.03			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	1		.964	mg/L	96	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.03	0.03			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	2		1.953	mg/L	98	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.03	0.03			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	.05005		.054	mg/L	108	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	.1001		.102	mg/L	102	80	120			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	.5005		.49	mg/L	98	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	1		.955	mg/L	96	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.03	0.03			
L80771-01AS	AS	06/07/23 3:08	II230530-2	.5005	U	.483	mg/L	97	85	115			
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	.5005	U	.486	mg/L	97	85	115	1	20	
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	1		.971	mg/L	97	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.03	0.03			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	1		.951	mg/L	95	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L80783***

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

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	2		1.985	mg/L	99	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.09	0.09			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	.1001		.101	mg/L	101	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	.1001		.097	mg/L	97	80	120			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	.5005		.483	mg/L	97	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	.5005	.166	.648	mg/L	96	85	115			
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	.5005	.166	.655	mg/L	98	85	115	1	20	
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	1		.996	mg/L	100	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.09	0.09			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	1		.99	mg/L	99	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.09	0.09			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	1		.998	mg/L	100	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.09	0.09			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	2		1.992	mg/L	100	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.09	0.09			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	.1001		.099	mg/L	99	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	.1001		.096	mg/L	96	80	120			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	.5005		.486	mg/L	97	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	1		.976	mg/L	98	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.09	0.09			
L80771-01AS	AS	06/07/23 3:08	II230530-2	.5005	U	.523	mg/L	104	85	115			
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	.5005	U	.52	mg/L	104	85	115	1	20	
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	1		.994	mg/L	99	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.09	0.09			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	1		.976	mg/L	98	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.09	0.09			

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567869													
WG567869ICV	ICV	06/13/23 16:36	MS230410-7	.05		.052625	mg/L	105	90	110			
WG567869ICB	ICB	06/13/23 16:38				U	mg/L		-0.00011	0.00011			
WG567869LFB	LFB	06/13/23 16:40	MS230605-2	.05005		.052489	mg/L	105	85	115			
L80783-02AS	AS	06/13/23 16:47	MS230605-2	.1001	.000123	.102533	mg/L	102	70	130			
L80783-02ASD	ASD	06/13/23 16:50	MS230605-2	.1001	.000123	.104324	mg/L	104	70	130	2	20	
WG567869CCV1	CCV	06/13/23 17:04	MS230606-3	.1001		.105019	mg/L	105	90	110			
WG567869CCB1	CCB	06/13/23 17:06				U	mg/L		-0.00015	0.00015			
WG567869CCV2	CCV	06/13/23 17:27	MS230606-3	.1001		.107336	mg/L	107	90	110			
WG567869CCB2	CCB	06/13/23 17:30				U	mg/L		-0.00015	0.00015			
WG567869CCV3	CCV	06/13/23 17:48	MS230606-3	.1001		.107485	mg/L	107	90	110			
WG567869CCB3	CCB	06/13/23 17:51				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: ***L80783***

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

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	100		99.41	mg/L	99	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.3	0.3			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	.4999		.44	mg/L	88	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	200.4599		199.9	mg/L	100	1	200			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	67.98753		68.95	mg/L	101	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	67.98753	466	510.9	mg/L	66	85	115			M3
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	67.98753	466	508.7	mg/L	63	85	115	0	20	M3
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	50		49.2	mg/L	98	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.3	0.3			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	50		48.78	mg/L	98	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.3	0.3			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	50		48.99	mg/L	98	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.3	0.3			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	100		98.43	mg/L	98	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.3	0.3			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	.4999		.47	mg/L	94	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	200.4599		199.3	mg/L	99	1	200			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	67.98753		68.8	mg/L	101	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	50		47.98	mg/L	96	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.3	0.3			
L80771-01AS	AS	06/07/23 3:08	II230530-2	67.98753	502	542.2	mg/L	59	85	115			M3
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	67.98753	502	548.1	mg/L	68	85	115	1	20	M3
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	50		48.79	mg/L	98	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.3	0.3			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	50		47.56	mg/L	95	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.3	0.3			

GCC

ACZ Project ID: ***L80783***

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

Chloride SM4500Cl-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567520													
WG567520ICV	ICV	06/06/23 15:37	WI230501-8	55		55.28	mg/L	101	90	110			
WG567520ICB	ICB	06/06/23 15:38				U	mg/L						
WG567520LFB1	LFB	06/06/23 15:38	WI230202-6	30		29.04	mg/L	97	90	110			
WG567520CCV1	CCV	06/06/23 15:44	WI221021-5	49.95		51.03	mg/L	102	90	110			
WG567520CCB1	CCB	06/06/23 15:44				U	mg/L						
WG567520CCV2	CCV	06/06/23 15:50	WI221021-5	49.95		51.58	mg/L	103	90	110			
WG567520CCB2	CCB	06/06/23 15:50				U	mg/L						
WG567520CCV11	CCV	06/06/23 17:08	WI221021-5	49.95		50.47	mg/L	101	90	110			
WG567520CCB11	CCB	06/06/23 17:08				U	mg/L						
WG567520LFB2	LFB	06/06/23 17:11	WI230202-6	30		29.08	mg/L	97	90	110			
L80778-01AS	AS	06/06/23 17:13	WI230202-6	30	69.3	92.52	mg/L	77	90	110			M2
WG567520CCV3	CCV	06/06/23 17:14	WI221021-5	49.95		51.29	mg/L	103	90	110			
WG567520CCB3	CCB	06/06/23 17:14				U	mg/L						
L80783-01DUP	DUP	06/06/23 17:14			1730	1617.23	mg/L				7	20	
WG567520CCV12	CCV	06/06/23 17:18	WI221021-5	49.95		50.96	mg/L	102	90	110			
WG567520CCB12	CCB	06/06/23 17:19				U	mg/L						
WG567520CCV13	CCV	06/07/23 9:51	WI221021-5	49.95		49.14	mg/L	98	90	110			
WG567520CCB13	CCB	06/07/23 9:52				U	mg/L						
WG567520CCV14	CCV	06/07/23 9:53	WI221021-5	49.95		48.91	mg/L	98	90	110			
WG567520CCB14	CCB	06/07/23 9:54				U	mg/L						

GCC

ACZ Project ID: ***L80783***

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

Chromium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	2		1.954	mg/L	98	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.06	0.06			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	.05005		.052	mg/L	104	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	.1001		.099	mg/L	99	80	120			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	.5005		.49	mg/L	98	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	.5005	U	.483	mg/L	97	85	115			
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	.5005	U	.481	mg/L	96	85	115	0	20	
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	1		.976	mg/L	98	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.06	0.06			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	1		.966	mg/L	97	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.06	0.06			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	1		.973	mg/L	97	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.06	0.06			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	2		1.96	mg/L	98	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.06	0.06			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	.05005		.053	mg/L	106	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	.1001		.103	mg/L	103	80	120			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	.5005		.489	mg/L	98	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	1		.967	mg/L	97	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.06	0.06			
L80771-01AS	AS	06/07/23 3:08	II230530-2	.5005	U	.487	mg/L	97	85	115			
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	.5005	U	.491	mg/L	98	85	115	1	20	
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	1		.981	mg/L	98	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.06	0.06			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	1		.956	mg/L	96	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.06	0.06			

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567869													
WG567869ICV	ICV	06/13/23 16:36	MS230410-7	.05		.050751	mg/L	102	90	110			
WG567869ICB	ICB	06/13/23 16:38				U	mg/L		-0.00011	0.00011			
WG567869LFB	LFB	06/13/23 16:40	MS230605-2	.05005		.050585	mg/L	101	85	115			
L80783-02AS	AS	06/13/23 16:47	MS230605-2	.1001	.00022	.096229	mg/L	96	70	130			
L80783-02ASD	ASD	06/13/23 16:50	MS230605-2	.1001	.00022	.093546	mg/L	93	70	130	3	20	
WG567869CCV1	CCV	06/13/23 17:04	MS230606-3	.1001		.10339	mg/L	103	90	110			
WG567869CCB1	CCB	06/13/23 17:06				U	mg/L		-0.00015	0.00015			
WG567869CCV2	CCV	06/13/23 17:27	MS230606-3	.1001		.104408	mg/L	104	90	110			
WG567869CCB2	CCB	06/13/23 17:30				U	mg/L		-0.00015	0.00015			
WG567869CCV3	CCV	06/13/23 17:48	MS230606-3	.1001		.106058	mg/L	106	90	110			
WG567869CCB3	CCB	06/13/23 17:51				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: ***L80783***

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

Copper, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	2		1.98	mg/L	99	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.03	0.03			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	.05005		.05	mg/L	100	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	.1001		.098	mg/L	98	80	120			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	.5005		.489	mg/L	98	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	.5005	U	.516	mg/L	103	85	115			
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	.5005	U	.517	mg/L	103	85	115	0	20	
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	1		.988	mg/L	99	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.03	0.03			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	1		.982	mg/L	98	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.03	0.03			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	1		.978	mg/L	98	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.03	0.03			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	2		1.977	mg/L	99	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.03	0.03			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	.05005		.052	mg/L	104	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	.1001		.102	mg/L	102	80	120			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	.5005		.487	mg/L	97	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	1		.959	mg/L	96	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.03	0.03			
L80771-01AS	AS	06/07/23 3:08	II230530-2	.5005	U	.512	mg/L	102	85	115			
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	.5005	U	.516	mg/L	103	85	115	1	20	
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	1		.982	mg/L	98	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.03	0.03			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	1		.96	mg/L	96	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L80783***

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

Fluoride SM4500F-C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG568253													
WG568253ICV	ICV	06/15/23 15:55	WC230614-1	2.002		1.9	mg/L	95	90	110			
WG568253ICB	ICB	06/15/23 16:03				U	mg/L		-0.3	0.3			
WG568253PQV	PQV	06/15/23 16:08	WC230522-7	.3514		.34	mg/L	97	70	130			
WG568253LFB1	LFB	06/15/23 16:13	WC221227-7	5.02		4.75	mg/L	95	90	110			
WG568253CCV1	CCV	06/15/23 17:05	WC230614-1	2.002		1.826	mg/L	91	90	110			
WG568253CCB1	CCB	06/15/23 17:11				U	mg/L		-0.3	0.3			
L80718-04AS	AS	06/15/23 17:36	WC221227-7	5.02	U	4.66	mg/L	93	90	110			
L80718-04ASD	ASD	06/15/23 17:41	WC221227-7	5.02	U	4.7	mg/L	94	90	110	1	20	
WG568253CCV2	CCV	06/15/23 18:07	WC230614-1	2.002		1.818	mg/L	91	90	110			
WG568253CCB2	CCB	06/15/23 18:14				U	mg/L		-0.3	0.3			
WG568253LFB2	LFB	06/15/23 18:45	WC221227-7	5.02		4.72	mg/L	94	90	110			
L80783-04AS	AS	06/15/23 18:56	WC221227-7	5.02	.41	4.36	mg/L	79	90	110			M2
L80783-04ASD	ASD	06/15/23 19:01	WC221227-7	5.02	.41	4.49	mg/L	81	90	110	3	20	M2
WG568253CCV3	CCV	06/15/23 19:12	WC230614-1	2.002		1.861	mg/L	93	90	110			
WG568253CCB3	CCB	06/15/23 19:20				U	mg/L		-0.3	0.3			
WG568253CCV4	CCV	06/15/23 20:15	WC230614-1	2.002		1.969	mg/L	98	90	110			
WG568253CCB4	CCB	06/15/23 20:22				U	mg/L		-0.3	0.3			
WG568253CCV5	CCV	06/15/23 21:24	WC230614-1	2.002		1.923	mg/L	96	90	110			
WG568253CCB5	CCB	06/15/23 21:31				U	mg/L		-0.3	0.3			

