SLR International Corporation
Durango, CO

April 26, 2024

Ms. Amy Rodrigues
GCC Rio Grande, Inc.
3372 Lime Road
Pueblo, CO 81004

RE: 2024 Q1 Quarterly Groundwater Report; Pueblo Plant, Permit #M-2002-004

Dear Ms. Rodrigues,

This letter addresses the 2024, quarter 1 groundwater compliance monitoring field activities and results, as a summary to be included with the quarterly data submittal of all field data sheets and laboratory results, as well as the updated groundwater monitoring data summary table, per DRMS requirements as stated in their letter dated February 28, 2024, RE: Adequacy Review of Quarterly Hydrology Reports. 2023, 2nd Quarter, 3rd Quarter, 4th Quarter, Permit #M-2002-004.

During 2024 Q1 monitoring the following wells exceeded the 0.33-foot EPA low-flow methodology target for maximum drawdown for low-flow/low-stress purging and sample collection, as indicated in bold in the following Table 1. The subject wells are completed in a classic arid west fractured sedimentary bedrock, resulting in very low-yield well conditions. As shown in the Table 1, drawdowns in excess of 0.33 feet occurred at MW-8, MW-9, MW-10, MW-11, MW-12, and MW-14 despite keeping purge and sample flow rates within the target 0.03 to 0.10 gpm and the total purge and sample production time to a minimum. Regardless, as there is a historical data set of at least 9 quarters for all of these wells, time-series plots for several constituents shown in Figures 1, 2, and 3 below indicate a data consistency to support that the current sample collection method, despite drawdown exceeding EPA methodology, does produce representative groundwater chemistry results.

It is noted that in 2024 Q1, for all wells but MW-14, the total purge volumes at sample collection time were aligned with the respective sample pump full tubing volumes, whereby stabilization parameter documentation apparently began at the start time of purging rather than at the time the full target tubing volume was produced. Per the TR-11 SAP Appendix 1 GCC Rio Grande Pueblo Plant Groundwater Monitoring Well Compliance Sampling Procedure, step 7(i) "Once the given target tubing purge volume has been discharged, monitor the individual water quality field parameters utilizing the VuSitu app for stabilization over 3 consecutive measurements…". Going forward with 2024Q2 compliance monitoring at each well, the three sets of recorded stabilization parameters recorded, each three minutes apart, including the final (third) set of sample parameters, must not be recorded until the initial prescribed tubing volume has been produced.

The following Table 1 shows what the actual tubing purge volume totals are, based on the given measured flow rates and static depths to water prior to sampling. The use of the full length of sample pump tubing to calculate the tubing purge volume was meant to be conservative as they all represent overestimations due to relatively deep static depths to water. In 2024 Q1 all wells but MW-14 were under-purged based on these calculations, however, since the target purge volumes are based on displacing the full tubing volume, which does not include the empty tubing from surface to static water level given these pumps do not have check valves (exception is the bladder pump at MW-14), all 2024 Q1 monitoring did in fact purge all stagnant water from the tubing prior to sample collection by 0.1 gallons or more.

Table 1 – 2024 Q1 Sampling Purge Rates, Volumes, & Drawdowns

Monitoring Well ID	2024Q1 Purge & Sample Flow Rate as Measured in Graduated Beaker (gpm)	Sample Pump Tubing Volume - Fixed Length on Dedicated Pump (gal)	2024Q1 Purge & Sample Flow Volume as Measured in Bucket at Sample Collection (gal)	2024Q1 Target Total Purge Volume Based on Measured Purge Flow Rate (gal)	2024Q1 Total Purge Volume Difference Target vs Actual (gal)	2024Q1 Static Water Level (ft TOC)	2024Q1 Pumping Water Level at Sample Collection (ft TOC)	2024Q1 Purge & Sample Drawdown (ft)	Pump Set Depth (ft TOC)	Actual Tubing Volume to Displace Factoring Tubing Water Column Length (gal)
MW-6	0.05	0.3	**0.3**	0.6	**-0.3**	34.16	34.14	-0.02	55.7	0.1
MW-7	0.05	0.3	**0.3**	0.6	**-0.3**	34.06	34.14	0.08	55.0	0.1
MW-8	0.03	0.4	**0.4**	0.6	**-0.2**	33.10	39.35	**6.25**	62.5	0.1
MW-9	0.08	0.2	**0.2**	0.7	**-0.5**	25.77	28.44	**2.67**	38.6	0.1
MW-10	0.07	0.5	**0.5**	0.9	**-0.4**	25.21	36.48	**11.27**	79.0	0.2
MW-11	0.04	0.4	**0.4**	0.6	**-0.2**	54.60	57.66	**3.06**	68.5	0.1
MW-12	0.07	0.5	**0.5**	0.9	**-0.4**	58.65	63.33	**4.68**	85.4	0.1
MW-13	0.04	1.0	**1.0**	1.2	**-0.2**	117.18	117.01	-0.17	167.5	0.3
MW-14	0.04	0.6	1.2	0.8	0.4	97.32	109.66	**12.34**	203.6	0.6

Time series plots for concentrations of sulfate, total dissolved solids (TDS), and total alkalinity are provided as Figures 1, 2, and 3, respectively, to demonstrate consistency of the 2024 Q1 data with respect to conservative constituent concentrations and trends through time within the Fort Hayes Limestone, Codell Sandstone, and Blue Hills Shale lithologic units. Further discussion of major ion and trace element chemistry is provided in the annual groundwater report submitted in January of each year.

Groundwater quality at monitoring locations completed in the Ft. Hayes Limestone (MW-6, MW-7, MW-11, and MW-13) during the 2024 Q1 sampling event was consistent with concentrations and trends through time for sulfate, TDS, and total alkalinity (Figures 1 through 3). Although alkalinity at the downgradient location, MW-13 has fluctuated over time, recent data from the 2024 Q1 sampling event follow the decreasing trend of the previous two sampling events.

Similarly, groundwater quality at monitoring locations completed in the underlying Codell Sandstone (MW-8, MW-9, MW-12, and MW-14) during the 2024 Q1 sampling event was consistent with concentrations and trends through time (Figures 1 through 3). Concentrations of TDS appear to be increasing through time in the downgradient MW-14 location. Concentrations of alkalinity have stabilized in the last four sampling events, with minor seasonal variation observed.

Monitoring location MW-10 is located upgradient of mine panel four and completed in the Blue Hills Shale. Concentrations of sulfate and TDS have been declining and alkalinity increasing, with the 2024 Q1 sampling results trending in line with previous sampling events (Figures 1 through 3).

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

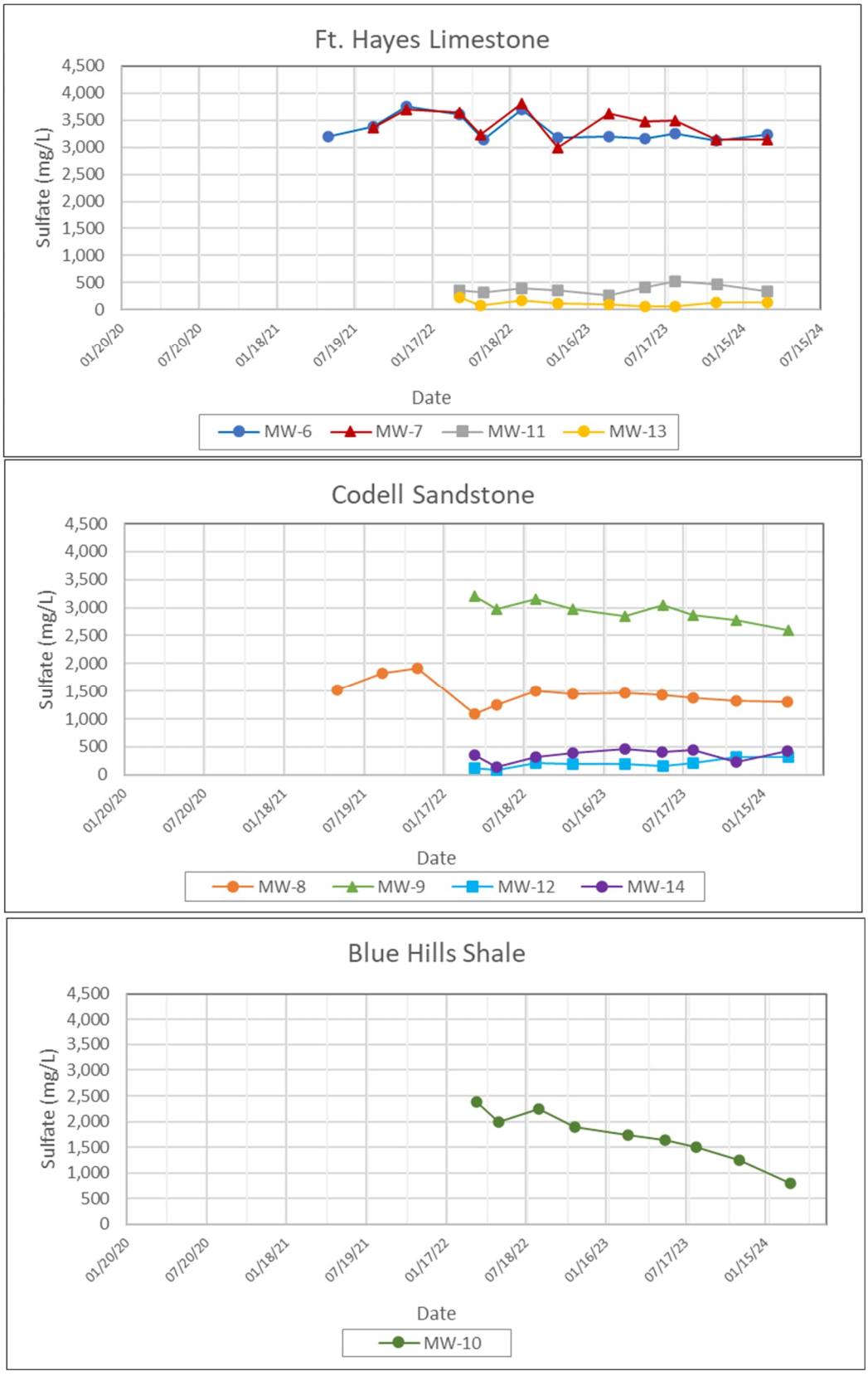
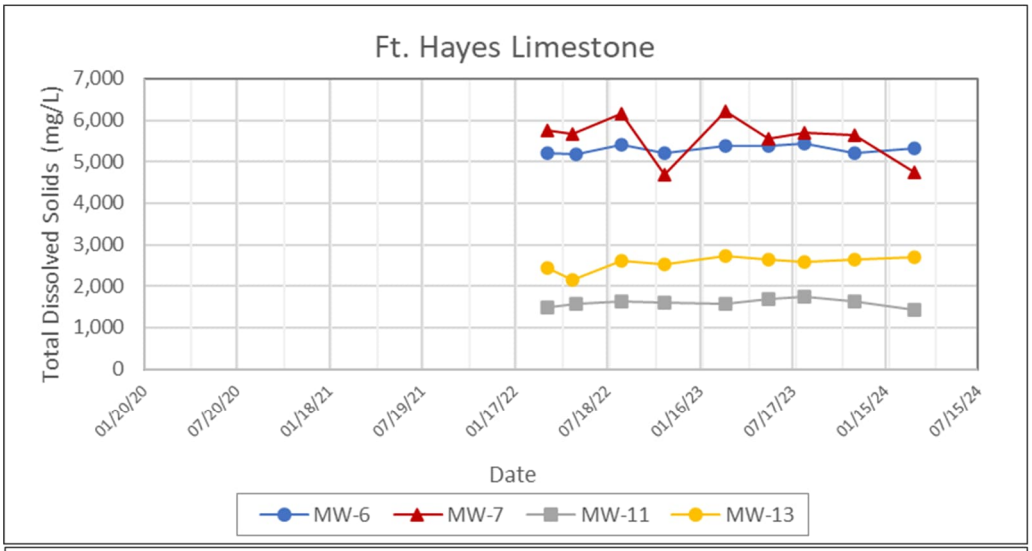
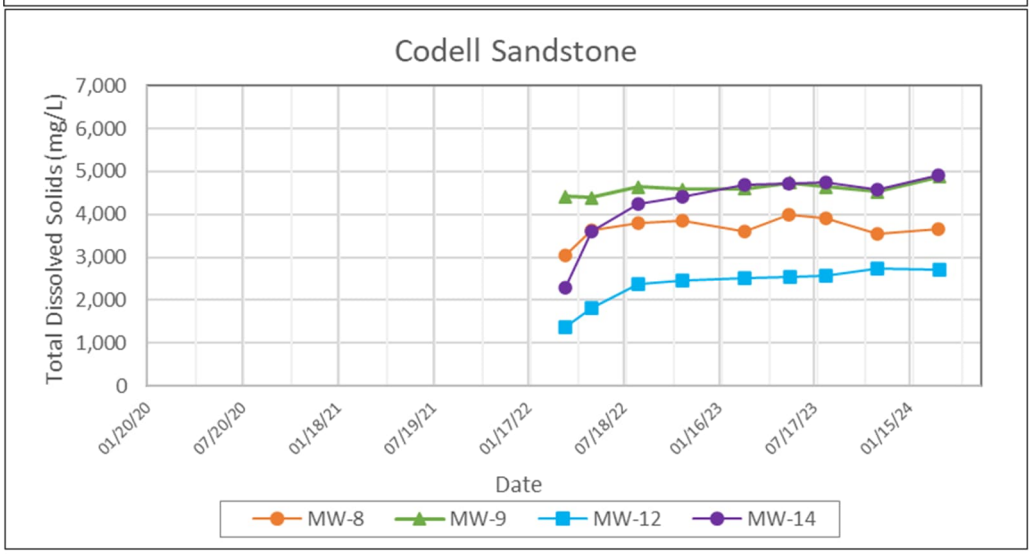


Figure 2. Concentrations of Total Dissolved Solids in the Ft. Hayes Limestone, Codell Sandstone, and Blue Hills Shale.