GCC

ACZ Project ID: ***L80783***

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

Iron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	2		1.899	mg/L	95	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.18	0.18			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	.1506		.151	mg/L	100	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	200.9506		188.5	mg/L	94	1	200			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	1.004		.983	mg/L	98	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	1.004	.092	1.043	mg/L	95	85	115			
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	1.004	.092	1.044	mg/L	95	85	115	0	20	
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	1		.957	mg/L	96	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.18	0.18			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	1		.932	mg/L	93	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.18	0.18			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	1		.943	mg/L	94	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.18	0.18			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	2		1.908	mg/L	95	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.18	0.18			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	.1506		.152	mg/L	101	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	200.9506		191.5	mg/L	95	1	200			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	1.004		.974	mg/L	97	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	1		.942	mg/L	94	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.18	0.18			
L80771-01AS	AS	06/07/23 3:08	II230530-2	1.004	U	.976	mg/L	97	85	115			
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	1.004	U	.968	mg/L	96	85	115	1	20	
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	1		.952	mg/L	95	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.18	0.18			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	1		.935	mg/L	94	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.18	0.18			

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567869													
WG567869ICV	ICV	06/13/23 16:36	MS230410-7	.05		.05154	mg/L	103	90	110			
WG567869ICB	ICB	06/13/23 16:38				U	mg/L		-0.00022	0.00022			
WG567869LFB	LFB	06/13/23 16:40	MS230605-2	.05005		.04981	mg/L	100	85	115			
L80783-02AS	AS	06/13/23 16:47	MS230605-2	.1001	.00043	.10832	mg/L	108	70	130			
L80783-02ASD	ASD	06/13/23 16:50	MS230605-2	.1001	.00043	.10439	mg/L	104	70	130	4	20	
WG567869CCV1	CCV	06/13/23 17:04	MS230606-3	.25025		.25752	mg/L	103	90	110			
WG567869CCB1	CCB	06/13/23 17:06				U	mg/L		-0.0003	0.0003			
WG567869CCV2	CCV	06/13/23 17:27	MS230606-3	.25025		.25444	mg/L	102	90	110			
WG567869CCB2	CCB	06/13/23 17:30				U	mg/L		-0.0003	0.0003			
WG567869CCV3	CCV	06/13/23 17:48	MS230606-3	.25025		.2522	mg/L	101	90	110			
WG567869CCB3	CCB	06/13/23 17:51				U	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: ***L80783***

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

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	2		2.0005	mg/L	100	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.024	0.024			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	.04012		.0381	mg/L	95	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	.1003		.108	mg/L	108	80	120			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	1.003		.9951	mg/L	99	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	1.003	.453	1.588	mg/L	113	85	115			
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	1.003	.453	1.588	mg/L	113	85	115	0	20	
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	1		.9897	mg/L	99	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.024	0.024			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	1		.9788	mg/L	98	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.024	0.024			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	1		.9816	mg/L	98	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.024	0.024			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	2		2.0055	mg/L	100	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.024	0.024			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	.04012		.0414	mg/L	103	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	.1003		.1113	mg/L	111	80	120			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	1.003		1	mg/L	100	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	1		.9677	mg/L	97	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.024	0.024			
L80771-01AS	AS	06/07/23 3:08	II230530-2	1.003	.084	1.171	mg/L	108	85	115			
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	1.003	.084	1.149	mg/L	106	85	115	2	20	
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	1		.9825	mg/L	98	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.024	0.024			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	1		.9698	mg/L	97	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.024	0.024			

GCC

ACZ Project ID: ***L80783***

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

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	100		99.43	mg/L	99	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.6	0.6			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	1.0023		.93	mg/L	93	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	201.4623		205.7	mg/L	102	1	200			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	49.99752		50.58	mg/L	101	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	49.99752	519	548.5	mg/L	59	85	115			M3
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	49.99752	519	551.4	mg/L	65	85	115	1	20	M3
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	50		49.07	mg/L	98	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.6	0.6			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	50		48.16	mg/L	96	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.6	0.6			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	50		48.81	mg/L	98	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.6	0.6			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	100		98.29	mg/L	98	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.6	0.6			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	1.0023		1.01	mg/L	101	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	201.4623		205.6	mg/L	102	1	200			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	49.99752		50.31	mg/L	101	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	50		48	mg/L	96	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.6	0.6			
L80771-01AS	AS	06/07/23 3:08	II230530-2	49.99752	77.1	124.9	mg/L	96	85	115			
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	49.99752	77.1	123.9	mg/L	94	85	115	1	20	
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	50		48.47	mg/L	97	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.6	0.6			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	50		47.42	mg/L	95	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L80783***

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

Manganese, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	2		1.931	mg/L	97	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.03	0.03			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	.0498		.048	mg/L	96	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	49.9998		47.26	mg/L	95	1	200			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	.4995		.496	mg/L	99	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	.4995	U	.5	mg/L	100	85	115			
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	.4995	U	.502	mg/L	101	85	115	0	20	
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	1		.967	mg/L	97	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.03	0.03			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	1		.953	mg/L	95	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.03	0.03			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	1		.961	mg/L	96	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.03	0.03			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	2		1.935	mg/L	97	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.03	0.03			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	.0498		.047	mg/L	94	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	49.9998		47.9	mg/L	96	1	200			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	.4995		.489	mg/L	98	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	1		.953	mg/L	95	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.03	0.03			
L80771-01AS	AS	06/07/23 3:08	II230530-2	.4995	2.55	2.913	mg/L	73	85	115			M3
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	.4995	2.55	2.896	mg/L	69	85	115	1	20	M3
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	1		.966	mg/L	97	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.03	0.03			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	1		.945	mg/L	95	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L80783***

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

Mercury, dissolved M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567378													
WG567378ICV	ICV	06/06/23 9:02	HG230530-3	.005		.00496	mg/L	99	95	105			
WG567378ICB	ICB	06/06/23 9:03				U	mg/L		-0.0002	0.0002			
WG567380													
WG567380CCV1	CCV	06/06/23 10:33	HG230530-3	.005		.00489	mg/L	98	90	110			
WG567380CCB1	CCB	06/06/23 10:34				U	mg/L		-0.0002	0.0002			
WG567380PQV	PQV	06/06/23 10:35	HG230530-5	.001001		.00092	mg/L	92	70	130			
WG567380LRB	LRB	06/06/23 10:36				U	mg/L		-0.00044	0.00044			
WG567380LFB	LFB	06/06/23 10:36	HG230530-6	.002002		.00186	mg/L	93	85	115			
WG567380CCV2	CCV	06/06/23 10:44	HG230530-3	.005		.00503	mg/L	101	90	110			
WG567380CCB2	CCB	06/06/23 10:45				U	mg/L		-0.0002	0.0002			
WG567380CCV3	CCV	06/06/23 10:55	HG230530-3	.005		.00514	mg/L	103	90	110			
WG567380CCB3	CCB	06/06/23 10:56				U	mg/L		-0.0002	0.0002			
L80725-07LFM	LFM	06/06/23 10:59	HG230530-6	.002002	U	.00188	mg/L	94	85	115			
L80725-07LFMD	LFMD	06/06/23 11:00	HG230530-6	.002002	U	.00191	mg/L	95	85	115	2	20	
WG567380CCV4	CCV	06/06/23 11:04	HG230530-3	.005		.00503	mg/L	101	90	110			
WG567380CCB4	CCB	06/06/23 11:05				U	mg/L		-0.0002	0.0002			
WG567498													
WG567498CCV1	CCV	06/06/23 14:34	HG230530-3	.005		.00487	mg/L	97	90	110			
WG567498CCB1	CCB	06/06/23 14:35				U	mg/L		-0.0002	0.0002			
WG567498PQV	PQV	06/06/23 14:36	HG230530-5	.001001		.00097	mg/L	97	70	130			
WG567498LRB	LRB	06/06/23 14:37				U	mg/L		-0.00044	0.00044			
WG567498LFB	LFB	06/06/23 14:38	HG230530-6	.002002		.00199	mg/L	99	85	115			
L80642-01LFM	LFM	06/06/23 14:39	HG230530-6	.002002	U	.00198	mg/L	99	85	115			
L80642-01LFMD	LFMD	06/06/23 14:40	HG230530-6	.002002	U	.00203	mg/L	101	85	115	2	20	
WG567498CCV2	CCV	06/06/23 14:45	HG230530-3	.005		.00499	mg/L	100	90	110			
WG567498CCB2	CCB	06/06/23 14:46				U	mg/L		-0.0002	0.0002			
WG567498CCV3	CCV	06/06/23 14:56	HG230530-3	.005		.0049	mg/L	98	90	110			
WG567498CCB3	CCB	06/06/23 14:57				U	mg/L		-0.0002	0.0002			
WG567498CCV4	CCV	06/06/23 15:05	HG230530-3	.005		.005	mg/L	100	90	110			
WG567498CCB4	CCB	06/06/23 15:06				U	mg/L		-0.0002	0.0002			

GCC

ACZ Project ID: ***L80783***

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

Nickel, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	2.002		2.0088	mg/L	100	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.024	0.024			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	.04		.0442	mg/L	111	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	.1		.0996	mg/L	100	80	120			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	.5		.5091	mg/L	102	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	.5	.0227	.5122	mg/L	98	85	115			
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	.5	.0227	.5134	mg/L	98	85	115	0	20	
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	1.001		1.027	mg/L	103	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.024	0.024			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	1.001		1.012	mg/L	101	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.024	0.024			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	1.001		1.023	mg/L	102	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.024	0.024			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	2.002		1.9735	mg/L	99	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.024	0.024			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	.04		.0445	mg/L	111	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	.1		.097	mg/L	97	80	120			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	.5		.4955	mg/L	99	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	1.001		.9899	mg/L	99	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.024	0.024			
L80771-01AS	AS	06/07/23 3:08	II230530-2	.5	U	.494	mg/L	99	85	115			
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	.5	U	.496	mg/L	99	85	115	0	20	
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	1.001		1.002	mg/L	100	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.024	0.024			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	1.001		.9769	mg/L	98	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.024	0.024			

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

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567174													
WG567174ICV	ICV	05/31/23 23:49	WI230301-5	2.416		2.308	mg/L	96	90	110			
WG567174ICB	ICB	05/31/23 23:50				U	mg/L		-0.02	0.02			
WG567174LFB	LFB	05/31/23 23:54	WI230228-3	2		2.052	mg/L	103	90	110			
WG567174CCV1	CCV	06/01/23 0:04	WI230531-7	2		1.984	mg/L	99	90	110			
WG567174CCB1	CCB	06/01/23 0:07				U	mg/L		-0.02	0.02			
L80780-04AS	AS	06/01/23 0:16	WI230228-3	2	.028	2.025	mg/L	100	90	110			
L80780-05DUP	DUP	06/01/23 0:19			.217	.216	mg/L				0	20	
WG567174CCV2	CCV	06/01/23 0:21	WI230531-7	2		1.983	mg/L	99	90	110			
WG567174CCB2	CCB	06/01/23 0:24				U	mg/L		-0.02	0.02			
WG567174CCV3	CCV	06/01/23 0:38	WI230531-7	2		1.936	mg/L	97	90	110			
WG567174CCB3	CCB	06/01/23 0:41				U	mg/L		-0.02	0.02			

GCC

ACZ Project ID: ***L80783***

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

Nitrite as N M353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567174													
WG567174ICV	ICV	05/31/23 23:49	WI230301-5	.608		.597	mg/L	98	90	110			
WG567174ICB	ICB	05/31/23 23:50				U	mg/L		-0.01	0.01			
WG567174LFB	LFB	05/31/23 23:54	WI230228-3	1		1.017	mg/L	102	90	110			
WG567174CCV1	CCV	06/01/23 0:04	WI230531-7	1		.983	mg/L	98	90	110			
WG567174CCB1	CCB	06/01/23 0:07				U	mg/L		-0.01	0.01			
L80780-04AS	AS	06/01/23 0:16	WI230228-3	1	U	1.006	mg/L	101	90	110			
L80780-05DUP	DUP	06/01/23 0:19			U	U	mg/L				0	20	RA
WG567174CCV2	CCV	06/01/23 0:21	WI230531-7	1		.99	mg/L	99	90	110			
WG567174CCB2	CCB	06/01/23 0:24				U	mg/L		-0.01	0.01			
WG567174CCV3	CCV	06/01/23 0:38	WI230531-7	1		.974	mg/L	97	90	110			
WG567174CCB3	CCB	06/01/23 0:41				U	mg/L		-0.01	0.01			