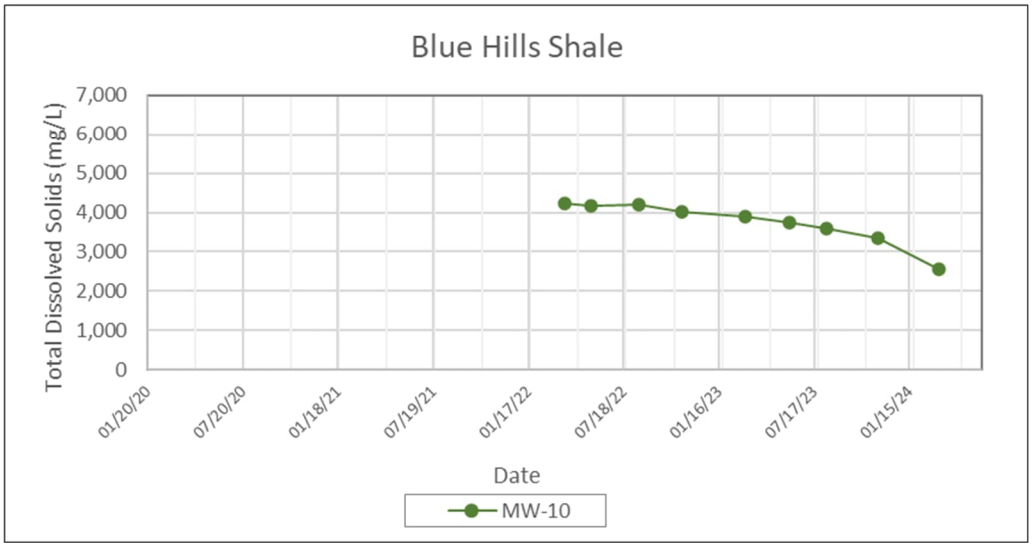
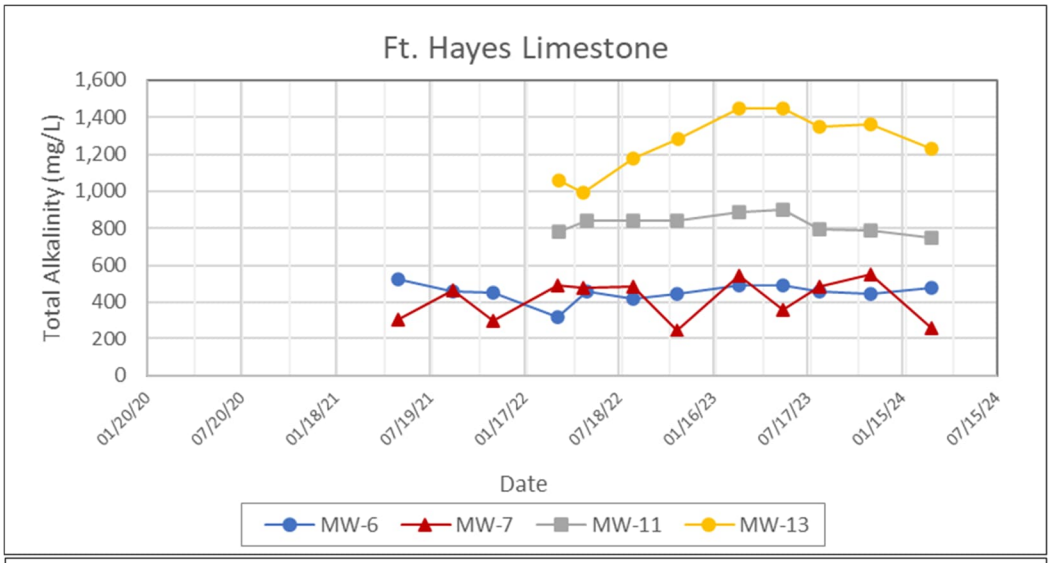
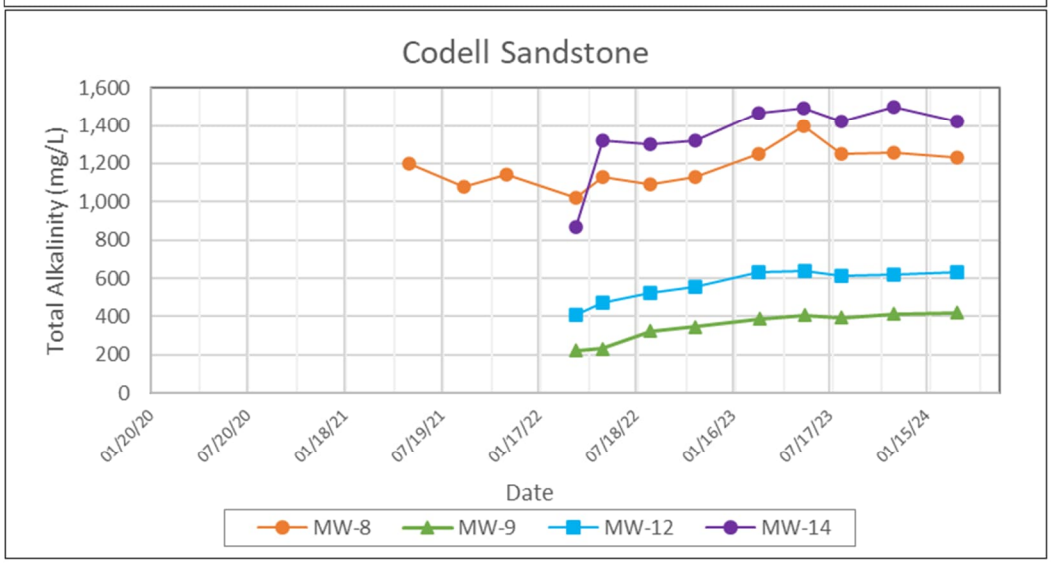
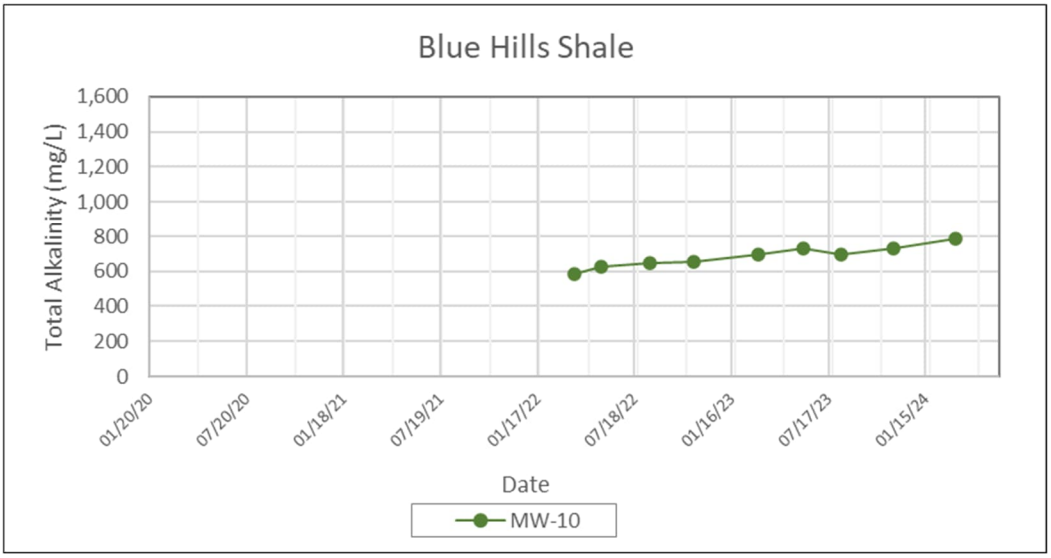


Figure 3. Total Alkalinity in the Ft. Hayes Limestone, Codell Sandstone, and Blue Hills Shale.







Regards,

SLR International Corporation

Landon Beck
Principal Hydrogeologist
lbeck@slrconsulting.com

Attachments: 2024 Q1 GW Monitoring field forms, lab reports and updated summary table

CC: None

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:	Form Name:
GCC_RGPP-20240318-1314032001-18359928947	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Mar 18, 2024 1:56:21 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)	34.16
Well Total Depth (ft below top of casing)	56.4
Depth to Water below ground Surface (ft)	31.64
Well Diameter (In)	2

Misc

Site Photo

Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Mar 11, 2024 9:00:00 AM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Cloudy
Air Temperature (°F)	55
Date	Mar 11, 2024
Time	1:12:00 PM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	Mar 11, 2024 1:07:00 PM MDT
Sample Temperature (°C)	14.54
Specific Conductivity (µS/cm)	5178.40
pH (S.U.)	6.93
Oxygen Reduction Potential (mV)	-65.04
Dissolved Oxygen (mg/L)	1.93

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	Mar 11, 2024 1:10:00 PM MDT
Sample Temperature (°C)	14.53
Specific Conductivity (µS/cm)	5170.70
pH (S.U.)	6.93
Oxygen Reduction Potential (mV)	-54.42
Dissolved Oxygen (mg/L)	1.84

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	Mar 11, 2024 1:12:00 PM MDT
Sample Temperature (°C)	14.54
Specific Conductivity (µS/cm)	5146.58
pH (S.U.)	6.93
Oxygen Reduction Potential (mV)	-46.01
Dissolved Oxygen (mg/L)	1.82

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	34.14
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.05
Total Purged (gal)	0.30
Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.12894593692263 altitude: 1535.1145 longitude: -104.60617332729008 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Amy Rodrigues – GCC Pueblo Environmental Engineer

Sampler's Signature

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-6 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-6
Sample Date/Time	Mar 11, 2024 1:12:00 PM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:	Form Name:
GCC_RGPP-20240318-1314032001-18359934796	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Mar 18, 2024 2:47:41 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)	34.06
Well Total Depth (ft below top of casing)	56.1
Depth to Water below ground Surface (ft)	31.40
Well Diameter (In)	2

Misc

Site Photo

Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Mar 11, 2024 9:00:00 AM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Cloudy
Air Temperature (°F)	63
Date	Mar 11, 2024
Time	1:39:00 PM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	Mar 11, 2024 1:34:00 PM MDT
Sample Temperature (°C)	14.48
Specific Conductivity (µS/cm)	4838.79
pH (S.U.)	7.10
Oxygen Reduction Potential (mV)	-23.93
Dissolved Oxygen (mg/L)	3.05

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	Mar 11, 2024 1:36:00 PM MDT
Sample Temperature (°C)	14.57
Specific Conductivity (µS/cm)	4791.74
pH (S.U.)	7.09
Oxygen Reduction Potential (mV)	-34.22
Dissolved Oxygen (mg/L)	2.94

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	Mar 11, 2024 1:39:00 PM MDT
Sample Temperature (°C)	14.76
Specific Conductivity (µS/cm)	4728.35
pH (S.U.)	7.09
Oxygen Reduction Potential (mV)	-39.67
Dissolved Oxygen (mg/L)	2.74

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	34.14
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.05
Total Purged (gal)	0.30
Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.12894593692263 altitude: 1535.1317 longitude: -104.60617332729008 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Amy Rodrigues – GCC Pueblo Environmental Engineer

Sampler's Signature

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 3

Details

Method of Sample Collection	MW-7 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-7
Sample Date/Time	Mar 11, 2024 1:39:00 PM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

LAB SAMPLE 2 OF 3

Details

Method of Sample Collection	MW-7 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-2B
Sample Date/Time	Mar 11, 2024 12:00:00 PM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Duplicate

LAB SAMPLE 3 OF 3

Details

Method of Sample Collection	MW-7 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	Method Blank
Sample Date/Time	Mar 11, 2024 12:30:00 PM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Method Blank

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:	Form Name:
GCC_RGPP-20240318-1314032001-18359934971	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Mar 18, 2024 2:55:56 PM 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)	33.10
Well Total Depth (ft below top of casing)	65.65
Depth to Water below ground Surface (ft)	30.94
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:	Mar 11, 2024 9:00:00 AM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Cloudy
Air Temperature (°F)	63
Date	Mar 11, 2024
Time	2:14:00 PM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	Mar 11, 2024 2:09:00 PM MDT
Sample Temperature (°C)	14.44
Specific Conductivity (µS/cm)	5004.60
pH (S.U.)	7.17
Oxygen Reduction Potential (mV)	-162.16
Dissolved Oxygen (mg/L)	3.55

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	Mar 11, 2024 2:12:00 PM MDT
Sample Temperature (°C)	14.63
Specific Conductivity (µS/cm)	4982.54
pH (S.U.)	7.16
Oxygen Reduction Potential (mV)	-165.53
Dissolved Oxygen (mg/L)	2.50

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	Mar 11, 2024 2:14:00 PM MDT
Sample Temperature (°C)	14.67
Specific Conductivity (µS/cm)	4968.55
pH (S.U.)	7.16
Oxygen Reduction Potential (mV)	-169.84
Dissolved Oxygen (mg/L)	2.53

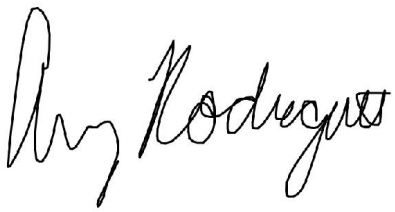
Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	39.35
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.03
Total Purged (gal)	0.40
Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.12894593692263 altitude: 1535.1356 longitude: -104.60617332729008 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Amy Rodrigues – GCC Pueblo Environmental Engineer

Sampler's Signature



SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-8 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-8
Sample Date/Time	Mar 11, 2024 2:14:00 PM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:	Form Name:
GCC_RGPP-20240318-1314032001-18359944396	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Mar 18, 2024 3:47:01 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)	25.77
Well Total Depth (ft below top of casing)	42.23
Depth to Water below ground Surface (ft)	23.69
Well Diameter (In)	2

Misc

Site Photo

Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Mar 11, 2024 9:00:00 AM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Partly Sunny
Air Temperature (°F)	55
Date	Mar 12, 2024
Time	11:30:00 AM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	Mar 12, 2024 11:24:00 AM MDT
Sample Temperature (°C)	15.64
Specific Conductivity (µS/cm)	5066.51
pH (S.U.)	6.87
Oxygen Reduction Potential (mV)	-130.42
Dissolved Oxygen (mg/L)	1.88

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	Mar 12, 2024 11:27:00 AM MDT
Sample Temperature (°C)	15.62
Specific Conductivity (µS/cm)	5099.18
pH (S.U.)	6.86
Oxygen Reduction Potential (mV)	-128.37
Dissolved Oxygen (mg/L)	1.71

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	Mar 12, 2024 11:30:00 AM MDT
Sample Temperature (°C)	15.84
Specific Conductivity (µS/cm)	5086.67
pH (S.U.)	6.86
Oxygen Reduction Potential (mV)	-126.59
Dissolved Oxygen (mg/L)	1.58

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	28.44
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.08
Total Purged (gal)	0.20
Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.12894593692263 altitude: 1535.1311 longitude: -104.60617332729008 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Amy Rodrigues – GCC Pueblo Environmental Engineer

Sampler's Signature

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-9 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-9
Sample Date/Time	Mar 12, 2024 11:30:00 AM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:	Form Name:
GCC_RGPP-20240318-1314032001-18359944455	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Mar 18, 2024 3:55:57 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)	25.21
Well Total Depth (ft below top of casing)	82.55
Depth to Water below ground Surface (ft)	22.97
Well Diameter (In)	2

Misc

Site Photo

Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Mar 11, 2024 9:00:00 AM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Partly Sunny
Air Temperature (°F)	55
Date	Mar 12, 2024
Time	12:02:00 PM MDT
Comments	Dissolved oxygen was not recorded for well. Issue wasn't identified in field.

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	Mar 12, 2024 11:57:00 AM MDT
Sample Temperature (°C)	15.07
Specific Conductivity (µS/cm)	4154.54
pH (S.U.)	7.80
Oxygen Reduction Potential (mV)	-162.27

Dissolved Oxygen (mg/L)	0.00

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	Mar 12, 2024 12:00:00 PM MDT
Sample Temperature (°C)	15.32
Specific Conductivity (µS/cm)	3606.01
pH (S.U.)	7.78
Oxygen Reduction Potential (mV)	-158.13
Dissolved Oxygen (mg/L)	0.00

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	Mar 12, 2024 12:02:00 PM MDT
Sample Temperature (°C)	15.40
Specific Conductivity (µS/cm)	3502.21
pH (S.U.)	7.76
Oxygen Reduction Potential (mV)	-156.30
Dissolved Oxygen (mg/L)	0.00

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	36.48
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.07
Total Purged (gal)	0.50
Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.12894593692263 altitude: 1535.1399 longitude: -104.60617332729008 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Amy Rodrigues – GCC Pueblo Environmental Engineer

Sampler's Signature

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-10 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-10
Sample Date/Time	Mar 12, 2024 12:02:00 PM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:	Form Name:
GCC_RGPP-20240318-1314032001-18359943093	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Mar 18, 2024 3:06:28 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)	54.60
Well Total Depth (ft below top of casing)	72.68
Depth to Water below ground Surface (ft)	52.42
Well Diameter (In)	2

Misc

Site Photo

Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Mar 11, 2024 9:00:00 AM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Partly Sunny
Air Temperature (°F)	55
Date	Mar 12, 2024
Time	9:21:00 AM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	Mar 12, 2024 9:16:00 AM MDT
Sample Temperature (°C)	15.43
Specific Conductivity (µS/cm)	2266.63
pH (S.U.)	7.30
Oxygen Reduction Potential (mV)	-316.62
Are you sure? This value seems very unlikely based on past data?	Yes

ORP - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Dissolved Oxygen (mg/L)	2.45

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	Mar 12, 2024 9:02:00 AM MDT
Sample Temperature (°C)	15.57
Specific Conductivity (µS/cm)	2154.83
pH (S.U.)	7.25
Oxygen Reduction Potential (mV)	-307.37
Are you sure? This value seems very unlikely based on past data?	Yes
ORP - Out of Range	Suspect conditions not observed before but I think the parameter value is accurate
Dissolved Oxygen (mg/L)	2.39

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	Mar 12, 2024 9:21:00 AM MDT
Sample Temperature (°C)	15.62
Specific Conductivity (µS/cm)	2092.60
pH (S.U.)	7.25
Oxygen Reduction Potential (mV)	-299.45
Dissolved Oxygen (mg/L)	2.67

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	57.66
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.04
Total Purged (gal)	0.40
Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.12894593692263 altitude: 1535.1459 longitude: -104.60617332729008 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

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

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-11 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-11
Sample Date/Time	Mar 12, 2024 9:21:00 AM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:	Form Name:
GCC_RGPP-20240318-1314032001-18359943163	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Mar 18, 2024 3:13:44 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)	58.65
Well Total Depth (ft below top of casing)	88.8
Depth to Water below ground Surface (ft)	56.36
Well Diameter (In)	2

Misc

Site Photo

Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Mar 11, 2024 9:00:00 AM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Partly Sunny
Air Temperature (°F)	55
Date	Mar 12, 2024
Time	9:42:00 AM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	Mar 12, 2024 9:37:00 AM MDT
Sample Temperature (°C)	14.74
Specific Conductivity (µS/cm)	4522.57
pH (S.U.)	7.70
Oxygen Reduction Potential (mV)	-276.01
Dissolved Oxygen (mg/L)	1.54

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	Mar 12, 2024 9:40:00 AM MDT
Sample Temperature (°C)	14.85
Specific Conductivity (µS/cm)	4523.10
pH (S.U.)	7.70
Oxygen Reduction Potential (mV)	-270.63
Dissolved Oxygen (mg/L)	1.51

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	Mar 12, 2024 9:42:00 AM MDT
Sample Temperature (°C)	14.96
Specific Conductivity (µS/cm)	4510.05
pH (S.U.)	7.70
Oxygen Reduction Potential (mV)	-266.92
Dissolved Oxygen (mg/L)	1.55

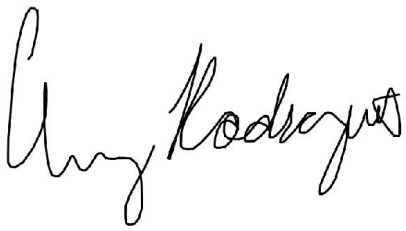
Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	63.33
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.07
Total Purged (gal)	0.50
Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.12894593692263 altitude: 1535.1344 longitude: -104.60617332729008 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Amy Rodrigues – GCC Pueblo Environmental Engineer

Sampler's Signature



SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-12 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-12
Sample Date/Time	Mar 12, 2024 9:42:00 AM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:	Form Name:
GCC_RGPP-20240318-1314032001-18359927296	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Mar 18, 2024 12:45:31 PM MDT**

SITE INFORMATION

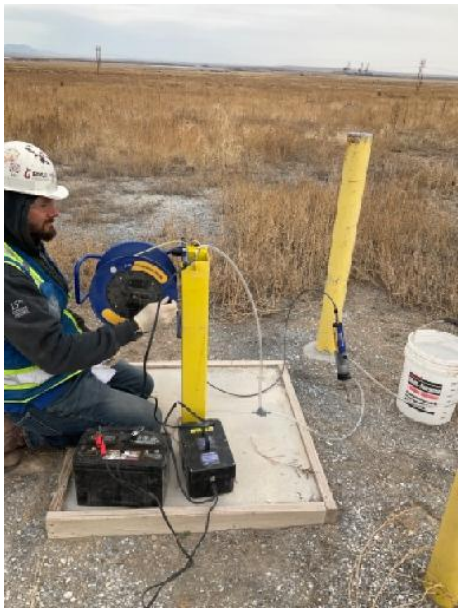
Location

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)	117.18
Well Total Depth (ft below top of casing)	177.88
Depth to Water below ground Surface (ft)	114.99
Well Diameter (In)	2

Misc

Site Photo



Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Mar 11, 2024 9:00:00 AM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Cloudy
Air Temperature (°F)	51
Date	Mar 11, 2024
Time	11:37:00 AM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	Mar 11, 2024 11:31:00 AM MDT
Sample Temperature (°C)	15.30
Specific Conductivity (µS/cm)	3854.31
pH (S.U.)	7.93
Oxygen Reduction Potential (mV)	-173.95
Dissolved Oxygen (mg/L)	1.75

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	Mar 11, 2024 11:33:00 AM MDT
Sample Temperature (°C)	15.39
Specific Conductivity (µS/cm)	3846.54
pH (S.U.)	7.93
Oxygen Reduction Potential (mV)	-176.16
Dissolved Oxygen (mg/L)	1.50

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	Mar 11, 2024 11:37:00 AM MDT
Sample Temperature (°C)	15.41
Specific Conductivity (µS/cm)	3783.18
pH (S.U.)	7.95
Oxygen Reduction Potential (mV)	-180.05
Dissolved Oxygen (mg/L)	1.46

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	117.01
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.04
Total Purged (gal)	1.00
Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.12894593692263 altitude: 1535.1412 longitude: -104.60617332729008 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Amy Rodrigues – GCC Pueblo Environmental Engineer

Sampler's Signature

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-13 – Dedicated Proactive Environmental SS Sample Champ XL 12-volt low-flow submersible pump
Lab Sample Name	MW-13
Sample Date/Time	Mar 11, 2024 11:37:00 AM MDT
Lab Suite	GW-Compliance
Number of Bottles/Containers	3
Lab Sample Type	Normal

Sample Handling

SAMPLE HANDLING 1 OF 3

Bottle Details

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

SAMPLE HANDLING 2 OF 3

Bottle Details

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

SAMPLE HANDLING 3 OF 3

Bottle Details

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

Wells - GCC Pueblo Compliance Water Sampling

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

Reference Number:	Form Name:
GCC_RGPP-20240318-1314032001-18359927172	**Wells - GCC Pueblo Compliance Water Sampling**
Submitter Name:	Date Sent on Device:
Amy Rodrigues | amy.rodrigues	**Mar 18, 2024 12:34:33 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)	97.32
Well Total Depth (ft below top of casing)	207.83
Depth to Water below ground Surface (ft)	95.21
Well Diameter (In)	2

Misc

Site Photo

Water Quality Meter

Water Quality Meter Make/Model/SN	In-Situ AquaTroll 400 SN 896017
Calibration Date/Time:	Mar 11, 2024 9:00:00 AM MDT
Calibration Parameters	Specific Conductivity (SC) pH Oxygen Reduction Potential (ORP) Dissolved Oxygen (DO or RDO)
AquaTroll calibration log generated?	Yes

SAMPLING DETAILS

Weather	Cloudy
Air Temperature (°F)	51
Date	Mar 11, 2024
Time	10:47:00 AM MDT

Micro-Purge Stabilization Parameters #1

Parameter Date/Time	Mar 11, 2024 10:41:00 AM MDT
Sample Temperature (°C)	14.72
Specific Conductivity (µS/cm)	6586.25
pH (S.U.)	7.61
Oxygen Reduction Potential (mV)	-109.54
Dissolved Oxygen (mg/L)	1.94

Micro-Purge Stabilization Parameters #2

Parameter Date/Time	Mar 11, 2024 10:44:00 AM MDT
Sample Temperature (°C)	14.80
Specific Conductivity (µS/cm)	6399.14
pH (S.U.)	7.58
Oxygen Reduction Potential (mV)	-112.17
Dissolved Oxygen (mg/L)	1.44

Micro-Purge Stabilization Parameters #3 (FINAL)

Parameter Date/Time	Mar 11, 2024 10:47:00 AM MDT
Sample Temperature (°C)	14.83
Specific Conductivity (µS/cm)	6462.37
pH (S.U.)	7.57
Oxygen Reduction Potential (mV)	-114.57
Dissolved Oxygen (mg/L)	2.24

Purge and Sampling

Water level measured at sample time?	Depth to Water (ft TOC) measured at Sample Time
Depth to Water (ft TOC)	109.66
Was flow rate measured?	Flow Rate was measured.
Flow Rate (gpm)	0.04
Total Purged (gal)	1.20
Geographic Sample Location	3372 Lime Rd, North Avondale, CO 81022, USA latitude: 38.12894593692263 altitude: 1535.1417 longitude: -104.60617332729008 [viewMap]
Sample(s) collected for laboratory analysis?	Yes

Sampler

Sampler Name	Amy Rodrigues – GCC Pueblo Environmental Engineer

Sampler's Signature

SAMPLE(S) COLLECTED FOR LABORATORY ANALYSIS

Sample Submittal Information

LAB SAMPLE 1 OF 1

Details

Method of Sample Collection	MW-14 – Dedicated QED SS Well Wizard T1300 low-flow bladder pump
Lab Sample Name	MW-14
Sample Date/Time	Mar 11, 2024 10:47:00 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

DIANE SHORT & ASSOCIATES, INC._____
2634 S. Deframe Circle
Lakewood CO 80228
303:271-9642
dsa7cbc@eazyqaqc.com

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

SDG	L86455, L86481
PROJECT	GCC Rio Grande – First Quarter 2024, Resource Hydrogeologic Services and GCC, Pueblo CO
LABORATORY	ACZ Laboratories, Steamboat Springs, CO
SAMPLE MATRIX	Water SAMPLING DATE: 3/11, 3/12/2024
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-2B, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-14, METHOD BLANK

DATA REVIEWER: John Huntington_____

QA REVIEWER: Diane Short & Associates, Inc. INITIALS/DATE: ___ DLS ___4/30/2024

Telephone Logs included Yes____ No __X_
Contractual Violations Yes____ No __X_

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

I. DELIVERABLES

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

Yes 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).

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.

One sample in L86455 had to be diluted after the initial analysis for TDS. The reanalysis was out of the 7-day holding time. The TDS result for this sample is qualified as JH#, where # is the number of days outside of holding time. These results could possibly be biased due to chemical changes between analyses. Any bias should be minor in this case. In addition, this sample is the field duplicate for MW-7 and its TDS result is nearly identical to that of the parent sample.

Qualifiers added are shown below and in the qualified EDD.

CLIENTID	LABID	ANALYTE	RESULT	QUAL	UNITS	MDL	PQL	DSA	EPA
MW-2B	L86455-06	Residue, Filterable (TDS) @180C	4720	H	mg/L	200	400	JH1	J-

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

Yes X No _____ N/A _____

C. Chains of Custody (COC)

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

Yes X No _____

All sample analyses were sent under a COC to ACZ Labs, Steamboat Springs, CO. Temperatures on receipt were all in control.

Clarification: Per the GCC project manager, "the sample called "METHOD BLANK" on the COC associated with SDG L86455 is essentially a field blank with DI water and a spare well pump. It is a requirement begun in 4th quarter 2023 to have one of these per quarterly sample event. The validator recommends that this field blank be called something else to avoid confusion with laboratory method blanks.

III. CALIBRATION AND STANDARDIZATION

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

Yes 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.

The alkalinity method blank has low detections in both SDGS. In SDG L86455, the METHOD BLANK sample (a field blank) has a detection very similar to the associated method blank levels and is qualified as UMB9.1, indicating that it should be regarded as a non-detect. In all other samples, the alkalinity results are greater than 5 times the laboratory preparation blank and no qualifiers are required.

No other analytes require qualification for preparation blank contamination.

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

Yes _____ No _____ N/A __X__

VII. CALIBRATION BLANKS

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

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

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

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

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

There are no reported detections in the CCBs except for sodium and sulfate in SDG L86455. The sodium and sulfate levels in associated samples are > 10 x the CCB levels and no qualifiers are required. In the METHOD BLANK field blank, a low level of sodium is detected but the CCBs related to that sample show no detections. No qualifiers are required.

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

Yes __X__ No _____ N/A _____
The METHOD BLANK field sample is a field blank. The results for the field blank are used to evaluate associated samples (those taken on the same day) after qualification of the field blank for associated method blank contamination.