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	20		19.65	mg/L	98	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.6	0.6			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	1.005		.98	mg/L	98	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	1.005		.94	mg/L	94	80	120			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	99.95693		99.13	mg/L	99	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	99.95693	13.1	119.9	mg/L	107	85	115			
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	99.95693	13.1	119.9	mg/L	107	85	115	0	20	
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	10		9.74	mg/L	97	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.6	0.6			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	10		9.72	mg/L	97	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.6	0.6			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	10		9.77	mg/L	98	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.6	0.6			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	20		19.5	mg/L	98	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.6	0.6			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	1.005		1.1	mg/L	109	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	1.005		1.07	mg/L	106	80	120			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	99.95693		98.81	mg/L	99	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	10		9.54	mg/L	95	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.6	0.6			
L80771-01AS	AS	06/07/23 3:08	II230530-2	99.95693	14.2	118.4	mg/L	104	85	115			
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	99.95693	14.2	118.2	mg/L	104	85	115	0	20	
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	10		9.77	mg/L	98	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.6	0.6			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	10		9.67	mg/L	97	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L80783***

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

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567419													
WG567419PBW	PBW	06/05/23 12:30				U	mg/L		-20	20			
WG567419LCSW	LCSW	06/05/23 12:32	PCN625110	1000		992	mg/L	99	80	120			
L80798-06DUP	DUP	06/05/23 13:06			1700	1714	mg/L				1	10	
WG568035													
WG568035PBW	PBW	06/13/23 15:00				U	mg/L		-20	20			
WG568035LCSW	LCSW	06/13/23 15:02	PCN623499	1000		988	mg/L	99	80	120			
L81025-05DUP	DUP	06/13/23 15:31			540	538	mg/L				0	10	

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567869													
WG567869ICV	ICV	06/13/23 16:36	MS230410-7	.05		.04881	mg/L	98	90	110			
WG567869ICB	ICB	06/13/23 16:38				.00012	mg/L		-0.00022	0.00022			
WG567869LFB	LFB	06/13/23 16:40	MS230605-2	.05005		.04876	mg/L	97	85	115			
L80783-02AS	AS	06/13/23 16:47	MS230605-2	.1001		.08748	mg/L	87	70	130			
L80783-02ASD	ASD	06/13/23 16:50	MS230605-2	.1001		.08619	mg/L	86	70	130	1	20	
WG567869CCV1	CCV	06/13/23 17:04	MS230606-3	.1001		.09939	mg/L	99	90	110			
WG567869CCB1	CCB	06/13/23 17:06				.00013	mg/L		-0.0003	0.0003			
WG567869CCV2	CCV	06/13/23 17:27	MS230606-3	.1001		.10062	mg/L	101	90	110			
WG567869CCB2	CCB	06/13/23 17:30				U	mg/L		-0.0003	0.0003			
WG567869CCV3	CCV	06/13/23 17:48	MS230606-3	.1001		.0994	mg/L	99	90	110			
WG568484													
WG568484ICV	ICV	06/19/23 17:14	MS230410-7	.05		.04811	mg/L	96	90	110			
WG568484ICB	ICB	06/19/23 17:16				U	mg/L		-0.00022	0.00022			
WG568484LFB	LFB	06/19/23 17:18	MS230619-2	.05005		.04955	mg/L	99	85	115			
L80869-02AS	AS	06/19/23 17:30	MS230619-2	.05005	U	.05258	mg/L	105	70	130			
L80869-02ASD	ASD	06/19/23 17:32	MS230619-2	.05005	U	.05189	mg/L	104	70	130	1	20	
WG568484CCV1	CCV	06/19/23 17:41	MS230616-2	.1001		.0997	mg/L	100	90	110			
WG568484CCB1	CCB	06/19/23 17:44				.00011	mg/L		-0.0003	0.0003			
WG568484CCV2	CCV	06/19/23 18:09	MS230616-2	.1001		.09718	mg/L	97	90	110			
WG568484CCB2	CCB	06/19/23 18:12				.00011	mg/L		-0.0003	0.0003			
WG568484CCV3	CCV	06/19/23 18:26	MS230616-2	.1001		.09922	mg/L	99	90	110			
WG568484CCB3	CCB	06/19/23 18:28				.00011	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: ***L80783***

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

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	100		102.25	mg/L	102	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.6	0.6			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	1.000141		.92	mg/L	92	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	1.000141		.98	mg/L	98	80	120			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	100.0094		101.8	mg/L	102	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	100.0094	360	454.6	mg/L	95	85	115			
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	100.0094	360	449.4	mg/L	89	85	115	1	20	
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	50		50.76	mg/L	102	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.6	0.6			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	50		50.27	mg/L	101	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.6	0.6			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	50		50.65	mg/L	101	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.6	0.6			
WG567619													
WG567619ICV	ICV	06/07/23 21:26	II230516-3	100		102.18	mg/L	102	95	105			
WG567619ICB	ICB	06/07/23 21:32				U	mg/L		-0.6	0.6			
WG567619PQV	PQV	06/07/23 21:36	II230516-2	1.000141		1.01	mg/L	101	70	130			
WG567619SIC	SIC	06/07/23 21:39	II230601-2	1.000141		1	mg/L	100	80	120			
WG567619LFB	LFB	06/07/23 21:45	II230530-2	100.0094		99.24	mg/L	99	85	115			
L80791-04AS	AS	06/07/23 22:05	II230530-2	10000.94	16500	27240	mg/L	107	85	115			
L80791-04ASD	ASD	06/07/23 22:08	II230530-2	10000.94	16500	26660	mg/L	102	85	115	2	20	
WG567619CCV1	CCV	06/07/23 22:18	II230525-1	50		50.01	mg/L	100	90	110			
WG567619CCB1	CCB	06/07/23 22:21				U	mg/L		-0.6	0.6			
WG567619CCV2	CCV	06/07/23 22:58	II230525-1	50		50.3	mg/L	101	90	110			
WG567619CCB2	CCB	06/07/23 23:01				U	mg/L		-0.6	0.6			
WG567619CCV3	CCV	06/07/23 23:22	II230525-1	50		50.46	mg/L	101	90	110			
WG567619CCB3	CCB	06/07/23 23:25				U	mg/L		-0.6	0.6			

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

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG568213													
WG568213ICB	ICB	06/15/23 11:39				U	mg/L		-3	3			
WG568213ICV	ICV	06/15/23 11:39	WI230614-2	20		20.3	mg/L	102	90	110			
WG568213CCV1	CCV	06/15/23 11:49	WI230614-1	25		24.4	mg/L	98	90	110			
WG568213CCB1	CCB	06/15/23 11:49				U	mg/L		-3	3			
WG568213LFB	LFB	06/15/23 11:49	WI230119-9	10		9.7	mg/L	97	90	110			
WG568213CCV2	CCV	06/15/23 11:51	WI230614-1	25		24.7	mg/L	99	90	110			
WG568213CCB2	CCB	06/15/23 11:51				U	mg/L		-3	3			
WG568213CCV3	CCV	06/15/23 12:35	WI230614-1	25		24.2	mg/L	97	90	110			
WG568213CCB3	CCB	06/15/23 12:35				U	mg/L		-3	3			
WG568213CCV4	CCV	06/15/23 12:37	WI230614-1	25		23.7	mg/L	95	90	110			
WG568213CCB4	CCB	06/15/23 12:37				U	mg/L		-3	3			
L80783-02AS	AS	06/15/23 12:39	SO4TURB5X	10	63.7	70.5	mg/L	68	90	110			M2
L80783-03DUP	DUP	06/15/23 12:39			1430	1318.4	mg/L				8	20	
WG568213CCV5	CCV	06/15/23 12:41	WI230614-1	25		24.4	mg/L	98	90	110			
WG568213CCB5	CCB	06/15/23 12:41				U	mg/L		-3	3			

GCC

ACZ Project ID: ***L80783***

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

Vanadium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	2		1.965	mg/L	98	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.015	0.015			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	.025025		.024	mg/L	96	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	.1001		.081	mg/L	81	80	120			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	.5005		.4925	mg/L	98	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	.5005	U	.4929	mg/L	98	85	115			
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	.5005	U	.493	mg/L	99	85	115	0	20	
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	1		.979	mg/L	98	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.03	0.03			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	1		.969	mg/L	97	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.03	0.03			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	1		.972	mg/L	97	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.03	0.03			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	2		1.96	mg/L	98	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.015	0.015			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	.025025		.028	mg/L	112	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	.1001		.081	mg/L	81	80	120			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	.5005		.4961	mg/L	99	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	1		.955	mg/L	96	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.03	0.03			
L80771-01AS	AS	06/07/23 3:08	II230530-2	.5005	U	.5001	mg/L	100	85	115			
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	.5005	U	.499	mg/L	100	85	115	0	20	
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	1		.97	mg/L	97	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.03	0.03			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	1		.95	mg/L	95	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L80783***

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

Zinc, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG567506													
WG567506ICV	ICV	06/06/23 19:40	II230516-3	2		1.954	mg/L	98	95	105			
WG567506ICB	ICB	06/06/23 19:46				U	mg/L		-0.06	0.06			
WG567506PQV	PQV	06/06/23 19:49	II230516-2	.05005		.051	mg/L	102	70	130			
WG567506SIC	SIC	06/06/23 19:52	II230601-2	.1001		.113	mg/L	113	80	120			
WG567506LFB	LFB	06/06/23 19:58	II230530-2	.50045		.512	mg/L	102	85	115			
L80783-04AS	AS	06/06/23 20:08	II230530-2	.50045	U	.526	mg/L	105	85	115			
L80783-04ASD	ASD	06/06/23 20:11	II230530-2	.50045	U	.524	mg/L	105	85	115	0	20	
WG567506CCV1	CCV	06/06/23 20:29	II230525-1	1		.971	mg/L	97	90	110			
WG567506CCB1	CCB	06/06/23 20:32				U	mg/L		-0.06	0.06			
WG567506CCV2	CCV	06/06/23 21:06	II230525-1	1		.959	mg/L	96	90	110			
WG567506CCB2	CCB	06/06/23 21:09				U	mg/L		-0.06	0.06			
WG567506CCV3	CCV	06/06/23 21:28	II230525-1	1		.969	mg/L	97	90	110			
WG567506CCB3	CCB	06/06/23 21:31				U	mg/L		-0.06	0.06			
WG567499													
WG567499ICV	ICV	06/07/23 2:02	II230516-3	2		1.909	mg/L	95	95	105			
WG567499ICB	ICB	06/07/23 2:07				U	mg/L		-0.06	0.06			
WG567499PQV	PQV	06/07/23 2:10	II230516-2	.05005		.049	mg/L	98	70	130			
WG567499SIC	SIC	06/07/23 2:13	II230601-2	.1001		.093	mg/L	93	80	120			
WG567499LFB	LFB	06/07/23 2:20	II230530-2	.50045		.506	mg/L	101	85	115			
WG567499CCV1	CCV	06/07/23 2:50	II230525-1	1		.946	mg/L	95	90	110			
WG567499CCB1	CCB	06/07/23 2:53				U	mg/L		-0.06	0.06			
L80771-01AS	AS	06/07/23 3:08	II230530-2	.50045	U	.5	mg/L	100	85	115			
L80771-01ASD	ASD	06/07/23 3:11	II230530-2	.50045	U	.496	mg/L	99	85	115	1	20	
WG567499CCV2	CCV	06/07/23 3:27	II230525-1	1		.955	mg/L	96	90	110			
WG567499CCB2	CCB	06/07/23 3:30				U	mg/L		-0.06	0.06			
WG567499CCV3	CCV	06/07/23 3:48	II230525-1	1		.93	mg/L	93	90	110			
WG567499CCB3	CCB	06/07/23 3:51				U	mg/L		-0.06	0.06			

GCC Rio Grande ACZ Project ID: ***L80783***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L80783-01	WG567499	Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567520	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567499	Manganese, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567174	Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG567419	Residue, Filterable (TDS) @180C	SM2540C	Z5	Oven temperature observed out of range. Sample and Quality Control attained a consistent weight and all Quality controls were within limits. Reanalyze at client request
	WG568484	Selenium, dissolved	M200.8 ICP-MS	DB	Sample required dilution due to low bias result.
	WG568213	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
L80783-02	WG567499	Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567520	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567499	Manganese, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567174	Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG567419	Residue, Filterable (TDS) @180C	SM2540C	Z5	Oven temperature observed out of range. Sample and Quality Control attained a consistent weight and all Quality controls were within limits. Reanalyze at client request
	WG568484	Selenium, dissolved	M200.8 ICP-MS	DB	Sample required dilution due to low bias result.
	WG568213	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
L80783-03	WG567499	Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567520	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567499	Manganese, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567174	Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG567419	Residue, Filterable (TDS) @180C	SM2540C	Z5	Oven temperature observed out of range. Sample and Quality Control attained a consistent weight and all Quality controls were within limits. Reanalyze at client request
	WG568213	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.