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

Yes _____ No __X__ N/A _____
In this case, several samples in SDG L86455 are qualified due to the field blank, as shown in the table below. All the samples had low-level detections of zinc which were very similar to the levels in the field blank. The results for zinc are qualified as UFB0.091 indicating that zinc should be regarded as non-detections in these samples. Although zinc detections in SDG L86481 are not qualified since the samples are collected on a different day, Those levels are very similar, and it is possible that dissolved zinc is a false positive in these samples as well. Zinc is a common contaminant of containers and sampling equipment. It may be that distilled water rather than deionized water is being used.

CLIENTID	LABID	ANALYTE	RESULT	QUAL	UNITS	MDL	PQL	DSA	EPA
L86455-01	MW-14	Zinc, dissolved	0.093		mg/L	0.02	0.05	UFB0.091	UB
L86455-02	MW-13	Magnesium, dissolved	1.93		mg/L	0.2	1	UFB0.45	UB
L86455-02	MW-13	Zinc, dissolved	0.067		mg/L	0.02	0.05	UFB0.091	UB
L86455-02	MW-13	Hardness as CaCO3 (dissolved)	26.0		mg/L	0.2	5	UFB2.7	UB
L86455-03	MW-6	Zinc, dissolved	0.095		mg/L	0.02	0.05	UFB0.091	UB
L86455-04	MW-7	Zinc, dissolved	0.080		mg/L	0.02	0.05	UFB0.091	UB
L86455-05	MW-8	Zinc, dissolved	0.090		mg/L	0.02	0.05	UFB0.091	UB
L86455-06	MW-2B	Zinc, dissolved	0.085		mg/L	0.02	0.05	UFB0.091	UB

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 per method would be required per year.

Spiked Sample – L86455	Methods
MW-13	M245.1 CVAA, SM4500F-C -Fluoride
MW-02B	M245.1 CVAA

MW-7	D516-02/-07/-11 - TURBIDIMETRIC
Spiked Sample – L86481	
MW-11	M200.7 ICP - copper

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

Yes _____ No __X__ N/A _____

When matrix spikes are present, associated data are qualified with the DSA qualifier JMS#, where # is the value of the %R for the associated MS or MSD. Data may be biased high or low proportional to the spike recovery. 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.

In SDG L86455, the recovery of mercury in the spike of MW-13 was 50% in the MS and 48% in the MSD. All other MS/MSD recoveries for ICP and ICP-MS metals in this SDG are acceptable. The results for the parent sample are qualified as JMS48 to indicate a possible low bias for mercury in the sample.

CLIENTID	LABID	ANALYTE	RESULT	Lab Flag	UNITS	MDL	PQL	DSA	EPA
MW-13	L86455-02	Mercury, dissolved		U	mg/L	0.0002	0.001	JMS48	J-

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 L86455	Methods
MW-14	M353.2 - Automated Cadmium Reduction
Parent Sample SDG L86481	
MW-10	SM2320B – alkalinity, TDS

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

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

XI. LABORATORY CONTROL SAMPLE

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

Yes X No _____

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

Yes X No _____
All LCS analyses were within criteria.

XII. FIELD QC

A. Field QC samples were identified.

Yes X No _____
Sample MW-2B is a blind duplicate of sample MW-7.

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

Yes X No _____ N/A _____

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.

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

Yes X No _____

C. Data were acceptable for the total versus dissolved and the cation/ anion balance.
Yes _X__ No ___NA_____
Total metals were not requested, so the total vs dissolved check cannot be performed. The cation-anion balance and calculated TDS are performed and are in control. These parameters are not evaluated for the METHOD BLANK field blank, since the levels of cations, anions, and TDS are too low to give meaningful comparisons.

XV. OVERALL ASSESSMENT OF THE CASE

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

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

The data were validated at EPA Level III (EPA Stage 2B) with a minimum of 10% validated as EPA raw data review).

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

Chain of Custody and Sample Preservation
All sample analyses were sent under a COC to ACZ Labs, Steamboat Springs, CO. Temperatures on receipt were all in control.

Clarification: Per the GCC project manager, "the sample called "METHOD BLANK" on the COC associated with SDG L86455 is essentially a field blank with DI water and a spare well pump. It is a requirement begun in 4th quarter 2023 to have one of these per quarterly sample event. The validator recommends that this field blank be called something else to avoid confusion with laboratory method blanks.

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

One sample in L86455 had to be diluted after the initial analysis for TDS. The reanalysis was out of the 7-day holding time. The TDS result for this sample is qualified as JH#, where # is the number of days outside of holding time. These results could possibly be biased due to chemical changes between analyses. Any bias should be minor in this case. In addition, this sample is the field duplicate for MW-7 and its TDS result is nearly identical to that of the parent sample.

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

Method Blanks

The ICB is used as the method blank for metals. This is acceptable since no digestion was performed on the samples prior to analysis.

Analytes reported as contaminants in the Preparation Blank are qualified with the DSA qualifier "UMB#," where # is the value of the associated blank. Only detected data less than 10x the blank for metals or 5x the blank for other analyses are qualified. Such data are fully usable as non-detected values at the reported concentration or elevated reporting limit.

The alkalinity method blank has low detections in both SDGS. In SDG L86455, the METHOD BLANK sample (a field blank) has a detection very similar to the associated method blank levels and is qualified as UMB9.1, indicating that it should be regarded as a non-detect. In all other samples, the alkalinity results are greater than 5x the laboratory preparation blank and no qualifiers are required.

No other analytes require qualification for preparation blank contamination.

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 analyses are qualified.

There are no reported detections in the CCBs except for sodium and sulfate in SDG L86455. The sodium and sulfate levels in associated samples are > 10 x the CCB levels and no qualifiers are required. In the METHOD BLANK field blank, a low level of sodium is detected but the CCBs related to that sample show no detections. No qualifiers are required.

Field Blanks

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

In this case, several samples in SDG L86455 are qualified due to the field blank, as shown in the table below. All the samples had low-level detections of zinc which were very similar to the levels in the field blank. The results for zinc are qualified as UFB0.091 indicating that zinc should be regarded as non-detections in these samples. Although zinc detections in SDG L86481 are not qualified since the samples are collected on a different day, Those levels are very similar, and it is possible that dissolved zinc is a false positive in these samples as well. Zinc is a common contaminant of containers and sampling equipment. It may be that distilled water rather than deionized water is being used.

Matrix Spikes, Matrix Spike Duplicates, and Matrix Duplicates

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.

In SDG L86455, the recovery of mercury in the spike of MW-13 was 50% in the MS and 48% in the MSD. All other MS/MSD recoveries for ICP and ICP-MS metals in this SDG are acceptable. The results for the parent sample are qualified as JMS48 to indicate a possible low bias for mercury in the sample.

CLIENTID	LABID	ANALYTE	RESULT	Lab Flag	UNITS	MDL	PQL	DSA	EPA
MW-13	L86455-02	Mercury, dissolved		U	mg/L	0.0002	0.001	JMS48	J-

Field QC

Sample MW-2B is a blind duplicate of sample MW-7. It is in control.

Cation-Anion Balance and Calculated TDS

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

TABLE OF QUALIFIED DATA

CLIENTID	LABID	ANALYTE	RESULT	Lab Flag	UNITS	MDL	PQL	DSA	EPA
METHOD BLANK	L86455-07	Bicarbonate as CaCO3	7.0	B	mg/L	2	20	UMB9.1	UB
MW-13	L86455-02	Hardness as CaCO3 (dissolved)	26.0		mg/L	0.2	5	UFB2.7	UB
MW-13	L86455-02	Magnesium, dissolved	1.93		mg/L	0.2	1	UFB0.45	UB
MW-13	L86455-02	Mercury, dissolved		U	mg/L	0.0002	0.001	JMS48	J-
MW-2B	L86455-06	Residue, Filterable (TDS) @180C	4720	H	mg/L	200	400	JH1	J-
METHOD BLANK	L86455-07	Total Alkalinity	7.0	B	mg/L	2	20	UMB9.1	UB
MW-14	L86455-01	Zinc, dissolved	0.093		mg/L	0.02	0.05	UFB0.091	UB
MW-13	L86455-02	Zinc, dissolved	0.067		mg/L	0.02	0.05	UFB0.091	UB
MW-6	L86455-03	Zinc, dissolved	0.095		mg/L	0.02	0.05	UFB0.091	UB
MW-7	L86455-04	Zinc, dissolved	0.080		mg/L	0.02	0.05	UFB0.091	UB
MW-8	L86455-05	Zinc, dissolved	0.090		mg/L	0.02	0.05	UFB0.091	UB
MW-2B	L86455-06	Zinc, dissolved	0.085		mg/L	0.02	0.05	UFB0.091	UB

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

Analytical Report

March 25, 2024

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

cc: Landon Beck

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

Project ID:
ACZ Project ID: L86455

Amy Rodrigues:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on March 12, 2024. This project has been assigned to ACZ's project number, L86455. 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 L86455. 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 March 25, 2025. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

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

Sue Webber has reviewed and approved this report.

GCC Rio Grande

March 25, 2024

Project ID:
ACZ Project ID: L86455

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 7 groundwater samples from GCC Rio Grande on March 12, 2024. 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 L86455. 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 the following:

1. The below is from WG585907, Qualifier: H1, Applies to: L86455-06/TOTAL DISSOLVED SOLIDS -
Sample originally run within hold but was pulled out of the workgroup automatically to be run on a dilution. Sample was not able to be rerun until one day past hold.

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:
Sample ID: MW-14

ACZ Sample ID: ***L86455-01***
Date Sampled: *03/11/24 10:47*
Date Received: *03/12/24*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	03/14/24 22:21	wtc
Arsenic, dissolved	M200.8 ICP-MS	5	0.00362	B		mg/L	0.001	0.005	03/19/24 21:20	aps
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/14/24 22:21	wtc
Boron, dissolved	M200.7 ICP	1	1.29			mg/L	0.03	0.1	03/14/24 22:21	wtc
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U		mg/L	0.00025	0.00125	03/19/24 21:20	aps
Calcium, dissolved	M200.7 ICP	1	17.9			mg/L	0.1	0.5	03/14/24 22:21	wtc
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	03/14/24 22:21	wtc
Cobalt, dissolved	M200.8 ICP-MS	5	<0.00025	U		mg/L	0.00025	0.00125	03/19/24 21:20	aps
Copper, dissolved	M200.7 ICP	5	<0.05	U		mg/L	0.05	0.25	03/18/24 18:08	brc
Iron, dissolved	M200.7 ICP	1	0.980			mg/L	0.06	0.15	03/14/24 22:21	wtc
Lead, dissolved	M200.8 ICP-MS	5	<0.0005	U		mg/L	0.0005	0.0025	03/19/24 21:20	aps
Lithium, dissolved	M200.7 ICP	1	0.415			mg/L	0.008	0.04	03/14/24 22:21	wtc
Magnesium, dissolved	M200.7 ICP	1	5.91			mg/L	0.2	1	03/14/24 22:21	wtc
Manganese, dissolved	M200.7 ICP	1	0.034	B		mg/L	0.01	0.05	03/14/24 22:21	wtc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	03/14/24 16:28	wtc
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	03/14/24 22:21	wtc
Potassium, dissolved	M200.7 ICP	1	5.44			mg/L	0.5	1	03/14/24 22:21	wtc
Selenium, dissolved	M200.8 ICP-MS	5	<0.0005	U	*	mg/L	0.0005	0.00125	03/19/24 21:20	aps
Sodium, dissolved	M200.7 ICP	5	1850			mg/L	1	5	03/18/24 18:08	brc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	03/14/24 22:21	wtc
Zinc, dissolved	M200.7 ICP	1	0.093			mg/L	0.02	0.05	03/14/24 22:21	wtc

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

ACZ Sample ID: ***L86455-01***
Date Sampled: *03/11/24 10:47*
Date Received: *03/12/24*
Sample Matrix: *Groundwater*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	1420			mg/L	2	20	03/22/24 0:00	jck
Carbonate as CaCO3		1	<2	U		mg/L	2	20	03/22/24 0:00	jck
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	03/22/24 0:00	jck
Total Alkalinity		1	1420		*	mg/L	2	20	03/22/24 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-1.2			%			03/25/24 0:00	calc
Sum of Anions			85			meq/L			03/25/24 0:00	calc
Sum of Cations			83.0			meq/L			03/25/24 0:00	calc
Chloride	SM4500Cl-E	50	1700		*	mg/L	50	100	03/15/24 10:43	jqr
Fluoride	SM4500F-C	1	2.98			mg/L	0.15	0.35	03/22/24 16:28	jck
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		69.0			mg/L	0.2	5	03/25/24 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	03/25/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	03/13/24 0:33	pjb
Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	03/13/24 0:04	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	4920			mg/L	40	80	03/15/24 13:20	emk
Sulfate	ASTM D516-07/-11/-16	25	429		*	mg/L	25	125	03/15/24 11:51	jqr
TDS (calculated)	Calculation		4880			mg/L			03/25/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.01						03/25/24 0:00	calc

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

ACZ Sample ID: ***L86455-02***
Date Sampled: *03/11/24 11:37*
Date Received: *03/12/24*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	03/13/24 21:44	brc
Arsenic, dissolved	M200.8 ICP-MS	5	<0.001	U		mg/L	0.001	0.005	03/19/24 21:22	aps
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/13/24 21:44	brc
Boron, dissolved	M200.7 ICP	1	1.07			mg/L	0.03	0.1	03/13/24 21:44	brc
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U		mg/L	0.00025	0.00125	03/19/24 21:22	aps
Calcium, dissolved	M200.7 ICP	1	7.24			mg/L	0.1	0.5	03/13/24 21:44	brc
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	03/13/24 21:44	brc
Cobalt, dissolved	M200.8 ICP-MS	5	<0.00025	U		mg/L	0.00025	0.00125	03/19/24 21:22	aps
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/15/24 0:36	wtc
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	03/13/24 21:44	brc
Lead, dissolved	M200.8 ICP-MS	5	<0.0005	U		mg/L	0.0005	0.0025	03/19/24 21:22	aps
Lithium, dissolved	M200.7 ICP	1	0.222			mg/L	0.008	0.04	03/13/24 21:44	brc
Magnesium, dissolved	M200.7 ICP	1	1.93			mg/L	0.2	1	03/13/24 21:44	brc
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/13/24 21:44	brc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	03/14/24 16:29	wtc
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	03/15/24 0:36	wtc
Potassium, dissolved	M200.7 ICP	1	2.91			mg/L	0.5	1	03/13/24 21:44	brc
Selenium, dissolved	M200.8 ICP-MS	5	<0.0005	U	*	mg/L	0.0005	0.00125	03/19/24 21:22	aps
Sodium, dissolved	M200.7 ICP	1	976			mg/L	0.2	1	03/13/24 21:44	brc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	03/13/24 21:44	brc
Zinc, dissolved	M200.7 ICP	1	0.067			mg/L	0.02	0.05	03/13/24 21:44	brc

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

ACZ Sample ID: ***L86455-02***
Date Sampled: *03/11/24 11:37*
Date Received: *03/12/24*
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	1230			mg/L	2	20	03/22/24 0:00	jck
Carbonate as CaCO3		1	<2	U		mg/L	2	20	03/22/24 0:00	jck
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	03/22/24 0:00	jck
Total Alkalinity		1	1230		*	mg/L	2	20	03/22/24 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-2.2			%			03/25/24 0:00	calc
Sum of Anions			46			meq/L			03/25/24 0:00	calc
Sum of Cations			44			meq/L			03/25/24 0:00	calc
Chloride	SM4500Cl-E	20	656		*	mg/L	20	40	03/15/24 10:37	jqr
Fluoride	SM4500F-C	1	6.34			mg/L	0.15	0.35	03/22/24 16:35	jck
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		26.0			mg/L	0.2	5	03/25/24 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	03/25/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	03/13/24 0:07	pjb
Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	1	0.012	B	*	mg/L	0.01	0.05	03/13/24 0:07	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	2700			mg/L	40	80	03/15/24 13:22	emk
Sulfate	ASTM D516-07/-11/-16	25	138		*	mg/L	25	125	03/15/24 11:51	jqr
TDS (calculated)	Calculation		2540			mg/L			03/25/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.06						03/25/24 0:00	calc

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

ACZ Sample ID: ***L86455-03***
Date Sampled: *03/11/24 13:12*
Date Received: *03/12/24*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	03/13/24 21:47	brc
Arsenic, dissolved	M200.8 ICP-MS	5	0.00120	B		mg/L	0.001	0.005	03/19/24 21:24	aps
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/13/24 21:47	brc
Boron, dissolved	M200.7 ICP	1	0.256			mg/L	0.03	0.1	03/13/24 21:47	brc
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U		mg/L	0.00025	0.00125	03/19/24 21:24	aps
Calcium, dissolved	M200.7 ICP	1	386			mg/L	0.1	0.5	03/13/24 21:47	brc
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	03/13/24 21:47	brc
Cobalt, dissolved	M200.8 ICP-MS	5	0.0355			mg/L	0.00025	0.00125	03/19/24 21:24	aps
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/15/24 0:39	wtc
Iron, dissolved	M200.7 ICP	1	1.35			mg/L	0.06	0.15	03/13/24 21:47	brc
Lead, dissolved	M200.8 ICP-MS	5	<0.0005	U		mg/L	0.0005	0.0025	03/19/24 21:24	aps
Lithium, dissolved	M200.7 ICP	1	0.400			mg/L	0.008	0.04	03/13/24 21:47	brc
Magnesium, dissolved	M200.7 ICP	1	398			mg/L	0.2	1	03/13/24 21:47	brc
Manganese, dissolved	M200.7 ICP	1	0.415			mg/L	0.01	0.05	03/13/24 21:47	brc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	03/15/24 10:49	wtc
Nickel, dissolved	M200.7 ICP	1	0.0683			mg/L	0.008	0.04	03/15/24 0:39	wtc
Potassium, dissolved	M200.7 ICP	1	9.90			mg/L	0.5	1	03/13/24 21:47	brc
Selenium, dissolved	M200.8 ICP-MS	5	<0.0005	U		mg/L	0.0005	0.00125	03/19/24 21:24	aps
Sodium, dissolved	M200.7 ICP	1	543			mg/L	0.2	1	03/13/24 21:47	brc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	03/13/24 21:47	brc
Zinc, dissolved	M200.7 ICP	1	0.095			mg/L	0.02	0.05	03/13/24 21:47	brc

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

ACZ Sample ID: ***L86455-03***
Date Sampled: *03/11/24 13:12*
Date Received: *03/12/24*
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	480			mg/L	2	20	03/22/24 0:00	jck
Carbonate as CaCO3		1	<2	U		mg/L	2	20	03/22/24 0:00	jck
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	03/22/24 0:00	jck
Total Alkalinity		1	480		*	mg/L	2	20	03/22/24 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-2.6			%			03/25/24 0:00	calc
Sum of Anions			80			meq/L			03/25/24 0:00	calc
Sum of Cations			76			meq/L			03/25/24 0:00	calc
Chloride	SM4500Cl-E	5	82.9		*	mg/L	5	10	03/15/24 10:24	jqr
Fluoride	SM4500F-C	1	0.53			mg/L	0.15	0.35	03/22/24 16:54	jck
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		2600			mg/L	0.2	5	03/25/24 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	03/25/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	03/13/24 0:08	pjb
Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	03/13/24 0:08	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	5310			mg/L	40	80	03/15/24 13:24	emk
Sulfate	ASTM D516-07/-11/-16	100	3230		*	mg/L	100	500	03/15/24 12:04	jqr
TDS (calculated)	Calculation		4940			mg/L			03/25/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.07						03/25/24 0:00	calc

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

ACZ Sample ID: ***L86455-04***
Date Sampled: *03/11/24 13:39*
Date Received: *03/12/24*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	03/13/24 21:51	brc
Arsenic, dissolved	M200.8 ICP-MS	5	<0.001	U		mg/L	0.001	0.005	03/19/24 21:26	aps
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/13/24 21:51	brc
Boron, dissolved	M200.7 ICP	1	0.152			mg/L	0.03	0.1	03/13/24 21:51	brc
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U		mg/L	0.00025	0.00125	03/19/24 21:26	aps
Calcium, dissolved	M200.7 ICP	1	432			mg/L	0.1	0.5	03/13/24 21:51	brc
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	03/13/24 21:51	brc
Cobalt, dissolved	M200.8 ICP-MS	5	0.00243			mg/L	0.00025	0.00125	03/19/24 21:26	aps
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/15/24 0:42	wtc
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	03/13/24 21:51	brc
Lead, dissolved	M200.8 ICP-MS	5	<0.0005	U		mg/L	0.0005	0.0025	03/19/24 21:26	aps
Lithium, dissolved	M200.7 ICP	1	0.336			mg/L	0.008	0.04	03/13/24 21:51	brc
Magnesium, dissolved	M200.7 ICP	1	379			mg/L	0.2	1	03/13/24 21:51	brc
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/13/24 21:51	brc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	03/15/24 10:50	wtc
Nickel, dissolved	M200.7 ICP	1	0.0140	B		mg/L	0.008	0.04	03/15/24 0:42	wtc
Potassium, dissolved	M200.7 ICP	1	11.9			mg/L	0.5	1	03/13/24 21:51	brc
Selenium, dissolved	M200.8 ICP-MS	5	0.0287			mg/L	0.0005	0.00125	03/19/24 21:26	aps
Sodium, dissolved	M200.7 ICP	1	370			mg/L	0.2	1	03/13/24 21:51	brc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	03/13/24 21:51	brc
Zinc, dissolved	M200.7 ICP	1	0.080			mg/L	0.02	0.05	03/13/24 21:51	brc

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

ACZ Sample ID: ***L86455-04***
Date Sampled: *03/11/24 13:39*
Date Received: *03/12/24*
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	260			mg/L	2	20	03/22/24 0:00	jck
Carbonate as CaCO3		1	<2	U		mg/L	2	20	03/22/24 0:00	jck
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	03/22/24 0:00	jck
Total Alkalinity		1	260		*	mg/L	2	20	03/22/24 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-2.1			%			03/25/24 0:00	calc
Sum of Anions			72			meq/L			03/25/24 0:00	calc
Sum of Cations			69			meq/L			03/25/24 0:00	calc
Chloride	SM4500Cl-E	1	44.8		*	mg/L	1	2	03/15/24 10:15	jqr
Fluoride	SM4500F-C	1	0.51			mg/L	0.15	0.35	03/22/24 17:02	jck
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		2640			mg/L	0.2	5	03/25/24 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		5.41			mg/L	0.06	0.3	03/25/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	3	5.41		*	mg/L	0.06	0.3	03/13/24 0:36	pjb
Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	03/13/24 0:14	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	4740			mg/L	40	80	03/15/24 13:26	emk
Sulfate	ASTM D516-07/-11/-16	100	3140		*	mg/L	100	500	03/15/24 12:09	jqr
TDS (calculated)	Calculation		4540			mg/L			03/25/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.04						03/25/24 0:00	calc

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

ACZ Sample ID: ***L86455-05***
Date Sampled: *03/11/24 14:14*
Date Received: *03/12/24*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	03/13/24 21:54	brc
Arsenic, dissolved	M200.8 ICP-MS	5	<0.001	U	*	mg/L	0.001	0.005	03/19/24 21:51	aps
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/13/24 21:54	brc
Boron, dissolved	M200.7 ICP	1	0.858			mg/L	0.03	0.1	03/13/24 21:54	brc
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U	*	mg/L	0.00025	0.00125	03/19/24 21:51	aps
Calcium, dissolved	M200.7 ICP	1	59.3			mg/L	0.1	0.5	03/13/24 21:54	brc
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	03/13/24 21:54	brc
Cobalt, dissolved	M200.8 ICP-MS	5	0.000288	B	*	mg/L	0.00025	0.00125	03/19/24 21:51	aps
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/15/24 0:46	wtc
Iron, dissolved	M200.7 ICP	1	0.712			mg/L	0.06	0.15	03/13/24 21:54	brc
Lead, dissolved	M200.8 ICP-MS	5	<0.0005	U	*	mg/L	0.0005	0.0025	03/19/24 21:51	aps
Lithium, dissolved	M200.7 ICP	1	0.337			mg/L	0.008	0.04	03/13/24 21:54	brc
Magnesium, dissolved	M200.7 ICP	1	24.8			mg/L	0.2	1	03/13/24 21:54	brc
Manganese, dissolved	M200.7 ICP	1	0.187			mg/L	0.01	0.05	03/13/24 21:54	brc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	03/15/24 10:52	wtc
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	03/15/24 0:46	wtc
Potassium, dissolved	M200.7 ICP	1	5.20			mg/L	0.5	1	03/13/24 21:54	brc
Selenium, dissolved	M200.8 ICP-MS	5	<0.0005	U	*	mg/L	0.0005	0.00125	03/19/24 21:51	aps
Sodium, dissolved	M200.7 ICP	2	1210			mg/L	0.4	2	03/18/24 18:11	brc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	03/13/24 21:54	brc
Zinc, dissolved	M200.7 ICP	1	0.090			mg/L	0.02	0.05	03/13/24 21:54	brc

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

ACZ Sample ID: ***L86455-05***
Date Sampled: *03/11/24 14:14*
Date Received: *03/12/24*
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	1230			mg/L	2	20	03/22/24 0:00	jck
Carbonate as CaCO3		1	<2	U		mg/L	2	20	03/22/24 0:00	jck
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	03/22/24 0:00	jck
Total Alkalinity		1	1230		*	mg/L	2	20	03/22/24 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-2.5			%			03/25/24 0:00	calc
Sum of Anions			61			meq/L			03/25/24 0:00	calc
Sum of Cations			58			meq/L			03/25/24 0:00	calc
Chloride	SM4500Cl-E	20	315		*	mg/L	20	40	03/15/24 10:35	jqr
Fluoride	SM4500F-C	1	1.03			mg/L	0.15	0.35	03/22/24 17:09	jck
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		250			mg/L	0.2	5	03/25/24 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	03/25/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	03/13/24 0:37	pjb
Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	03/13/24 0:15	pjb
Residue, Filterable (TDS) @180C	SM2540C	5	3660			mg/L	100	200	03/15/24 13:28	emk
Sulfate	ASTM D516-07/-11/-16	50	1300		*	mg/L	50	250	03/19/24 14:55	cbp
TDS (calculated)	Calculation		3670			mg/L			03/25/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.00						03/25/24 0:00	calc

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

ACZ Sample ID: ***L86455-06***
Date Sampled: *03/11/24 12:00*
Date Received: *03/12/24*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	03/13/24 21:57	brc
Arsenic, dissolved	M200.8 ICP-MS	5	<0.001	U	*	mg/L	0.001	0.005	03/19/24 21:53	aps
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/13/24 21:57	brc
Boron, dissolved	M200.7 ICP	1	0.144			mg/L	0.03	0.1	03/13/24 21:57	brc
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U	*	mg/L	0.00025	0.00125	03/19/24 21:53	aps
Calcium, dissolved	M200.7 ICP	1	446			mg/L	0.1	0.5	03/13/24 21:57	brc
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	03/13/24 21:57	brc
Cobalt, dissolved	M200.8 ICP-MS	5	0.00193			mg/L	0.00025	0.00125	03/19/24 21:53	aps
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/15/24 0:49	wtc
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	03/13/24 21:57	brc
Lead, dissolved	M200.8 ICP-MS	5	<0.0005	U	*	mg/L	0.0005	0.0025	03/19/24 21:53	aps
Lithium, dissolved	M200.7 ICP	1	0.329			mg/L	0.008	0.04	03/13/24 21:57	brc
Magnesium, dissolved	M200.7 ICP	1	382			mg/L	0.2	1	03/13/24 21:57	brc
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/13/24 21:57	brc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	03/15/24 10:53	wtc
Nickel, dissolved	M200.7 ICP	1	0.0131	B		mg/L	0.008	0.04	03/15/24 0:49	wtc
Potassium, dissolved	M200.7 ICP	1	12.0			mg/L	0.5	1	03/13/24 21:57	brc
Selenium, dissolved	M200.8 ICP-MS	5	0.0294			mg/L	0.0005	0.00125	03/19/24 21:53	aps
Sodium, dissolved	M200.7 ICP	1	354			mg/L	0.2	1	03/13/24 21:57	brc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	03/13/24 21:57	brc
Zinc, dissolved	M200.7 ICP	1	0.085			mg/L	0.02	0.05	03/13/24 21:57	brc

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

ACZ Sample ID: ***L86455-06***
Date Sampled: *03/11/24 12:00*
Date Received: *03/12/24*
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	247			mg/L	2	20	03/22/24 0:00	jck
Carbonate as CaCO3		1	<2	U		mg/L	2	20	03/22/24 0:00	jck
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	03/22/24 0:00	jck
Total Alkalinity		1	247		*	mg/L	2	20	03/22/24 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			2.9			%			03/25/24 0:00	calc
Sum of Anions			66			meq/L			03/25/24 0:00	calc
Sum of Cations			70			meq/L			03/25/24 0:00	calc
Chloride	SM4500Cl-E	1	43.1		*	mg/L	1	2	03/15/24 10:16	jqr
Fluoride	SM4500F-C	1	0.50			mg/L	0.15	0.35	03/22/24 17:14	jck
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		2690			mg/L	0.2	5	03/25/24 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		6.45			mg/L	0.06	0.3	03/25/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	3	6.45		*	mg/L	0.06	0.3	03/13/24 0:38	pjb
Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	03/13/24 0:16	pjb
Residue, Filterable (TDS) @180C	SM2540C	10	4720	H	*	mg/L	200	400	03/19/24 9:46	asn
Sulfate	ASTM D516-07/-11/-16	200	2870		*	mg/L	200	1000	03/19/24 15:10	cbp
TDS (calculated)	Calculation		4260			mg/L			03/25/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.11						03/25/24 0:00	calc