GCC Rio Grande ACZ Project ID: ***L80783***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L80783-04	WG567506	Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567520	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG568253	Fluoride	SM4500F-C	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567506	Magnesium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567174	Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG568035	Residue, Filterable (TDS) @180C	SM2540C	H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
			SM2540C	N1	See Case Narrative.
	WG568213	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
L80783-05	WG567506	Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567520	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG568253	Fluoride	SM4500F-C	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567506	Magnesium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG567174	Nitrite as N	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG568035	Residue, Filterable (TDS) @180C	SM2540C	H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
			SM2540C	N1	See Case Narrative.
	WG568213	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.

Certification Qualifiers

GCC Rio Grande ACZ Project ID: ***L80783***

No certification qualifiers associated with this analysis

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

Sample Receipt

GCC Rio Grande
183230

ACZ Project ID: L80783
Date Received: 05/31/2023 11:41
Received By:
Date Printed: 6/1/2023

Receipt Verification

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

Samples/Containers

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

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
NA40378	5.9	<=6.0	15	Yes

Was ice present in the shipment container(s)?

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

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

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

Sample Receipt

GCC Rio Grande
183230

ACZ Project ID: L80783
Date Received: 05/31/2023 11:41
Received By:
Date Printed: 6/1/2023

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L80783

CHAIN of CUSTODY

Report to:

Name: Amy Veek	Address: 3372 Lime Road
Company: GCC Rio Grande Inc	Pueblo CO 81004
E-mail: aveek@gcc.com	Telephone: 719-647-6861

Copy of Report to:

Name: Landon Beck	E-mail: lbeck@resourcehydrogeologic.com
Company: Resource Hydrogeologic	Telephone: (970) 459-4865

Invoice to:

Name: Amy Veek	Address: 3372 Lime Road
Company: GCC Rio Grande Inc	Pueblo CO 81004
E-mail: aveek@gcc.com	Telephone: 719-647-6861

Copy of Invoice to:

Name:	Address:
Company:	
E-mail:	Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes No ✓

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: David Bemis **Sampler's Site Information** **State** CO **Zip code** 81004 **Time Zone** MDT

***Sampler's Signature:** _____

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: GW-COMPLIANCE

PO#: 183230

Reporting state for compliance testing:

Check box if samples include NRC licensed material?

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	GW-COmpliance							
MW-14	5/30/2023 10:54	GW	3	✓							
MW-13	5/30/2023 12:57	GW	3	✓							
MW-8	5/30/2023 13:55	GW	3	✓							
MW-7	5/30/2023 14:46	GW	3	✓							
MW-6	5/30/2023 15:15	GW	3	✓							

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
Landon Beck	16:45	Landon Beck	5/30/23 1605
			5/31/23 1141

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

L80783 Chain of Custod

Location ID	Sample Date	Depth to Water (ft BTOC)	Field pH (SU)	Field Specific Conductance (µS/cm)	Field Temperature (Degrees C)	Total Dissolved Solids (mg/L)	Total Alkalinity (mg/L)	Bicarbonate as CaCO3 (mg/L)	Carbonate as CaCO3 (mg/L)	Hydroxide as CaCO3 (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Fluoride (mg/L)	Nitrate (mg/L)
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-6	1/3/2018	48.24	6.95	4720	14.0	----	----	----	----	----	----	----	----	----
MW-6	4/27/2018	41.31	7.20	6200	16.3	5030	----	----	----	----	----	----	<1.0	<0.10
MW-6	9/26/2018	DRY												
MW-6	12/12/2018	42.91	7.39	6500	14.9	----	----	----	----	----	----	----	<1.0	----
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	5620	----	----	----	----	----	----	0.60	12
MW-6	9/19/2019	28.15	----	----	----	5860	----	----	----	----	----	----	0.60	11
MW-6	12/9/2019	30.44	----	----	----	5460	----	----	----	----	----	----	<u>0.80</u>	<u>8.1</u>
MW-6	3/9/2020	32.30	7.22	5591	16.5	5780	----	----	----	----	----	----	0.70	2.02
MW-6	9/16/2020	29.78	7.20	5405	16.7	5480	----	----	----	----	----	----	0.50	0.05
MW-6	11/23/2020	30.92	7.25	5425	14.3	5300	----	----	----	----	----	----	0.57	<u>1.62</u>
MW-6	2/22/2021	36.61	7.55	5684	15.8	5780	----	----	----	----	----	----	0.62	0.07
MW-6	5/19/2021	46.32	7.43	5945	14.9	----	524	524	<2	<2	109	3200	0.57	0.03
MW-6	8/31/2021	26.18	7.32	6170	16.1	----	459	459	<2	<2	74.3	3390	0.58	4.2
MW-6	11/18/2021	29.70	7.18	7477	14.2	----	450	450	<2	<2	76.1	3750	0.62	0.846
MW-6	3/22/2022	36.00	7.23	5322	14.0	5200	321	321	<2	<2	48.5	3610	0.62	8.01
MW-6	5/17/2022	36.94	7.03	5726	16.7	5190	461	461	<2	<2	89.1	3140	0.57	3.24
MW-6	8/15/2022	36.78	7.02	5404	20.5	5410	421	421	<2	<2	68.7	3700	0.50	1.02
MW-6	11/7/2022	33.62	6.92	5311	15.7	5200	445	445	<2	<2	77.0	3180	0.79	<0.02
MW-6	3/6/2023	37.00	6.92	4358	15.9	5390	491	491	<2	<2	75.5	3200	0.52	<0.02
MW-6	5/30/2023	24.61	6.96	5847	18.2	<u>5380</u>	493	493	<2	<2	74.6	3150	0.52	0.321
MW-7	1/3/2018	42.91	6.86	4765	15.0	5510	----	----	----	----	----	----	0.42	----
MW-7	4/27/2018	39.09	6.85	5820	15.0	5270	----	----	----	----	----	----	<0.50	<0.050
MW-7	9/26/2018	DRY												
MW-7	12/12/2018	37.84	6.90	6093	14.0	----	----	----	----	----	----	----	<1.0	----
MW-7	3/7/2019	40.79	6.95	6020	13.7	5640	----	----	----	----	----	----	----	----
MW-7	6/12/2019	31.25	6.95	5997	18.0	5700	----	----	----	----	----	----	0.50	1.73
MW-7	9/18/2019	27.89	----	----	----	6740	----	----	----	----	----	----	0.50	<u>10</u>
MW-7	12/9/2019	29.51	----	----	----	5320	----	----	----	----	----	----	<u>0.50</u>	<u>14</u>
MW-7	3/9/2020	32.46	7.01	6459	15.8	6540	----	----	----	----	----	----	0.40	15
MW-7	9/16/2020	29.65	7.17	4772	15.2	4950	----	----	----	----	----	----	0.40	11
MW-7	11/23/2020	30.40	7.16	4999	14.3	5070	----	----	----	----	----	----	0.47	<u>11</u>
MW-7	2/22/2021	32.87	7.55	6077	14.4	6500	----	----	----	----	----	----	0.49	9.9
MW-7	5/19/2021	30.83	7.51	5464	15.2	----	309	309	<2	<2	51	3430	0.40	7.51
MW-7	8/31/2021	25.79	7.15	6061	15.4	----	467	467	<2	<2	96	3360	0.52	0.91
MW-7	11/18/2021	29.45	6.94	6589	13.9	----	299	299	<2	<2	53	3700	0.53	3.84
MW-7	3/22/2022	36.70	6.95	5654	15.1	5760	491	491	<2	<2	94	3650	0.57	1.22
MW-7	5/10/2022	37.61	6.86	5593	15.2	<u>5660</u>	477	477	<2	<2	104	3240	0.58	0.186
MW-7	8/15/2022	29.34	6.99	5905	20.0	6170	484	484	<2	<2	97	3810	0.50	0.151
MW-7	11/7/2022	33.53	7.08	4727	15.2	4690	250	250	<2	<2	41	3000	0.37	4.65
MW-7	3/6/2023	38.33	6.95	4958	15.6	6210	545	545	<2	<2	91	3630	0.55	0.263
MW-7	5/30/2023	25.46	7.03	5099	18.1	<u>5560</u>	358	358	<2	<2	47	3470	0.41	8.66
MW-8	3/9/2020	43.78	Inadequate volume for representative field parameters or lab sample submittal at time of water level measurement and then COVID-19 restrictions enacted before well could be revisited following purge											
MW-8	9/16/2020	29.74	Inadequate volume for representative field parameters or lab sample submittal after purge - sample collected 9/28/20 because well took 2 weeks to recover											
MW-8	9/28/2020	57.43	7.26	9179	14.7	7900	----	----	----	----	----	----	0.90	<0.02
MW-8	11/9/2020	37.26	Inadequate volume for representative field parameters or lab sample submittal after purge - sample collected 11/23/20 because well took 2 weeks to recover											
MW-8	11/23/2020	39.73	7.11	5327	13.9	4060	----	----	----	----	----	----	1.14	<u><0.050</u>
MW-8	2/22/2021	34.21	7.65	5476	14.8	4180	----	----	----	----	----	----	1.10	<0.02
MW-8	5/19/2021	34.56	7.60	5571	16.1	----	1200	1200	<2	<2	316	1520	0.89	0.99
MW-8	8/31/2021	25.75	7.32	6077	17.8	----	1080	1080	<2	<2	272	1820	1.00	<0.02
MW-8	11/18/2021	24.46	7.14	3852	14.7	----	1140	1140	<2	<2	283	1920	0.90	0.068
MW-8	3/28/2022	36.35	7.13	4545	15.1	3040	1020	1020	<2	<2	204	1090	0.92	0.029
MW-8	5/17/2022	37.93	7.12	5556	18.0	3630	1130	1130	<2	<2	315	1260	1.01	<0.02
MW-8	8/15/2022	30.25	7.18	5325	18.8	3790	1090	1090	<2	<2	291	1510	1.09	<0.02
MW-8	11/7/2022	32.00	7.15	5236	16.1	3840	1130	1130	<2	<2	297	1450	0.90	<0.02
MW-8	3/6/2023	33.76	7.19	4375	15.3	3600	1250	1250	<2	<2	280	1470	1.03	<0.02
MW-8	5/30/2023	27.25	7.14	5892	17.1	4000	1400	1400	<2	<2	288	1430	0.89	0.989
MW-9	3/28/2022	26.16	6.55	4834	15.0	4420	223	223	<2	<2	43.6	3200	0.49	0.513
MW-9	5/17/2022	26.32	6.59	5486	16.9	<u>4390</u>	232	232	<2	<2	44.4	2980	0.44	0.89
MW-9	8/15/2022	26.42	6.86	4998	18.9	4640	323	323	<2	<2	44.5	3160	0.43	0.038
MW-9	11/7/2022	26.37	6.81	4959	16.2	4590	347	347	<2	<2	45.9	2970	0.27	<0.02
MW-9	3/7/2023	26.52	6.90	4387	13.6	4600	389	389	<2	<2	44.4	2850	0.44	<0.02
MW-9	5/31/2023	26.68	6.85	5789	18.6	4740	407	407	<2	<2	49.4	3050	0.35	<0.02
MW-10	3/28/2022	26.35	7.43	5724	15.1	4220	587	587	<2	<2	289	2380	0.99	<0.02
MW-10	5/17/2022	26.73	7.50	6205	18.0	4170	627	627	<2	<2	358	1990	1.08	<0.02
MW-10	8/15/2022	26.04	7.56	5813	18.8	4210	644	644	<2	<2	350	2240	1.16	<0.02
MW-10	11/7/2022	25.45	7.57	5698	15.3	4030	656	656	<2	<2	376	1900	1.02	<0.02
MW-10	3/7/2023	24.88	7.65	4662	13.8	3890	696	696	<2	<2	375	1730	1.15	<0.02
MW-10	5/31/2023	25.50	7.68	6002	17.7	3740	729	713	15.4	<2	399	1640	1.18	<0.02
MW-11	3/23/2022	58.41	7.39	2265	15.5	1500	782	782	<2	<2	133	353	0.82	<0.02
MW-11	5/17/2022	59.41	7.39	2681	17.2	1580	842	821	20.4	<2	136	330	0.91	<0.02
MW-11	8/15/2022	54.00	7.37	2619	18.8	1640	839	839	<2	<2	135	401	0.93	<0.2
MW-11	11/7/2022	57.23	7.35	2573	15.2	1590	839	839	<2	<2	125	359	0.76	<0.02
MW-11	3/6/2023	59.37	7.39	2039	15.8	1570	885	885	<2	<2	125	263	0.89	<0.02
MW-11	5/31/2023	52.18	7.39	2861	16.6	1700	898	898	<2	<2	138	424	0.87	<0.02
MW-12	3/28/2022	63.48	8.19	2896	15.4	1360	409	380	28.9	<2	374	129	**2.52**	<0.02
MW-12	5/17/2022	81.76	8.04	3720	17.3	1810	472	448	23.6	<2	793	88.3	**2.21**	0.323
MW-12	8/15/2022	79.28	7.69	4219	18.0	2370	523	523	<2	<2	954	204	1.85	8.89
MW-12	11/7/2022	72.80	7.67	4399	15.2	2450	553	553	<2	<2	1000	195	1.65	4.18
MW-12	3/6/2023	65.47	7.74	3504	17.7	2520	634	631	3.1	<2	1020	186	1.77	0.092
MW-12	5/31/2023	65.23	7.79	4903	17.1	2530	638	629	8.5	<2	1070	159	1.81	<0.02
MW-13	3/23/2022	117.48	8.23	3872	16.9	2430	1060	1030	28.8	<2	573	234	**5.41**	<0.02
MW-13	5/10/2022	118.78	8.38	3190	17.5	2150	995	933	61.8	<2	566	88.5	**6.06**	<u>0.109</u>
MW-13	8/15/2022	119.21	7.89	4115	19.1	2610	1180	1180	<2	<2	606	172	**6.46**	<0.02
MW-13	11/8/2022	119.31	7.96	4251	16.0	2540	1280	1230	52.5	<2	643	122	**6.51**	0.04
MW-13	3/6/2023	83.74	7.91	3668	15.7	2730	1450	1340	111	<2	674	104	**6.49**	<0.02
MW-13	5/30/2023	119.19	8.00	4842	17.7	2640	1450	1380	74.9	<2	654	63.7	**5.79**	<0.02
MW-14	3/28/2022	92.54	8.07	3669	17.5	2300	866	800	65.9	<2	473	353	**2.35**	<0.02
MW-14	5/17/2022	108.77	7.68	6741	17.2	3610	1320	1300	27.4	<2	1410	143	**3.10**	0.02
MW-14	8/15/2022	95.53	7.66	5626	18.2	4240	1300	1300	<2	<2	1480	321	**3.10**	<0.02
MW-14	11/8/2022	92.34	7.59	6395	15.5	4410	1320	1320	<2	<2	1660	393	**2.87**	<0.02
MW-14	3/6/2023	90.12	7.60	5744	14.7	<u>4690</u>	1470	1410	61.6	<2	1590	460	**3.1**	<0.02
MW-14	5/30/2023	86.50	7.61	8043	17.8	4710	1490	1490	<2	<2	1730	414	**2.61**	<0.02
Field QA/QC Samples														
MW-6 (duplicate)	9/19/2019	----	----	----	----	6020	----	----	----	----	----	----	0.70	11
MW-7 (duplicate)	6/12/2019	----	----	----	----	5600	----	----	----	----	----	----	0.90	1.28
MW-7 (duplicate)	11/9/2019	----	----	----	----	5510	----	----	----	----	----	----	<u>0.50</u>	<u>15</u>
MW-7 (duplicate)	3/9/2020	----	----	----	----	6530	----	----	----	----	----	----	0.40	15
MW-7 (duplicate)	9/16/2020	----	----	----	----	5040	----	----	----	----	----	----	0.40	11
MW-7 (duplicate)	2/22/2021	----	----	----	----	6460	----	----	----	----	----	----	0.49	10
MW-7 (duplicate)	5/19/2021	----	----	----	----	----	291	291	<2	<2	50.7	3280	0.43	7.45
MW-7 (duplicate)	8/31/2021	----	----	----	----	----	464	464	<2	<2	109	3480	0.53	0.91
MW-7 (duplicate)	3/22/2022	----	----	----	----	5730	492	492	<2	<2	93.9	3720	0.56	1.18
MW-7 (duplicate)	5/10/2022	----	----	----	----	<u>5660</u>	490	490	<2	<2	104	3290	0.58	<u>0.20</u>
MW-8 (duplicate)	11/23/2020	----	----	----	----	4040	----	----	----	----	----	----	1.15	<u><0.050</u>
MW-8 (duplicate)	11/18/2021	----	----	----	----	----	1130	1130	<2	<2	288	1920	0.89	0.078
MW-8 (duplicate)	8/15/2022	----	----	----	----	3730	1100	1100	<2	<2	290	1560	1.07	<0.02
MW-8 (duplicate)	11/7/2022	----	----	----	----	3770	1110	1110	<2	<2	289	1460	0.93	0.26
MW-7 (duplicate)	3/6/2023	----	----	----	----	<u>5870</u>	504	504	<2	<2	88.6	3480	0.51	0.20
MW-11 (duplicate)	5/31/2023	----	----	----	----	1700	902	898	3.3	<2	142	423	0.86	<0.02
CDPHE Regulation 41 Table 3 Groundwater Quality Reference Standards (Agricultural Use)[1]			*6.5 -8.5*	----	----	*10000*	----	----	----	----	----	----	*2*	----

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

Location ID	Sample Date	Nitrate/Nitrite (mg/L)	Nitrite (mg/L)	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)
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-6	1/3/2018	<0.020	----	0.64	<0.03	<0.005	0.63	<0.005	<0.005	0.0042	0.006	----	0.47	<0.01	0.66
MW-6	4/27/2018	<0.020	<0.040	<0.2	<0.03	<0.005	0.65	<0.005	<0.005	0.019	<0.01	----	0.06	<0.01	0.69
MW-6	9/26/2018														
MW-6	12/12/2018	<0.020	<0.040	<0.2	<0.03	<0.005	0.62	<0.005	<0.005	0.0060	<0.01	----	<0.1	0.004	0.48
MW-6	3/7/2019						DRY								
MW-6	6/12/2019	12.1	0.030	0.5	<0.001	<0.05	0.50	0.0003	<0.05	<0.05	<0.05	----	0.80	0.002	0.52
MW-6	9/19/2019	11.1	0.080	<0.3	0.0004	<0.05	0.30	0.00026	<0.05	0.05	<0.05	----	0.30	0.0004	0.49
MW-6	12/9/2019	8.12	0.020	<0.3	<0.001	<0.05	0.30	<0.0003	<0.05	<0.05	<0.05	----	<0.2	<0.0005	0.49
MW-6	3/9/2020	2.58	0.560	<0.3	0.0005	<0.05	0.30	0.00016	<0.05	<0.05	0.06	----	<0.2	<0.0001	0.48
MW-6	9/16/2020	0.05	<0.01	0.19	0.0009	<0.01	0.31	0.00011	0.01	0.03	<0.01	----	0.19	0.0006	0.49
MW-6	11/23/2020	1.63	0.012	<0.25	<0.001	<0.05	0.33	<0.00025	<0.05	<0.05	<0.05	----	<0.3	<0.0005	0.45
MW-6	2/22/2021	0.067	<0.01	<0.25	<0.001	<0.05	0.330	<0.00025	<0.05	<0.05	<0.05	----	<0.3	<0.0005	0.476
MW-6	5/19/2021	0.032	<0.01	<0.05	0.00237	<0.01	0.38	0.000058	<0.02	<0.02	<0.01	315	0.13	<0.0001	0.47
MW-6	8/31/2021	4.24	0.038	<0.05	<0.001	<0.01	0.24	<0.00025	<0.02	<0.02	<0.01	410	<0.06	<0.0005	0.49
MW-6	11/18/2021	0.85	<0.01	<0.05	<0.001	<0.01	0.25	<0.00025	<0.1	<0.02	<0.01	383	<0.06	<0.0005	0.47
MW-6	3/22/2022	8.02	0.011	<0.25	<0.001	<0.05	0.21	<0.00025	<0.1	<0.1	<0.05	488	<0.3	<0.0005	0.43
MW-6	5/17/2022	3.25	0.015	<0.25	<0.0002	<0.05	0.32	<0.00005	<0.1	0.012	<0.05	440	<0.3	<0.0001	0.46
MW-6	8/15/2022	1.09	0.070	<0.25	0.00040	<0.05	0.19	0.000131	<0.1	0.020	<0.05	421	0.70	<0.0001	0.43
MW-6	11/7/2022	<0.02	<0.01	<0.25	<0.001	<0.05	0.28	<0.00025	<0.1	**0.061**	<0.05	414	0.32	<0.0005	0.43
MW-6	3/6/2023	<0.02	<0.01	<0.05	0.00109	<0.01	0.25	<0.00025	<0.1	**0.063**	<0.01	413	1.55	<0.0005	0.42
MW-6	5/30/2023	0.361	0.04	<0.05	<0.001	<0.01	0.24	<0.00025	<0.02	**0.054**	<0.01	398	1.12	<0.0005	0.46
MW-7	1/3/2018	<0.020	<1.00	1.35	0.00949	<0.005	0.46	<0.005	<0.005	0.0014	0.00555	----	1.39	<0.01	0.78
MW-7	4/27/2018	<0.100	<0.020	<0.2	<0.03	<0.005	0.44	<0.005	<0.005	<0.005	<0.01	----	0.25	<0.01	0.67
MW-7	9/26/2018														
MW-7	12/12/2018	<0.020	<0.040	<0.2	<0.03	<0.005	0.45	<0.005	<0.005	<0.005	<0.01	----	0.24	<0.01	0.57
MW-7	3/7/2019	0.014		<0.2	<0.03	<0.005	0.43	<0.005	<0.005	0.0020	<0.01	----	0.30	<0.01	0.56
MW-7	6/12/2019	1.74	0.010	<0.3	<0.001	<0.05	0.40	<0.0003	<0.05	<0.05	<0.05	----	<0.2	<0.0005	0.62
MW-7	9/18/2019	10.1	0.020	0.40	0.0003	<0.05	0.30	0.00015	<0.05	<0.05	<0.05	----	0.80	0.001	0.48
MW-7	12/9/2019	14.3	0.080	<0.3	<0.001	<0.05	0.20	<0.0003	<0.05	<0.05	<0.05	----	<0.2	<0.0005	0.44
MW-7	3/9/2020	14.9	0.060	<0.3	<0.0002	<0.05	0.20	0.00011	<0.05	<0.05	<0.05	----	<0.2	<0.0001	0.60
MW-7	9/16/2020	11.0	0.030	0.16	<0.0002	<0.01	0.14	0.00007	0.01	<0.01	<0.01	----	0.15	0.0002	0.43
MW-7	11/23/2020	11.2	0.039	<0.25	<0.001	<0.05	0.15	<0.00025	<0.05	<0.05	<0.05	----	<0.3	<0.0005	0.38
MW-7	2/22/2021	9.98	0.068	<0.25	<0.001	<0.05	0.196	<0.00025	<0.05	<0.05	<0.05	----	<0.3	<0.0005	0.634
MW-7	5/19/2021	7.54	0.027	<0.05	<0.0002	<0.01	0.14	0.000057	<0.02	<0.02	<0.01	460	<0.06	<0.0001	0.47
MW-7	8/31/2021	0.91	<0.01	<0.05	<0.001	<0.01	0.31	<0.00025	<0.02	<0.02	<0.01	391	<0.06	<0.0005	0.52
MW-7	11/18/2021	3.84	<0.01	<0.05	<0.001	<0.01	0.19	<0.00025	<0.1	<0.02	<0.01	429	<0.06	<0.0005	0.38
MW-7	3/22/2022	1.24	0.02	<0.25	<0.001	<0.05	0.39	<0.00025	<0.1	<0.1	<0.05	396	<0.3	<0.0005	0.55
MW-7	5/10/2022	0.19	<0.01	<0.25	<0.001	<0.05	0.37	<0.00025	<0.1	0.0023	<0.05	376	<0.3	<0.0005	0.55
MW-7	8/15/2022	0.15	<0.01	<0.25	0.0004	<0.05	0.29	0.000067	<0.1	0.0028	<0.05	346	0.44	<0.0001	0.54
MW-7	11/7/2022	4.65	<0.01	<0.25	<0.001	<0.05	0.16	<0.00025	<0.1	0.0018	<0.05	454	<0.3	<0.0005	0.34
MW-7	3/6/2023	0.276	0.013	<0.25	<0.002	<0.05	0.322	<0.0005	<0.1	0.0040	<0.05	384	<0.3	<0.001	0.56
MW-7	5/30/2023	8.66	<0.01	<0.05	<0.001	<0.01	0.166	<0.00025	<0.02	0.0021	<0.01	466	0.09	<0.0005	0.45
MW-8	3/9/2020														
MW-8	9/16/2020														
MW-8	9/28/2020	<0.02	<0.01	<0.25	0.0138	<0.05	1.2	<0.00025	<0.05	<0.05	<0.05	----	2.62	<0.0005	0.51
MW-8	11/9/2020														
MW-8	11/23/2020	<0.02	<0.01	<0.25	0.00219	<0.05	0.82	<0.00025	<0.05	<0.05	<0.05	----	<0.3	<0.0005	0.33
MW-8	2/22/2021	<0.02	<0.01	<0.05	0.00350	<0.01	0.848	<0.00025	<0.01	<0.01	<0.01	----	<0.06	<0.0005	0.360
MW-8	5/19/2021	1.01	0.016	<0.05	0.00155	<0.01	0.89	0.000065	<0.04	<0.02	<0.01	93.1	<0.06	0.00016	0.37
MW-8	8/31/2021	0.022	0.014	<0.05	0.00124	<0.01	0.78	<0.00025	<0.02	<0.02	<0.01	111	<0.06	<0.0005	0.38
MW-8	11/18/2021	0.096	0.028	<0.05	<0.001	<0.01	0.80	<0.00025	<0.1	<0.02	<0.01	107	<0.06	<0.0005	0.38
MW-8	3/28/2022	0.041	0.012	<0.1	0.00279	<0.02	0.60	<0.0001	<0.04	<0.04	<0.02	59.8	<0.12	0.00036	0.26
MW-8	5/17/2022	<0.02	<0.01	<0.1	0.00427	<0.02	0.88	<0.00005	<0.04	<0.04	<0.02	77.1	<0.12	<0.0001	0.39
MW-8	8/15/2022	<0.02	<0.01	<0.1	0.00767	<0.02	0.81	<0.00005	<0.04	<0.04	<0.02	68.1	0.83	<0.0001	0.37
MW-8	11/7/2022	<0.02	<0.01	<0.1	0.00542	<0.02	0.85	<0.0001	<0.04	0.00051	<0.02	68.1	0.89	<0.0002	0.37
MW-8	3/6/2023	<0.02	<0.01	<0.1	0.00511	<0.02	0.89	<0.0001	<0.04	0.00055	<0.02	70.4	0.86	<0.0002	0.36
MW-8	5/30/2023	0.989	<0.01	<0.05	0.00146	<0.01	0.93	<0.00025	<0.02	0.00031	<0.01	60.1	1.02	<0.0005	0.42
MW-9	3/28/2022	1.38	0.867	0.14	<0.001	<0.01	0.90	<0.00025	<0.02	<0.02	<0.01	367	<0.06	<0.0005	0.29