GCC Rio Grande
Project ID:
Sample ID: METHOD BLANK

ACZ Sample ID: ***L86455-07***
Date Sampled: *03/11/24 12:30*
Date Received: *03/12/24*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	03/13/24 22:00	brc
Arsenic, dissolved	M200.8 ICP-MS	1	<0.0002	U		mg/L	0.0002	0.001	03/19/24 21:55	aps
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/13/24 22:00	brc
Boron, dissolved	M200.7 ICP	1	<0.03	U		mg/L	0.03	0.1	03/13/24 22:00	brc
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U		mg/L	0.00005	0.00025	03/19/24 21:55	aps
Calcium, dissolved	M200.7 ICP	1	0.32	B		mg/L	0.1	0.5	03/13/24 22:00	brc
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	03/13/24 22:00	brc
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U		mg/L	0.00005	0.00025	03/19/24 21:55	aps
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/18/24 18:14	brc
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	03/13/24 22:00	brc
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	03/19/24 21:55	aps
Lithium, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	03/13/24 22:00	brc
Magnesium, dissolved	M200.7 ICP	1	0.45	B		mg/L	0.2	1	03/13/24 22:00	brc
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/13/24 22:00	brc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	03/15/24 10:56	wtc
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	03/14/24 18:03	brc
Potassium, dissolved	M200.7 ICP	1	<0.5	U		mg/L	0.5	1	03/13/24 22:00	brc
Selenium, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.00025	03/19/24 21:55	aps
Sodium, dissolved	M200.7 ICP	1	0.44	B		mg/L	0.2	1	03/13/24 22:00	brc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	03/13/24 22:00	brc
Zinc, dissolved	M200.7 ICP	1	0.091			mg/L	0.02	0.05	03/13/24 22:00	brc

GCC Rio Grande
Project ID:
Sample ID: METHOD BLANK

ACZ Sample ID: ***L86455-07***
Date Sampled: *03/11/24 12:30*
Date Received: *03/12/24*
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	7.0	B		mg/L	2	20	03/22/24 0:00	jck
Carbonate as CaCO3		1	<2	U		mg/L	2	20	03/22/24 0:00	jck
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	03/22/24 0:00	jck
Total Alkalinity		1	7.0	B	*	mg/L	2	20	03/22/24 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			n/a			%			03/25/24 0:00	calc
Sum of Anions			0.1	B		meq/L			03/25/24 0:00	calc
Sum of Cations			<	U		meq/L			03/25/24 0:00	calc
Chloride	SM4500Cl-E	1	<1	U	*	mg/L	1	2	03/15/24 10:16	jqr
Fluoride	SM4500F-C	1	<0.15	U		mg/L	0.15	0.35	03/22/24 17:34	jck
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		2.7	B		mg/L	0.2	5	03/25/24 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	03/25/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	03/13/24 0:40	pjb
Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	03/13/24 0:18	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	<20	U	*	mg/L	20	40	03/15/24 13:32	emk
Sulfate	ASTM D516-07/-11/-16	1	<1	U	*	mg/L	1	5	03/19/24 14:38	cbp
TDS (calculated)	Calculation		5.57			mg/L			03/25/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		n/a						03/25/24 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: ***L86455***

NOTE: If the Rec% column is null, the high/low 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
WG586165													
WG586165PBW1	PBW	03/22/24 22:02				9.1	mg/L		-20	20			
WG586165LCSW3	LCSW	03/22/24 22:14	WC240320-1	820.0001		807.2	mg/L	98	90	110			
L86455-07DUP	DUP	03/22/24 23:57			7	3.7	mg/L				62	20	RA
WG586165LCSW6	LCSW	03/23/24 0:07	WC240320-1	820.0001		814.5	mg/L	99	90	110			
WG586165PBW2	PBW	03/23/24 0:14				5.4	mg/L		-20	20			
WG586165LCSW9	LCSW	03/23/24 2:07	WC240320-1	820.0001		824.3	mg/L	101	90	110			
WG586165PBW3	PBW	03/23/24 2:14				4.9	mg/L		-20	20			
WG586165LCSW12	LCSW	03/23/24 4:08	WC240320-1	820.0001		819.7	mg/L	100	90	110			
WG586165PBW4	PBW	03/23/24 4:15				4.2	mg/L		-20	20			
WG586165LCSW15	LCSW	03/23/24 6:06	WC240320-1	820.0001		846.4	mg/L	103	90	110			
WG586165PBW5	PBW	03/23/24 6:13				9.1	mg/L		-20	20			
WG586165LCSW18	LCSW	03/23/24 8:08	WC240320-1	820.0001		835.7	mg/L	102	90	110			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585631													
WG585631ICV	ICV	03/13/24 20:38	II240305-3	2		1.961	mg/L	98	95	105			
WG585631ICB	ICB	03/13/24 20:44				U	mg/L		-0.15	0.15			
WG585631PQV	PQV	03/13/24 20:47	II240221-2	.25025		.206	mg/L	82	70	130			
WG585631SIC	SIC	03/13/24 20:50	II240222-2	200.45025		204.8	mg/L	102	1	200			
WG585631LFB	LFB	03/13/24 20:56	II240306-3	1.001		.972	mg/L	97	85	115			
WG585631CCV1	CCV	03/13/24 21:26	II240313-2	1		.94	mg/L	94	90	110			
WG585631CCB1	CCB	03/13/24 21:29				U	mg/L		-0.15	0.15			
WG585631CCV2	CCV	03/13/24 22:03	II240313-2	1		.932	mg/L	93	90	110			
WG585631CCB2	CCB	03/13/24 22:06				U	mg/L		-0.15	0.15			
L86465-01AS	AS	03/13/24 22:16	II240306-3	1.001	U	.999	mg/L	100	85	115			
L86465-01ASD	ASD	03/13/24 22:18	II240306-3	1.001	U	.996	mg/L	100	85	115	0	20	
WG585631CCV3	CCV	03/13/24 22:25	II240313-2	1		.944	mg/L	94	90	110			
WG585631CCB3	CCB	03/13/24 22:28				U	mg/L		-0.15	0.15			
WG585626													
WG585626ICV	ICV	03/14/24 20:39	II240305-3	2		2.015	mg/L	101	95	105			
WG585626ICB	ICB	03/14/24 20:44				U	mg/L		-0.15	0.15			
WG585626PQV	PQV	03/14/24 20:47	II240221-2	.25025		.252	mg/L	101	70	130			
WG585626SIC	SIC	03/14/24 20:50	II240222-2	200.45025		205.2	mg/L	102	1	200			
WG585626LFB	LFB	03/14/24 20:57	II240306-3	1.001		1.034	mg/L	103	85	115			
WG585626CCV1	CCV	03/14/24 21:27	II240313-2	1		.996	mg/L	100	90	110			
WG585626CCB1	CCB	03/14/24 21:30				U	mg/L		-0.15	0.15			
WG585626CCV2	CCV	03/14/24 22:03	II240313-2	1		1	mg/L	100	90	110			
WG585626CCB2	CCB	03/14/24 22:06				U	mg/L		-0.15	0.15			
L86447-08AS	AS	03/14/24 22:16	II240306-3	1.001	U	1.052	mg/L	105	85	115			
L86447-08ASD	ASD	03/14/24 22:19	II240306-3	1.001	U	1.056	mg/L	105	85	115	0	20	
WG585626CCV3	CCV	03/14/24 22:25	II240313-2	1		.996	mg/L	100	90	110			
WG585626CCB3	CCB	03/14/24 22:28				U	mg/L		-0.15	0.15			

GCC

ACZ Project ID: ***L86455***

NOTE: If the Rec% column is null, the high/low 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
WG585937													
WG585937ICV	ICV	03/19/24 20:31	MS240109-5	.05		.05256	mg/L	105	90	110			
WG585937ICB	ICB	03/19/24 20:33				U	mg/L		-0.00044	0.00044			
WG585937LFB	LFB	03/19/24 20:35	MS240213-3	.0501		.05302	mg/L	106	85	115			
WG585937CCV1	CCV	03/19/24 20:53	MS240305-4	.1002		.10196	mg/L	102	90	110			
WG585937CCB1	CCB	03/19/24 20:55				U	mg/L		-0.0006	0.0006			
L86453-08AS	AS	03/19/24 21:11	MS240213-3	.0501	U	.05733	mg/L	114	70	130			
L86453-08ASD	ASD	03/19/24 21:13	MS240213-3	.0501	U	.05745	mg/L	115	70	130	0	20	
WG585937CCV2	CCV	03/19/24 21:15	MS240305-4	.1002		.10003	mg/L	100	90	110			
WG585937CCB2	CCB	03/19/24 21:17				U	mg/L		-0.0006	0.0006			
WG585937CCV3	CCV	03/19/24 21:28	MS240305-4	.1002		.10248	mg/L	102	90	110			
WG585937CCB3	CCB	03/19/24 21:29				U	mg/L		-0.0006	0.0006			
WG585938													
WG585938ICV	ICV	03/19/24 21:46	MS240109-5	.05		.04995	mg/L	100	90	110			
WG585938ICB	ICB	03/19/24 21:47				U	mg/L		-0.00044	0.00044			
WG585938LFB	LFB	03/19/24 21:49	MS240213-3	.0501		.0513	mg/L	102	85	115			
L86479-01AS	AS	03/19/24 22:02	MS240213-3	.0501	.00055	.05591	mg/L	110	70	130			
L86479-01ASD	ASD	03/19/24 22:04	MS240213-3	.0501	.00055	.05626	mg/L	111	70	130	1	20	
WG585938CCV1	CCV	03/19/24 22:07	MS240305-4	.1002		.09775	mg/L	98	90	110			
WG585938CCB1	CCB	03/19/24 22:09				U	mg/L		-0.0006	0.0006			
WG585938CCV2	CCV	03/19/24 22:29	MS240305-4	.1002		.09632	mg/L	96	90	110			
WG585938CCB2	CCB	03/19/24 22:31				U	mg/L		-0.0006	0.0006			
WG585938CCV3	CCV	03/19/24 22:42	MS240305-4	.1002		.09494	mg/L	95	90	110			
WG585938CCB3	CCB	03/19/24 22:44				U	mg/L		-0.0006	0.0006			

GCC

ACZ Project ID: ***L86455***

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

Beryllium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585631													
WG585631ICV	ICV	03/13/24 20:38	II240305-3	2		1.891	mg/L	95	95	105			
WG585631ICB	ICB	03/13/24 20:44				U	mg/L		-0.03	0.03			
WG585631PQV	PQV	03/13/24 20:47	II240221-2	.05005		.05	mg/L	100	70	130			
WG585631SIC	SIC	03/13/24 20:50	II240222-2	.10015		.098	mg/L	98	80	120			
WG585631LFB	LFB	03/13/24 20:56	II240306-3	.5005		.494	mg/L	99	85	115			
WG585631CCV1	CCV	03/13/24 21:26	II240313-2	1		.943	mg/L	94	90	110			
WG585631CCB1	CCB	03/13/24 21:29				U	mg/L		-0.03	0.03			
WG585631CCV2	CCV	03/13/24 22:03	II240313-2	1		.948	mg/L	95	90	110			
WG585631CCB2	CCB	03/13/24 22:06				U	mg/L		-0.03	0.03			
L86465-01AS	AS	03/13/24 22:16	II240306-3	.5005	U	.493	mg/L	99	85	115			
L86465-01ASD	ASD	03/13/24 22:18	II240306-3	.5005	U	.496	mg/L	99	85	115	1	20	
WG585631CCV3	CCV	03/13/24 22:25	II240313-2	1		.95	mg/L	95	90	110			
WG585631CCB3	CCB	03/13/24 22:28				U	mg/L		-0.03	0.03			
WG585626													
WG585626ICV	ICV	03/14/24 20:39	II240305-3	2		1.927	mg/L	96	95	105			
WG585626ICB	ICB	03/14/24 20:44				U	mg/L		-0.03	0.03			
WG585626PQV	PQV	03/14/24 20:47	II240221-2	.05005		.052	mg/L	104	70	130			
WG585626SIC	SIC	03/14/24 20:50	II240222-2	.10015		.1	mg/L	100	80	120			
WG585626LFB	LFB	03/14/24 20:57	II240306-3	.5005		.503	mg/L	100	85	115			
WG585626CCV1	CCV	03/14/24 21:27	II240313-2	1		.954	mg/L	95	90	110			
WG585626CCB1	CCB	03/14/24 21:30				U	mg/L		-0.03	0.03			
WG585626CCV2	CCV	03/14/24 22:03	II240313-2	1		.96	mg/L	96	90	110			
WG585626CCB2	CCB	03/14/24 22:06				U	mg/L		-0.03	0.03			
L86447-08AS	AS	03/14/24 22:16	II240306-3	.5005	U	.512	mg/L	102	85	115			
L86447-08ASD	ASD	03/14/24 22:19	II240306-3	.5005	U	.509	mg/L	102	85	115	1	20	
WG585626CCV3	CCV	03/14/24 22:25	II240313-2	1		.959	mg/L	96	90	110			
WG585626CCB3	CCB	03/14/24 22:28				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L86455***