MW-9	5/17/2022	1.33	0.44	<0.25	<0.0002	<0.05	1.19	<0.00005	<0.1	0.0093	<0.05	478	<0.3	<0.0001	0.36
MW-9	8/15/2022	0.038	<0.01	<0.25	0.00058	<0.05	1.15	0.000065	<0.1	0.0040	<0.05	417	<0.3	<0.0001	0.36
MW-9	11/7/2022	<0.02	<0.01	<0.25	0.0007	<0.05	1.26	<0.00025	<0.1	0.0063	0.05	418	0.51	<0.0005	0.38
MW-9	3/7/2023	<0.02	<0.01	<0.05	0.00061	<0.01	1.32	<0.00005	<0.1	0.0036	<0.01	409	0.94	<0.0001	0.38
MW-9	5/31/2023	<0.02	<0.01	0.052	<0.001	<0.01	1.39	<0.00025	<0.02	0.0025	<0.01	415	1.39	<0.0005	0.41
MW-10	3/28/2022	<0.02	<0.01	<0.25	0.00289	<0.05	0.99	<0.00025	<0.1	<0.1	<0.05	430	<0.3	0.00055	0.31
MW-10	5/17/2022	<0.02	<0.01	<0.25	0.00321	<0.05	1.59	<0.00005	<0.1	0.00102	<0.05	82.6	0.51	<0.0001	0.34
MW-10	8/15/2022	<0.02	<0.01	<0.25	0.00404	<0.05	1.32	<0.00005	<0.1	0.000287	<0.05	53.5	0.62	0.00021	0.31
MW-10	11/7/2022	<0.02	<0.01	<0.25	0.00264	<0.05	1.40	<0.00025	<0.1	<0.00025	0.06	46.2	0.53	<0.0005	0.32
MW-10	3/7/2023	<0.02	<0.01	<0.05	0.00182	<0.01	1.33	0.000052	<0.04	0.000165	<0.01	40.4	0.47	0.00028	0.30
MW-10	5/31/2023	<0.02	<0.01	<0.05	0.00138	<0.01	1.35	<0.0001	<0.02	<0.0001	<0.01	37.5	0.41	<0.0002	0.30
MW-11	3/23/2022	<0.02	0.017	<0.05	<0.002	<0.01	0.41	<0.0005	<0.02	<0.02	<0.01	45.4	<0.06	<0.001	0.15
MW-11	5/17/2022	0.03	0.033	<0.05	0.00078	<0.01	0.49	<0.00005	<0.02	<0.02	<0.01	52.4	<0.06	<0.0001	0.18
MW-11	8/15/2022	<0.2	<0.01	<0.05	0.00051	<0.01	0.45	<0.00005	<0.02	<0.02	<0.01	47.2	<0.06	<0.0001	0.16
MW-11	11/7/2022	<0.02	<0.01	<0.05	0.00029	<0.01	0.43	<0.00005	<0.02	0.0023	<0.01	68.3	<0.06	<0.0001	0.15
MW-11	3/6/2023	<0.02	<0.01	<0.05	<0.0222	<0.01	0.46	<0.00005	<0.02	0.0004	<0.01	52.6	<0.06	<0.0001	0.14
MW-11	5/31/2023	<0.02	<0.01	<0.05	0.00025	<0.01	0.48	<0.00005	<0.02	0.0001	<0.01	46.4	<0.06	<0.0001	0.17
MW-12	3/28/2022	<0.02	0.012	<0.05	0.00464	<0.01	0.60	<0.00005	<0.02	<0.02	<0.01	10.8	<0.06	<0.0001	0.11
MW-12	5/17/2022	1.28	0.957	<0.05	0.00233	<0.01	0.80	<0.00005	<0.02	<0.02	<0.01	14.2	<0.06	<0.0001	0.17
MW-12	8/15/2022	9.4	0.511	<0.1	0.00157	<0.02	0.79	<0.00005	<0.04	<0.04	<0.02	25.5	<0.12	<0.0002	0.19
MW-12	11/7/2022	5.7	1.55	<0.1	0.00081	<0.02	0.84	<0.0001	<0.04	0.0017	<0.02	26.2	<0.12	<0.0002	0.20
MW-12	3/6/2023	0.6	0.495	<0.1	0.00302	<0.02	0.87	<0.0001	<0.04	0.0009	<0.02	23.7	<0.12	0.00021	0.21
MW-12	5/31/2023	<0.02	<0.01	<0.05	0.00203	<0.01	0.89	<0.0001	<0.02	0.0004	<0.01	21	0.30	0.00028	0.21
MW-13	3/23/2022	<0.02	<0.01	<0.1	0.00178	<0.02	0.94	<0.0001	<0.04	<0.04	<0.02	5.46	<0.12	<0.0002	0.18
MW-13	5/10/2022	0.11	<0.01	<0.1	0.00075	<0.02	0.95	<0.0001	<0.04	<0.04	<0.02	4.13	<0.12	<0.0002	0.18
MW-13	8/15/2022	<0.02	0.029	<0.1	0.00285	<0.02	1.00	<0.00005	<0.04	<0.04	<0.02	7.84	<0.12	<0.0001	0.21
MW-13	11/8/2022	0.064	0.024	<0.1	0.00102	<0.02	1.03	<0.00025	<0.04	<0.00025	<0.02	6.65	<0.12	<0.0002	0.23
MW-13	3/6/2023	<0.02	<0.01	<0.1	<0.001	<0.02	1.09	<0.00025	<0.04	<0.00025	<0.02	7.6	<0.12	<0.0005	0.24
MW-13	5/30/2023	<0.02	<0.01	<0.05	0.00044	<0.01	1.04	0.000123	<0.02	0.00022	<0.01	6.22	<0.06	0.00043	0.28
MW-14	3/28/2022	<0.02	<0.01	<0.1	0.00533	<0.02	1.46	<0.0001	<0.04	<0.04	<0.02	84.8	<0.12	<0.0002	0.32
MW-14	5/17/2022	0.02	<0.01	<0.1	0.00382	<0.02	1.26	0.000066	<0.04	<0.04	<0.02	15.9	<0.12	<0.0001	0.40
MW-14	8/15/2022	<0.02	<0.01	<0.25	0.0059	<0.05	1.17	<0.00005	<0.1	0.00075	<0.05	17.3	<0.3	<0.0002	0.36
MW-14	11/8/2022	<0.02	<0.01	<0.25	0.00448	<0.05	1.24	<0.0005	<0.1	0.00086	<0.05	18	0.36	<0.001	0.36
MW-14	3/6/2023	<0.02	<0.01	<0.25	0.00531	<0.05	1.32	<0.00025	<0.1	0.00066	<0.05	19.4	0.81	<0.0005	0.38
MW-14	5/30/2023	<0.02	<0.01	0.053	0.00408	<0.01	1.21	<0.00025	<0.02	0.00062	<0.01	17.1	0.68	0.00084	0.50
Field QA/QC Samples															
MW-6 (duplicate)	9/19/2019	10.8	0.08	<0.3	0.0004	<0.05	0.30	0.00031	<0.05	0.05	<0.05	----	0.30	0.0005	0.48
MW-7 (duplicate)	6/12/2019	1.28	<0.01	<0.3	<0.001	<0.05	0.40	<0.04	<0.05	<0.05	<0.05	----	0.20	<0.0005	0.61
MW-7 (duplicate)	11/9/2019	14.7	0.08	<0.3	<0.001	<0.05	0.20	<0.0003	<0.05	<0.05	<0.05	----	<0.2	<0.0005	0.44
MW-7 (duplicate)	3/9/2020	14.5	0.05	<0.3	<0.0002	<0.05	0.10	0.0001	<0.05	<0.05	<0.05	----	<0.2	<0.0001	0.60
MW-7 (duplicate)	9/16/2020	10.9	0.03	0.11	<0.0002	<0.01	0.13	0.00007	0.01	<0.01	<0.01	----	0.12	0.0002	0.43
MW-7 (duplicate)	2/22/2021	10.3	0.068	<0.05	<0.001	<0.01	0.17	<0.00025	<0.01	<0.01	<0.01	----	<0.06	<0.0005	0.619
MW-7 (duplicate)	5/19/2021	7.48	0.028	<0.05	<0.0002	<0.01	0.14	0.000068	<0.02	<0.02	<0.01	457	<0.06	<0.0001	0.47
MW-7 (duplicate)	8/31/2021	0.91	<0.01	<0.05	<0.001	<0.01	0.31	<0.00025	<0.02	<0.02	<0.01	390	<0.06	<0.0005	0.52
MW-7 (duplicate)	3/22/2022	1.20	0.018	<0.25	<0.001	<0.05	0.35	<0.00025	<0.1	<0.1	<0.05	383	<0.3	<0.0005	0.52
MW-7 (duplicate)	5/10/2022	0.20	<0.01	<0.25	<0.001	<0.05	0.39	<0.00025	<0.1	0.0022	<0.05	373	<0.3	<0.0005	0.56
MW-8 (duplicate)	11/23/2020	<0.02	<0.01	<0.25	0.00234	<0.05	0.83	<0.00025	<0.05	<0.05	<0.05	----	<0.3	<0.0005	0.34
MW-8 (duplicate)	11/18/2021	0.107	0.029	<0.05	0.00084	<0.01	0.81	<0.0001	<0.04	<0.02	<0.01	104	<0.06	<0.0002	0.38
MW-8 (duplicate)	8/15/2022	<0.02	<0.01	<0.1	0.00788	<0.02	0.80	<0.00005	<0.04	<0.04	<0.02	68.1	0.83	<0.0001	0.36
MW-8 (duplicate)	11/7/2022	0.26	<0.01	<0.1	0.00533	<0.02	0.87	<0.0001	<0.04	0.00052	<0.02	69.6	0.86	<0.0002	0.37
MW-7 (duplicate)	3/6/2023	0.20	<0.01	<0.05	<0.0004	<0.01	0.29	<0.0001	<0.1	0.00388	<0.01	388	0.09	<0.0002	0.54
MW-11 (duplicate)	5/31/2023	<0.02	<0.01	<0.05	0.00022	<0.01	0.48	<0.00005	<0.02	0.00007	<0.01	46.4	<0.06	<0.0001	0.17
CDPHE Regulation 41 Table 3 Groundwater Quality Reference Standards (Agricultural Use)[1]		*100*	*10*	*5.0*	*0.10*	*0.10*	*5.0*	*0.01*	*0.10*	*0.05*	*0.2*	----	*5.0*	*0.10*	*2.5*

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

Location ID	Sample Date	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-6	1/3/2018	----	**0.59**	<0.0002	0.029	----	**<0.03**	----	<0.005	0.025	----
MW-6	4/27/2018	----	**1.14**	<0.0002	0.069	----	**<0.03**	----	<0.005	<0.01	0.032
MW-6	9/26/2018										
MW-6	12/12/2018	----	**0.66**	<0.0002	0.017	----	0.0062	----	0.0012	0.009	----
MW-6	3/7/2019									DRY	
MW-6	6/12/2019	----	**0.97**	<0.0002	0.150	----	**0.0966**	----	<0.03	<0.05	----
MW-6	9/19/2019	----	**0.58**	<0.0002	0.130	----	**0.1400**	----	<0.03	<0.05	----
MW-6	12/9/2019	----	**0.49**	<0.0002	0.110	----	**0.0880**	----	<0.03	<0.05	----
MW-6	3/9/2020	----	**0.40**	<0.0002	0.110	----	**0.0401**	----	<0.03	<0.05	----
MW-6	9/16/2020	----	**0.39**	<0.0002	0.088	----	0.0064	----	<0.01	0.020	----
MW-6	11/23/2020	----	**0.33**	<0.0002	0.114	----	0.0155	----	<0.05	0.110	----
MW-6	2/22/2021	----	**0.32**	<0.0002	0.0810	----	0.00487	----	<0.05	<0.1	----
MW-6	5/19/2021	344	**0.36**	<0.0002	0.058	9.9	0.0023	810	<0.01	<0.02	----
MW-6	8/31/2021	498	**0.28**	<0.0002	0.085	11.2	0.0148	575	<0.01	<0.02	----
MW-6	11/18/2021	473	**0.24**	<0.0002	0.076	10.3	0.0153	589	<0.01	<0.02	----
MW-6	3/22/2022	460	0.08	<0.0002	<0.04	11.5	**0.0465**	362	<0.05	<0.1	----
MW-6	5/17/2022	422	0.20	<0.0002	0.121	10.9	**0.0538**	522	<0.05	<0.1	----
MW-6	8/15/2022	410	**0.29**	<0.0002	**0.409**	10.8	0.0112	456	<0.05	<0.1	----
MW-6	11/7/2022	411	**0.61**	<0.0002	**0.320**	10.3	<0.0005	473	<0.05	<0.1	----
MW-6	3/6/2023	416	**0.84**	<0.0002	0.102	10.7	<0.0005	558	<0.01	<.02	----
MW-6	5/30/2023	421	**0.66**	<0.0002	0.090	10.5	0.0032	566	<0.01	0.028	----
MW-7	1/3/2018	----	0.20	<0.0002	0.016	----	**<0.03**	----	0.0023	0.027	----
MW-7	4/27/2018	----	0.17	<0.0002	0.006	----	**<0.03**	----	<0.005	<0.01	0.0142
MW-7	9/26/2018										
MW-7	12/12/2018	----	0.10	<0.0002	0.004	----	**<0.03**	----	<0.005	0.010	----
MW-7	3/7/2019	----	0.15	<0.0002	0.008	----	**<0.03**	----	<0.005	0.010	----
MW-7	6/12/2019	----	0.14	<0.0002	<0.04	----	0.0087	----	<0.03	<0.05	----
MW-7	9/18/2019	----	0.10	<0.0002	<0.04	----	**0.0762**	----	<0.03	<0.05	----
MW-7	12/9/2019	----	<0.05	<0.0002	<0.04	----	**0.0903**	----	<0.03	<0.05	----
MW-7	3/9/2020	----	<0.05	<0.0002	<0.04	----	**0.0701**	----	<0.03	<0.05	----
MW-7	9/16/2020	----	0.01	<0.0002	0.013	----	**0.0655**	----	<0.01	<0.02	----
MW-7	11/23/2020	----	<0.05	<0.0002	<0.04	----	**0.0452**	----	<0.05	<0.1	----
MW-7	2/22/2021	----	<0.05	<0.002	<0.04	----	**0.0348**	----	<0.05	<0.1	----
MW-7	5/19/2021	530	<0.01	<0.0002	0.023	13.7	**0.0401**	393	<0.01	<0.02	----
MW-7	8/31/2021	397	0.07	<0.0002	0.016	10.8	0.0115	666	<0.01	<0.02	----
MW-7	11/18/2021	386	0.06	<0.0002	0.016	10.6	**0.0284**	402	<0.01	<0.02	----
MW-7	3/22/2022	428	0.06	<0.0002	<0.04	10.8	0.0114	671	<0.05	<0.1	----
MW-7	5/10/2022	392	0.09	<0.0002	<0.04	10.1	0.0055	662	<0.05	<0.1	----
MW-7	8/15/2022	371	0.07	<0.0002	<0.04	10.5	0.0008	703	<0.05	<0.1	----
MW-7	11/7/2022	365	<0.05	<0.0002	<0.04	11.3	**0.0371**	306	<0.05	<0.1	----
MW-7	3/6/2023	449	0.06	<0.0002	<0.04	11.2	<0.001	706	<0.05	<0.1	----
MW-7	5/30/2023	519	<0.01	<0.0002	0.023	13.1	**0.0981**	360	<0.01	<0.02	----
MW-8	3/9/2020										
MW-8	9/16/2020										
MW-8	9/28/2020	----	**0.30**	<0.0002	<0.04	----	0.0008	----	<0.05	<0.1	----
MW-8	11/9/2020										
MW-8	11/23/2020	----	**0.25**	<0.0002	<0.04	----	<0.0005	----	<0.05	<0.1	----
MW-8	2/22/2021	----	**0.31**	<0.0002	<0.008	----	<0.0005	----	<0.01	<0.02	----
MW-8	5/19/2021	31.2	**0.28**	<0.0002	<0.008	6.2	0.0002	1250	<0.01	<0.02	----
MW-8	8/31/2021	38.5	**0.32**	<0.0002	<0.008	5.9	<0.0005	1300	<0.01	<0.02	----
MW-8	11/18/2021	46.5	**0.27**	<0.0002	<0.008	6.4	<0.0005	1150	<0.02	<0.02	----
MW-8	3/28/2022	19.7	0.20	<0.0002	<0.016	4.3	<0.0002	805	<0.02	<0.04	----
MW-8	5/17/2022	28.9	**0.30**	<0.0002	<0.016	5.3	<0.0001	1180	<0.02	<0.04	----
MW-8	8/15/2022	26.6	**0.24**	<0.0002	<0.016	5.4	<0.0002	1110	<0.02	<0.04	----
MW-8	11/7/2022	27.1	**0.24**	<0.0002	<0.016	5.4	<0.0005	1160	<0.02	<0.04	----
MW-8	3/6/2023	28	**0.23**	<0.0002	<0.016	5.6	<0.0002	1240	<0.02	<0.04	----
MW-8	5/30/2023	25.3	0.19	<0.0002	<0.008	5.5	0.0009	1280	<0.01	<0.02	----
MW-9	3/28/2022	178	**0.61**	<0.0002	0.022	8.1	<0.0005	540	<0.01	<0.02	----
MW-9	5/17/2022	216	**0.76**	<0.0002	<0.04	9.3	0.0003	694	<0.05	<0.1	----
MW-9	8/15/2022	156	**0.55**	<0.0002	<0.04	9.5	<0.0001	716	<0.05	<0.1	----
MW-9	11/7/2022	158	**0.55**	<0.0002	<0.04	9.0	<0.0001	741	<0.05	<0.1	----
MW-9	3/7/2023	156	**0.46**	<0.0002	<0.008	9.0	<0.0001	779	<0.01	<0.02	----
MW-9	5/31/2023	161	**0.45**	<0.0002	<0.008	8.9	<0.0005	820	<0.01	<0.02	----
MW-10	3/28/2022	198	**0.69**	<0.0002	<0.04	8.9	<0.0005	615	<0.05	<0.1	----
MW-10	5/17/2022	24.2	0.07	<0.0002	<0.04	6.9	0.0004	1400	<0.05	<0.1	----
MW-10	8/15/2022	16.2	<0.05	<0.0002	<0.04	6.9	<0.0002	1240	<0.05	<0.1	----
MW-10	11/7/2022	14.7	<0.05	<0.0002	<0.04	6.3	<0.0005	1240	<0.05	<0.1	----
MW-10	3/7/2023	12.4	0.025	<0.0002	<0.008	5.9	0.0001	1090	<0.01	<0.02	----
MW-10	5/31/2023	11.8	0.021	<0.0002	<0.008	5.6	<0.0002	1230	<0.01	<0.02	----
MW-11	3/23/2022	24.4	<0.01	<0.0002	<0.008	3.6	<0.002	461	<0.01	<0.02	----
MW-11	5/17/2022	28.9	0.022	<0.0002	<0.008	3.4	**0.1320**	513	<0.01	<0.02	----
MW-11	8/15/2022	26.3	<0.01	<0.0002	<0.008	3.5	**0.1250**	477	<0.01	<0.02	----
MW-11	11/7/2022	33.9	0.02	<0.0002	0.011	3.7	**0.1620**	412	<0.01	<0.02	----
MW-11	3/6/2023	27.6	<0.01	<0.0002	<0.008	3.4	**0.1140**	435	<0.01	<0.02	----
MW-11	5/31/2023	29.2	0.02	<0.0002	<0.008	3.7	**0.0386**	563	<0.01	<0.02	----
MW-12	3/28/2022	3.12	0.01	<0.0002	<0.008	2.2	<0.0002	488	<0.01	<0.02	----
MW-12	5/17/2022	4.55	0.03	<0.0002	<0.008	2.9	0.0007	707	<0.01	<0.02	----
MW-12	8/15/2022	6.19	<0.02	<0.0002	<0.016	3.7	<0.0002	805	<0.02	<0.04	----
MW-12	11/7/2022	7.38	0.07	<0.0002	0.099	4.1	0.0008	861	<0.02	<0.04	----
MW-12	3/6/2023	8.32	0.04	<0.0002	0.048	4.0	0.0004	967	<0.02	<0.04	----
MW-12	5/31/2023	8.7	0.10	<0.0002	<0.008	3.9	<0.0002	958	<0.01	<0.02	----
MW-13	3/23/2022	1.45	<0.02	<0.0002	<0.016	2.9	<0.0002	885	<0.02	<0.04	----
MW-13	5/10/2022	1.00	<0.02	<0.0002	<0.016	2.4	0.0184	782	<0.02	<0.04	----
MW-13	8/15/2022	1.74	<0.02	<0.0002	<0.016	3.1	<0.0002	910	<0.02	<0.04	----
MW-13	11/8/2022	1.67	<0.02	<0.0002	<0.016	3.1	<0.0002	977	<0.02	<0.04	----
MW-13	3/6/2023	2.21	<0.02	<0.0002	<0.016	3.1	<0.0002	1060	<0.02	<0.04	----
MW-13	5/30/2023	1.82	<0.01	<0.0002	<0.016	2.9	<0.001	1050	<0.01	<0.02	----
MW-14	3/28/2022	23.3	<0.02	<0.0002	<0.016	7.1	0.0098	1260	<0.02	<0.1	----
MW-14	5/17/2022	4.75	<0.02	<0.0002	<0.016	4.6	0.0012	1390	<0.02	<0.04	----
MW-14	8/15/2022	4.86	<0.05	<0.0002	<0.04	5.3	<0.0002	1450	<0.05	<0.1	----
MW-14	11/8/2022	4.99	<0.05	<0.0002	<0.04	5.7	<0.001	1610	<0.05	<0.1	----
MW-14	3/6/2023	6.44	<0.05	<0.0002	<0.04	5.3	<0.0005	1740	<0.05	<0.1	----
MW-14	5/30/2023	5.47	0.035	<0.0002	<0.008	5.0	<0.002	1770	<0.01	0.063	----
Field QA/QC Samples											
MW-6 (duplicate)	9/19/2019	----	**0.57**	<0.0002	0.150	----	**0.1410**	----	<0.03	<0.05	----
MW-7 (duplicate)	6/12/2019	----	0.14	<0.0002	<0.04	----	0.0084	----	<0.03	<0.05	----
MW-7 (duplicate)	11/9/2019	----	<0.05	<0.0002	<0.04	----	**0.0903**	----	<0.03	<0.05	----
MW-7 (duplicate)	3/9/2020	----	<0.05	<0.0002	<0.04	----	**0.0704**	----	<0.03	<0.05	----
MW-7 (duplicate)	9/16/2020	----	0.01	<0.0002	0.010	----	**0.0654**	----	<0.01	<0.02	----
MW-7 (duplicate)	2/22/2021	----	0.020	<0.0002	0.0197	----	**0.0329**	----	<0.01	<0.02	----
MW-7 (duplicate)	5/19/2021	528	<0.01	<0.0002	0.012	13.9	**0.0398**	390	<0.01	<0.02	----
MW-7 (duplicate)	8/31/2021	396	0.07	<0.0002	0.017	10.9	0.0109	661	<0.01	<0.02	----
MW-7 (duplicate)	3/22/2022	431	<0.05	<0.0002	<0.04	10.5	0.0119	642	<0.05	<0.1	----
MW-7 (duplicate)	5/10/2022	389	0.10	<0.0002	<0.04	10.3	0.0061	675	<0.05	<0.1	----
MW-8 (duplicate)	11/23/2020	----	**0.25**	<0.0002	<0.04	----	<0.0005	----	<0.05	<0.1	----
MW-8 (duplicate)	11/18/2021	43.2	**0.27**	<0.0002	<0.008	6.3	<0.0002	1150	<0.02	<0.02	----
MW-8 (duplicate)	8/15/2022	26.5	**0.24**	<0.0002	<0.016	5.4	<0.0002	1100	<0.02	<0.04	----
MW-8 (duplicate)	11/7/2022	27.6	**0.25**	<0.0002	<0.016	5.7	<0.0005	1160	<0.02	<0.04	----
MW-7 (duplicate)	3/6/2023	443	0.07	<0.0002	0.026	11.7	0.0056	677	<0.01	<0.02	----
MW-11 (duplicate)	5/31/2023	29.1	<0.01	<0.0002	<0.008	3.3	0.0019	549	<0.01	<0.02	----
CDPHE Regulation 41 Table 3 Groundwater Quality Reference Standards (Agricultural Use)[1]		----	*0.20*	*0.01*	*0.20*	----	*0.02*	----	*0.10*	*2.0*	----