NOTE: If the Rec% column is null, the high/low 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
WG585631													
WG585631ICV	ICV	03/13/24 20:38	II240305-3	2		1.998	mg/L	100	95	105			
WG585631ICB	ICB	03/13/24 20:44				U	mg/L		-0.09	0.09			
WG585631PQV	PQV	03/13/24 20:47	II240221-2	.1001		.102	mg/L	102	70	130			
WG585631SIC	SIC	03/13/24 20:50	II240222-2	.1001		.105	mg/L	105	80	120			
WG585631LFB	LFB	03/13/24 20:56	II240306-3	.5005		.508	mg/L	101	85	115			
WG585631CCV1	CCV	03/13/24 21:26	II240313-2	1		1.007	mg/L	101	90	110			
WG585631CCB1	CCB	03/13/24 21:29				U	mg/L		-0.09	0.09			
WG585631CCV2	CCV	03/13/24 22:03	II240313-2	1		.999	mg/L	100	90	110			
WG585631CCB2	CCB	03/13/24 22:06				U	mg/L		-0.09	0.09			
L86465-01AS	AS	03/13/24 22:16	II240306-3	.5005	.089	.595	mg/L	101	85	115			
L86465-01ASD	ASD	03/13/24 22:18	II240306-3	.5005	.089	.6	mg/L	102	85	115	1	20	
WG585631CCV3	CCV	03/13/24 22:25	II240313-2	1		1.013	mg/L	101	90	110			
WG585631CCB3	CCB	03/13/24 22:28				U	mg/L		-0.09	0.09			
WG585626													
WG585626ICV	ICV	03/14/24 20:39	II240305-3	2		2.033	mg/L	102	95	105			
WG585626ICB	ICB	03/14/24 20:44				U	mg/L		-0.09	0.09			
WG585626PQV	PQV	03/14/24 20:47	II240221-2	.1001		.118	mg/L	118	70	130			
WG585626SIC	SIC	03/14/24 20:50	II240222-2	.1001		.116	mg/L	116	80	120			
WG585626LFB	LFB	03/14/24 20:57	II240306-3	.5005		.531	mg/L	106	85	115			
WG585626CCV1	CCV	03/14/24 21:27	II240313-2	1		1.02	mg/L	102	90	110			
WG585626CCB1	CCB	03/14/24 21:30				U	mg/L		-0.09	0.09			
WG585626CCV2	CCV	03/14/24 22:03	II240313-2	1		1.027	mg/L	103	90	110			
WG585626CCB2	CCB	03/14/24 22:06				U	mg/L		-0.09	0.09			
L86447-08AS	AS	03/14/24 22:16	II240306-3	.5005	U	.537	mg/L	107	85	115			
L86447-08ASD	ASD	03/14/24 22:19	II240306-3	.5005	U	.541	mg/L	108	85	115	1	20	
WG585626CCV3	CCV	03/14/24 22:25	II240313-2	1		1.031	mg/L	103	90	110			
WG585626CCB3	CCB	03/14/24 22:28				U	mg/L		-0.09	0.09			

GCC

ACZ Project ID: ***L86455***

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

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585937													
WG585937ICV	ICV	03/19/24 20:31	MS240109-5	.05		.052361	mg/L	105	90	110			
WG585937ICB	ICB	03/19/24 20:33				U	mg/L		-0.00011	0.00011			
WG585937LFB	LFB	03/19/24 20:35	MS240213-3	.05005		.052891	mg/L	106	85	115			
WG585937CCV1	CCV	03/19/24 20:53	MS240305-4	.1001		.102478	mg/L	102	90	110			
WG585937CCB1	CCB	03/19/24 20:55				U	mg/L		-0.00015	0.00015			
L86453-08AS	AS	03/19/24 21:11	MS240213-3	.05005	U	.056022	mg/L	112	70	130			
L86453-08ASD	ASD	03/19/24 21:13	MS240213-3	.05005	U	.056339	mg/L	113	70	130	1	20	
WG585937CCV2	CCV	03/19/24 21:15	MS240305-4	.1001		.101404	mg/L	101	90	110			
WG585937CCB2	CCB	03/19/24 21:17				U	mg/L		-0.00015	0.00015			
WG585937CCV3	CCV	03/19/24 21:28	MS240305-4	.1001		.103255	mg/L	103	90	110			
WG585937CCB3	CCB	03/19/24 21:29				U	mg/L		-0.00015	0.00015			
WG585938													
WG585938ICV	ICV	03/19/24 21:46	MS240109-5	.05		.050586	mg/L	101	90	110			
WG585938ICB	ICB	03/19/24 21:47				U	mg/L		-0.00011	0.00011			
WG585938LFB	LFB	03/19/24 21:49	MS240213-3	.05005		.049891	mg/L	100	85	115			
L86479-01AS	AS	03/19/24 22:02	MS240213-3	.05005	U	.054555	mg/L	109	70	130			
L86479-01ASD	ASD	03/19/24 22:04	MS240213-3	.05005	U	.053224	mg/L	106	70	130	2	20	
WG585938CCV1	CCV	03/19/24 22:07	MS240305-4	.1001		.098799	mg/L	99	90	110			
WG585938CCB1	CCB	03/19/24 22:09				U	mg/L		-0.00015	0.00015			
WG585938CCV2	CCV	03/19/24 22:29	MS240305-4	.1001		.097771	mg/L	98	90	110			
WG585938CCB2	CCB	03/19/24 22:31				U	mg/L		-0.00015	0.00015			
WG585938CCV3	CCV	03/19/24 22:42	MS240305-4	.1001		.098415	mg/L	98	90	110			
WG585938CCB3	CCB	03/19/24 22:44				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: ***L86455***

NOTE: If the Rec% column is null, the high/low 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
WG585631													
WG585631ICV	ICV	03/13/24 20:38	II240305-3	100		95.82	mg/L	96	95	105			
WG585631ICB	ICB	03/13/24 20:44				U	mg/L		-0.3	0.3			
WG585631PQV	PQV	03/13/24 20:47	II240221-2	.5025		.44	mg/L	88	70	130			
WG585631SIC	SIC	03/13/24 20:50	II240222-2	201.5025		198.7	mg/L	99	1	200			
WG585631LFB	LFB	03/13/24 20:56	II240306-3	67.94555		67.11	mg/L	99	85	115			
WG585631CCV1	CCV	03/13/24 21:26	II240313-2	50		47.69	mg/L	95	90	110			
WG585631CCB1	CCB	03/13/24 21:29				U	mg/L		-0.3	0.3			
WG585631CCV2	CCV	03/13/24 22:03	II240313-2	50		47.93	mg/L	96	90	110			
WG585631CCB2	CCB	03/13/24 22:06				U	mg/L		-0.3	0.3			
L86465-01AS	AS	03/13/24 22:16	II240306-3	67.94555	137	202.8	mg/L	97	85	115			
L86465-01ASD	ASD	03/13/24 22:18	II240306-3	67.94555	137	200	mg/L	93	85	115	1	20	
WG585631CCV3	CCV	03/13/24 22:25	II240313-2	50		48.09	mg/L	96	90	110			
WG585631CCB3	CCB	03/13/24 22:28				U	mg/L		-0.3	0.3			
WG585626													
WG585626ICV	ICV	03/14/24 20:39	II240305-3	100		97.72	mg/L	98	95	105			
WG585626ICB	ICB	03/14/24 20:44				U	mg/L		-0.3	0.3			
WG585626PQV	PQV	03/14/24 20:47	II240221-2	.5025		.51	mg/L	101	70	130			
WG585626SIC	SIC	03/14/24 20:50	II240222-2	201.5025		197.5	mg/L	98	1	200			
WG585626LFB	LFB	03/14/24 20:57	II240306-3	67.94555		68.68	mg/L	101	85	115			
WG585626CCV1	CCV	03/14/24 21:27	II240313-2	50		48.44	mg/L	97	90	110			
WG585626CCB1	CCB	03/14/24 21:30				U	mg/L		-0.3	0.3			
WG585626CCV2	CCV	03/14/24 22:03	II240313-2	50		48.64	mg/L	97	90	110			
WG585626CCB2	CCB	03/14/24 22:06				U	mg/L		-0.3	0.3			
L86447-08AS	AS	03/14/24 22:16	II240306-3	67.94555	.22	69.86	mg/L	102	85	115			
L86447-08ASD	ASD	03/14/24 22:19	II240306-3	67.94555	.22	69.83	mg/L	102	85	115	0	20	
WG585626CCV3	CCV	03/14/24 22:25	II240313-2	50		48.56	mg/L	97	90	110			
WG585626CCB3	CCB	03/14/24 22:28				U	mg/L		-0.3	0.3			

GCC

ACZ Project ID: ***L86455***

NOTE: If the Rec% column is null, the high/low 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
WG585615													
WG585615ICV	ICV	03/15/24 9:45	WI231211-1	39.96		40.48	mg/L	101	90	110			
WG585615ICB	ICB	03/15/24 9:45				U	mg/L						
WG585615CCV1	CCV	03/15/24 10:04	WI240111-9	25.025		25.41	mg/L	102	90	110			
WG585615CCB1	CCB	03/15/24 10:04				U	mg/L						
WG585615PQV	PQV	03/15/24 10:04	WI240213-4	2.002		2.11	mg/L	105	50	150			
WG585615LFB	LFB	03/15/24 10:05	WI231211-4	20.02		21.67	mg/L	108	90	110			
WG585615CCV2	CCV	03/15/24 10:07	WI240111-9	25.025		26.48	mg/L	106	90	110			
WG585615CCB2	CCB	03/15/24 10:08				U	mg/L						
WG585615CCV3	CCV	03/15/24 10:15	WI240111-9	25.025		26.54	mg/L	106	90	110			
WG585615CCB3	CCB	03/15/24 10:15				U	mg/L						
WG585615CCV4	CCV	03/15/24 10:22	WI240111-9	25.025		25.58	mg/L	102	90	110			
WG585615CCB4	CCB	03/15/24 10:22				U	mg/L						
WG585615CCV5	CCV	03/15/24 10:24	WI240111-9	25.025		26.58	mg/L	106	90	110			
WG585615CCB5	CCB	03/15/24 10:25				U	mg/L						
WG585615CCV6	CCV	03/15/24 10:27	WI240111-9	25.025		26.47	mg/L	106	90	110			
WG585615CCB6	CCB	03/15/24 10:27				U	mg/L						
L86465-01DUP	DUP	03/15/24 10:30			57.6	58.51	mg/L				2	20	
WG585615CCV7	CCV	03/15/24 10:30	WI240111-9	25.025		26.55	mg/L	106	90	110			
WG585615CCB7	CCB	03/15/24 10:30				U	mg/L						
WG585615CCV8	CCV	03/15/24 10:33	WI240111-9	25.025		25.33	mg/L	101	90	110			
WG585615CCB8	CCB	03/15/24 10:34				U	mg/L						
L86463-01AS	AS	03/15/24 10:37	WI231211-4	20.02	34.5	34.78	mg/L	1	90	110			M2
WG585615CCV9	CCV	03/15/24 10:38	WI240111-9	25.025		26.7	mg/L	107	90	110			
WG585615CCB9	CCB	03/15/24 10:38				U	mg/L						
WG585615CCV10	CCV	03/15/24 10:43	WI240111-9	25.025		26.55	mg/L	106	90	110			
WG585615CCB10	CCB	03/15/24 10:43				U	mg/L						

GCC

ACZ Project ID: ***L86455***

NOTE: If the Rec% column is null, the high/low 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
WG585631													
WG585631ICV	ICV	03/13/24 20:38	II240305-3	2		1.9	mg/L	95	95	105			
WG585631ICB	ICB	03/13/24 20:44				U	mg/L		-0.06	0.06			
WG585631PQV	PQV	03/13/24 20:47	II240221-2	.05005		.052	mg/L	104	70	130			
WG585631SIC	SIC	03/13/24 20:50	II240222-2	.1001		.099	mg/L	99	80	120			
WG585631LFB	LFB	03/13/24 20:56	II240306-3	.5005		.496	mg/L	99	85	115			
WG585631CCV1	CCV	03/13/24 21:26	II240313-2	1		.955	mg/L	96	90	110			
WG585631CCB1	CCB	03/13/24 21:29				U	mg/L		-0.06	0.06			
WG585631CCV2	CCV	03/13/24 22:03	II240313-2	1		.958	mg/L	96	90	110			
WG585631CCB2	CCB	03/13/24 22:06				U	mg/L		-0.06	0.06			
L86465-01AS	AS	03/13/24 22:16	II240306-3	.5005	U	.495	mg/L	99	85	115			
L86465-01ASD	ASD	03/13/24 22:18	II240306-3	.5005	U	.498	mg/L	100	85	115	1	20	
WG585631CCV3	CCV	03/13/24 22:25	II240313-2	1		.961	mg/L	96	90	110			
WG585631CCB3	CCB	03/13/24 22:28				U	mg/L		-0.06	0.06			
WG585626													
WG585626ICV	ICV	03/14/24 20:39	II240305-3	2		1.935	mg/L	97	95	105			
WG585626ICB	ICB	03/14/24 20:44				U	mg/L		-0.06	0.06			
WG585626PQV	PQV	03/14/24 20:47	II240221-2	.05005		.064	mg/L	128	70	130			
WG585626SIC	SIC	03/14/24 20:50	II240222-2	.1001		.113	mg/L	113	80	120			
WG585626LFB	LFB	03/14/24 20:57	II240306-3	.5005		.521	mg/L	104	85	115			
WG585626CCV1	CCV	03/14/24 21:27	II240313-2	1		.973	mg/L	97	90	110			
WG585626CCB1	CCB	03/14/24 21:30				U	mg/L		-0.06	0.06			
WG585626CCV2	CCV	03/14/24 22:03	II240313-2	1		.984	mg/L	98	90	110			
WG585626CCB2	CCB	03/14/24 22:06				U	mg/L		-0.06	0.06			
L86447-08AS	AS	03/14/24 22:16	II240306-3	.5005	U	.525	mg/L	105	85	115			
L86447-08ASD	ASD	03/14/24 22:19	II240306-3	.5005	U	.525	mg/L	105	85	115	0	20	
WG585626CCV3	CCV	03/14/24 22:25	II240313-2	1		.985	mg/L	99	90	110			
WG585626CCB3	CCB	03/14/24 22:28				U	mg/L		-0.06	0.06			

GCC

ACZ Project ID: ***L86455***

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

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585937													
WG585937ICV	ICV	03/19/24 20:31	MS240109-5	.05		.053537	mg/L	107	90	110			
WG585937ICB	ICB	03/19/24 20:33				U	mg/L		-0.00011	0.00011			
WG585937LFB	LFB	03/19/24 20:35	MS240213-3	.05005		.053878	mg/L	108	85	115			
WG585937CCV1	CCV	03/19/24 20:53	MS240305-4	.1001		.099959	mg/L	100	90	110			
WG585937CCB1	CCB	03/19/24 20:55				U	mg/L		-0.00015	0.00015			
L86453-08AS	AS	03/19/24 21:11	MS240213-3	.05005	U	.054116	mg/L	108	70	130			
L86453-08ASD	ASD	03/19/24 21:13	MS240213-3	.05005	U	.054148	mg/L	108	70	130	0	20	
WG585937CCV2	CCV	03/19/24 21:15	MS240305-4	.1001		.101124	mg/L	101	90	110			
WG585937CCB2	CCB	03/19/24 21:17				U	mg/L		-0.00015	0.00015			
WG585937CCV3	CCV	03/19/24 21:28	MS240305-4	.1001		.102532	mg/L	102	90	110			
WG585937CCB3	CCB	03/19/24 21:29				U	mg/L		-0.00015	0.00015			
WG585938													
WG585938ICV	ICV	03/19/24 21:46	MS240109-5	.05		.052987	mg/L	106	90	110			
WG585938ICB	ICB	03/19/24 21:47				U	mg/L		-0.00011	0.00011			
WG585938LFB	LFB	03/19/24 21:49	MS240213-3	.05005		.054211	mg/L	108	85	115			
L86479-01AS	AS	03/19/24 22:02	MS240213-3	.05005	.000265	.053712	mg/L	107	70	130			
L86479-01ASD	ASD	03/19/24 22:04	MS240213-3	.05005	.000265	.052499	mg/L	104	70	130	2	20	
WG585938CCV1	CCV	03/19/24 22:07	MS240305-4	.1001		.099833	mg/L	100	90	110			
WG585938CCB1	CCB	03/19/24 22:09				U	mg/L		-0.00015	0.00015			
WG585938CCV2	CCV	03/19/24 22:29	MS240305-4	.1001		.099803	mg/L	100	90	110			
WG585938CCB2	CCB	03/19/24 22:31				U	mg/L		-0.00015	0.00015			
WG585938CCV3	CCV	03/19/24 22:42	MS240305-4	.1001		.099578	mg/L	99	90	110			
WG585938CCB3	CCB	03/19/24 22:44				U	mg/L		-0.00015	0.00015			