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

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:
GCC_RGPP-20230530-1314032001-18311722250

Form Name:
Wells - GCC Pueblo Compliance Water Sampling

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

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

SITE INFORMATION

Location

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

Misc

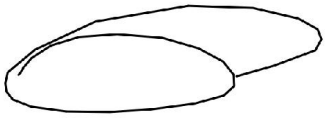
Site Photo

SAMPLING DETAILS

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

Sampler

Sampler Name	Dave Bemis - GCC Pueblo
Sampler's Signature	



Wells - GCC Pueblo Compliance Water Sampling-UPDATE

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

Reference Number:
GCC_RGPP-20230608-1314006005-18313407902

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

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

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

SITE INFORMATION

Location

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

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

Misc

Site Photo

Water Quality Meter

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

SAMPLING DETAILS

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

Micro-Purge Stabilization Parameters #1

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

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

Micro-Purge Stabilization Parameters #2

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

Micro-Purge Stabilization Parameters #3 (FINAL)

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

Purge and Sampling

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

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

Sampler

Sampler Name	Dave Bemis - GCC Pueblo
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

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

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling-UPDATE

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

Reference Number:
GCC_RGPP-20230608-1314006005-18313407711

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

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

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

SITE INFORMATION

Location

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

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

Misc

Site Photo

Water Quality Meter

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

SAMPLING DETAILS

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

Micro-Purge Stabilization Parameters #1

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

Micro-Purge Stabilization Parameters #2

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

Micro-Purge Stabilization Parameters #3 (FINAL)

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

Purge and Sampling

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

Sampler

Sampler Name	Dave Bemis - GCC Pueblo
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

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

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling-UPDATE

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

Reference Number:
GCC_RGPP-20230608-1314006005-18313406445

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

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

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

SITE INFORMATION

Location

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

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

Misc

Site Photo

Water Quality Meter

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

SAMPLING DETAILS

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

Micro-Purge Stabilization Parameters #1

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

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

Micro-Purge Stabilization Parameters #2

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

Micro-Purge Stabilization Parameters #3 (FINAL)

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

Purge and Sampling

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

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

Sampler

Sampler Name	Dave Bemis - GCC Pueblo
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

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

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling-UPDATE

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

Reference Number:
GCC_RGPP-20230607-1314006005-18313252112

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

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

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

SITE INFORMATION

Location

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

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

Misc

Site Photo

Water Quality Meter

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

SAMPLING DETAILS

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

Micro-Purge Stabilization Parameters #1

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

Micro-Purge Stabilization Parameters #2

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

Micro-Purge Stabilization Parameters #3 (FINAL)

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

Purge and Sampling

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

Sampler

Sampler Name	Dave Bemis - GCC Pueblo
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

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

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling-UPDATE

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

Reference Number:
GCC_RGPP-20230607-1314006005-18313246588

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

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

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

SITE INFORMATION

Location

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

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

Misc

Site Photo

Water Quality Meter

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

SAMPLING DETAILS

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

Micro-Purge Stabilization Parameters #1

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

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

Micro-Purge Stabilization Parameters #2

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

Micro-Purge Stabilization Parameters #3 (FINAL)

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

Purge and Sampling

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

Sampler

Sampler Name	Dave Bemis - GCC Pueblo
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

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

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling-UPDATE

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

Reference Number:
GCC_RGPP-20230608-1314006005-18313410621

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

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

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

SITE INFORMATION

Location

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

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

Misc

Site Photo

Water Quality Meter

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

SAMPLING DETAILS

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

Micro-Purge Stabilization Parameters #1

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

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

Micro-Purge Stabilization Parameters #2

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

Micro-Purge Stabilization Parameters #3 (FINAL)

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

Purge and Sampling

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

Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Dave Bemis - GCC Pueblo
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

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

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling-UPDATE

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

Reference Number:
GCC_RGPP-20230608-1314006005-18313410353

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

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

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

SITE INFORMATION

Location

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

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

Misc

Site Photo

Water Quality Meter

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

SAMPLING DETAILS

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

Micro-Purge Stabilization Parameters #1

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

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

Micro-Purge Stabilization Parameters #2

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

Micro-Purge Stabilization Parameters #3 (FINAL)

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

Purge and Sampling

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

Sampler

Sampler Name	Dave Bemis - GCC Pueblo

Sampler's Signature

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

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

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling-UPDATE

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

Reference Number:
GCC_RGPP-20230607-1314006005-18313239595

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

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

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

SITE INFORMATION

Location

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

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

Misc

Site Photo

Water Quality Meter

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

SAMPLING DETAILS

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

Micro-Purge Stabilization Parameters #1

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

Micro-Purge Stabilization Parameters #2

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

Micro-Purge Stabilization Parameters #3 (FINAL)

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

Purge and Sampling

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

Sampler

Sampler Name	Dave Bemis - GCC Pueblo
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

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

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling-UPDATE

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

Reference Number:
GCC_RGPP-20230607-1314006005-18313201164

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

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

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

SITE INFORMATION

Location

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

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

Misc

Site Photo

Water Quality Meter

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

SAMPLING DETAILS

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

Micro-Purge Stabilization Parameters #1

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

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

Micro-Purge Stabilization Parameters #2

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

Micro-Purge Stabilization Parameters #3 (FINAL)

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

Purge and Sampling

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

Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Dave Bemis - GCC Pueblo
Sampler's Signature	

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

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

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

Analysis	Wet Chemistry - no preservative, no filtration

SAMPLE HANDLING 2 OF 3

Bottle Details

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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