GCC

ACZ Project ID: ***L86455***

NOTE: If the Rec% column is null, the high/low 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
WG585684													
WG585684ICV	ICV	03/14/24 23:01	II240305-3	2		1.903	mg/L	95	95	105			
WG585684ICB	ICB	03/14/24 23:07				U	mg/L		-0.03	0.03			
WG585684PQV	PQV	03/14/24 23:10	II240221-2	.05005		.047	mg/L	94	70	130			
WG585684SIC	SIC	03/14/24 23:13	II240222-2	.1001		.096	mg/L	96	80	120			
WG585684LFB	LFB	03/14/24 23:20	II240306-3	.5005		.508	mg/L	101	85	115			
WG585684CCV1	CCV	03/14/24 23:52	II240313-2	1		.954	mg/L	95	90	110			
WG585684CCB1	CCB	03/14/24 23:55				U	mg/L		-0.03	0.03			
L85240-12AS	AS	03/15/24 0:17	II240306-3	.5005	U	.506	mg/L	101	85	115			
L85240-12ASD	ASD	03/15/24 0:20	II240306-3	.5005	U	.508	mg/L	101	85	115	0	20	
WG585684CCV2	CCV	03/15/24 0:29	II240313-2	1		.952	mg/L	95	90	110			
WG585684CCB2	CCB	03/15/24 0:33				U	mg/L		-0.03	0.03			
WG585684CCV3	CCV	03/15/24 0:53	II240313-2	1		.941	mg/L	94	90	110			
WG585684CCB3	CCB	03/15/24 0:56				U	mg/L		-0.03	0.03			
WG585802													
WG585802ICV	ICV	03/18/24 16:55	II240305-3	2		1.911	mg/L	96	95	105			
WG585802ICB	ICB	03/18/24 17:01				U	mg/L		-0.03	0.03			
WG585802PQV	PQV	03/18/24 17:04	II240221-2	.05005		.051	mg/L	102	70	130			
WG585802SIC	SIC	03/18/24 17:07	II240222-2	.1001		.107	mg/L	107	80	120			
WG585802LFB	LFB	03/18/24 17:14	II240306-3	.5005		.498	mg/L	100	85	115			
WG585802CCV1	CCV	03/18/24 17:45	II240313-2	1		.95	mg/L	95	90	110			
WG585802CCB1	CCB	03/18/24 17:48				U	mg/L		-0.03	0.03			
WG585802CCV2	CCV	03/18/24 18:24	II240313-2	1		.962	mg/L	96	90	110			
WG585802CCB2	CCB	03/18/24 18:27				U	mg/L		-0.03	0.03			
L86506-01AS	AS	03/18/24 18:33	II240306-3	.5005	U	.508	mg/L	101	85	115			
L86506-01ASD	ASD	03/18/24 18:37	II240306-3	.5005	U	.516	mg/L	103	85	115	2	20	
WG585802CCV3	CCV	03/18/24 18:47	II240313-2	1		.961	mg/L	96	90	110			
WG585802CCB3	CCB	03/18/24 18:50				U	mg/L		-0.03	0.03			

Fluoride SM4500F-C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG586161													
WG586161ICV	ICV	03/22/24 14:45	WC240322-2	2.002		2.02	mg/L	101	90	110			
WG586161ICB	ICB	03/22/24 14:50				U	mg/L		-0.3	0.3			
WG586161PQV	PQV	03/22/24 14:56	WC240314-1	.35		.36	mg/L	103	50	150			
WG586161LFB	LFB	03/22/24 15:04	WC230825-1	5.005		5	mg/L	100	90	110			
L86453-01AS	AS	03/22/24 15:13	WC230825-1	5.005	.18	5.21	mg/L	100	90	110			
L86453-01ASD	ASD	03/22/24 15:19	WC230825-1	5.005	.18	5.21	mg/L	100	90	110	0	20	
WG586161CCV1	CCV	03/22/24 16:00	WC240322-2	2.002		2.001	mg/L	100	90	110			
WG586161CCB1	CCB	03/22/24 16:08				U	mg/L		-0.3	0.3			
L86455-02AS	AS	03/22/24 16:41	WC230825-1	5.005	6.34	11.51	mg/L	103	90	110			
L86455-02ASD	ASD	03/22/24 16:49	WC230825-1	5.005	6.34	11.4	mg/L	101	90	110	1	20	
WG586161CCV2	CCV	03/22/24 17:18	WC240322-2	2.002		2.105	mg/L	105	90	110			
WG586161CCB2	CCB	03/22/24 17:26				U	mg/L		-0.3	0.3			
WG586161CCV3	CCV	03/22/24 17:59	WC240322-2	2.002		2.076	mg/L	104	90	110			
WG586161CCB3	CCB	03/22/24 18:07				U	mg/L		-0.3	0.3			

GCC

ACZ Project ID: ***L86455***

NOTE: If the Rec% column is null, the high/low 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
WG585631													
WG585631ICV	ICV	03/13/24 20:38	II240305-3	2		1.946	mg/L	97	95	105			
WG585631ICB	ICB	03/13/24 20:44				U	mg/L		-0.18	0.18			
WG585631PQV	PQV	03/13/24 20:47	II240221-2	.15045		.111	mg/L	74	70	130			
WG585631SIC	SIC	03/13/24 20:50	II240222-2	200.75045		201.2	mg/L	100	1	200			
WG585631LFB	LFB	03/13/24 20:56	II240306-3	1.003		1.004	mg/L	100	85	115			
WG585631CCV1	CCV	03/13/24 21:26	II240313-2	1		.94	mg/L	94	90	110			
WG585631CCB1	CCB	03/13/24 21:29				U	mg/L		-0.18	0.18			
WG585631CCV2	CCV	03/13/24 22:03	II240313-2	1		.944	mg/L	94	90	110			
WG585631CCB2	CCB	03/13/24 22:06				U	mg/L		-0.18	0.18			
L86465-01AS	AS	03/13/24 22:16	II240306-3	1.003	U	1.01	mg/L	101	85	115			
L86465-01ASD	ASD	03/13/24 22:18	II240306-3	1.003	U	1.028	mg/L	102	85	115	2	20	
WG585631CCV3	CCV	03/13/24 22:25	II240313-2	1		.945	mg/L	95	90	110			
WG585631CCB3	CCB	03/13/24 22:28				U	mg/L		-0.18	0.18			
WG585626													
WG585626ICV	ICV	03/14/24 20:39	II240305-3	2		1.984	mg/L	99	95	105			
WG585626ICB	ICB	03/14/24 20:44				U	mg/L		-0.18	0.18			
WG585626PQV	PQV	03/14/24 20:47	II240221-2	.15045		.152	mg/L	101	70	130			
WG585626SIC	SIC	03/14/24 20:50	II240222-2	200.75045		198.4	mg/L	99	1	200			
WG585626LFB	LFB	03/14/24 20:57	II240306-3	1.003		1.052	mg/L	105	85	115			
WG585626CCV1	CCV	03/14/24 21:27	II240313-2	1		.989	mg/L	99	90	110			
WG585626CCB1	CCB	03/14/24 21:30				U	mg/L		-0.18	0.18			
WG585626CCV2	CCV	03/14/24 22:03	II240313-2	1		.991	mg/L	99	90	110			
WG585626CCB2	CCB	03/14/24 22:06				U	mg/L		-0.18	0.18			
L86447-08AS	AS	03/14/24 22:16	II240306-3	1.003	U	1.057	mg/L	105	85	115			
L86447-08ASD	ASD	03/14/24 22:19	II240306-3	1.003	U	1.062	mg/L	106	85	115	0	20	
WG585626CCV3	CCV	03/14/24 22:25	II240313-2	1		.984	mg/L	98	90	110			
WG585626CCB3	CCB	03/14/24 22:28				U	mg/L		-0.18	0.18			

GCC

ACZ Project ID: ***L86455***

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

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585937													
WG585937ICV	ICV	03/19/24 20:31	MS240109-5	.05		.05293	mg/L	106	90	110			
WG585937ICB	ICB	03/19/24 20:33				U	mg/L		-0.00022	0.00022			
WG585937LFB	LFB	03/19/24 20:35	MS240213-3	.05005		.05333	mg/L	107	85	115			
WG585937CCV1	CCV	03/19/24 20:53	MS240305-4	.25025		.25146	mg/L	100	90	110			
WG585937CCB1	CCB	03/19/24 20:55				U	mg/L		-0.0003	0.0003			
L86453-08AS	AS	03/19/24 21:11	MS240213-3	.05005	U	.05448	mg/L	109	70	130			
L86453-08ASD	ASD	03/19/24 21:13	MS240213-3	.05005	U	.05484	mg/L	110	70	130	1	20	
WG585937CCV2	CCV	03/19/24 21:15	MS240305-4	.25025		.24947	mg/L	100	90	110			
WG585937CCB2	CCB	03/19/24 21:17				U	mg/L		-0.0003	0.0003			
WG585937CCV3	CCV	03/19/24 21:28	MS240305-4	.25025		.25658	mg/L	103	90	110			
WG585937CCB3	CCB	03/19/24 21:29				U	mg/L		-0.0003	0.0003			
WG585938													
WG585938ICV	ICV	03/19/24 21:46	MS240109-5	.05		.0519	mg/L	104	90	110			
WG585938ICB	ICB	03/19/24 21:47				U	mg/L		-0.00022	0.00022			
WG585938LFB	LFB	03/19/24 21:49	MS240213-3	.05005		.05137	mg/L	103	85	115			
L86479-01AS	AS	03/19/24 22:02	MS240213-3	.05005	U	.05418	mg/L	108	70	130			
L86479-01ASD	ASD	03/19/24 22:04	MS240213-3	.05005	U	.05318	mg/L	106	70	130	2	20	
WG585938CCV1	CCV	03/19/24 22:07	MS240305-4	.25025		.25101	mg/L	100	90	110			
WG585938CCB1	CCB	03/19/24 22:09				U	mg/L		-0.0003	0.0003			
WG585938CCV2	CCV	03/19/24 22:29	MS240305-4	.25025		.24955	mg/L	100	90	110			
WG585938CCB2	CCB	03/19/24 22:31				U	mg/L		-0.0003	0.0003			
WG585938CCV3	CCV	03/19/24 22:42	MS240305-4	.25025		.24662	mg/L	99	90	110			
WG585938CCB3	CCB	03/19/24 22:44				U	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: ***L86455***

NOTE: If the Rec% column is null, the high/low 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
WG585631													
WG585631ICV	ICV	03/13/24 20:38	II240305-3	2		1.905	mg/L	95	95	105			
WG585631ICB	ICB	03/13/24 20:44				U	mg/L		-0.024	0.024			
WG585631PQV	PQV	03/13/24 20:47	II240221-2	.04012		.0385	mg/L	96	70	130			
WG585631SIC	SIC	03/13/24 20:50	II240222-2	.10012		.1006	mg/L	100	80	120			
WG585631LFB	LFB	03/13/24 20:56	II240306-3	1		.9633	mg/L	96	85	115			
WG585631CCV1	CCV	03/13/24 21:26	II240313-2	1		.9509	mg/L	95	90	110			
WG585631CCB1	CCB	03/13/24 21:29				U	mg/L		-0.024	0.024			
WG585631CCV2	CCV	03/13/24 22:03	II240313-2	1		.9551	mg/L	96	90	110			
WG585631CCB2	CCB	03/13/24 22:06				U	mg/L		-0.024	0.024			
L86465-01AS	AS	03/13/24 22:16	II240306-3	1	.0223	.9976	mg/L	98	85	115			
L86465-01ASD	ASD	03/13/24 22:18	II240306-3	1	.0223	1.017	mg/L	99	85	115	2	20	
WG585631CCV3	CCV	03/13/24 22:25	II240313-2	1		.9611	mg/L	96	90	110			
WG585631CCB3	CCB	03/13/24 22:28				U	mg/L		-0.024	0.024			
WG585626													
WG585626ICV	ICV	03/14/24 20:39	II240305-3	2		1.9475	mg/L	97	95	105			
WG585626ICB	ICB	03/14/24 20:44				U	mg/L		-0.024	0.024			
WG585626PQV	PQV	03/14/24 20:47	II240221-2	.04012		.0443	mg/L	110	70	130			
WG585626SIC	SIC	03/14/24 20:50	II240222-2	.10012		.1061	mg/L	106	80	120			
WG585626LFB	LFB	03/14/24 20:57	II240306-3	1		.9904	mg/L	99	85	115			
WG585626CCV1	CCV	03/14/24 21:27	II240313-2	1		.9675	mg/L	97	90	110			
WG585626CCB1	CCB	03/14/24 21:30				U	mg/L		-0.024	0.024			
WG585626CCV2	CCV	03/14/24 22:03	II240313-2	1		.9709	mg/L	97	90	110			
WG585626CCB2	CCB	03/14/24 22:06				U	mg/L		-0.024	0.024			
L86447-08AS	AS	03/14/24 22:16	II240306-3	1	U	1	mg/L	100	85	115			
L86447-08ASD	ASD	03/14/24 22:19	II240306-3	1	U	1.015	mg/L	102	85	115	1	20	
WG585626CCV3	CCV	03/14/24 22:25	II240313-2	1		.9741	mg/L	97	90	110			
WG585626CCB3	CCB	03/14/24 22:28				U	mg/L		-0.024	0.024			

GCC

ACZ Project ID: ***L86455***

NOTE: If the Rec% column is null, the high/low 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
WG585631													
WG585631ICV	ICV	03/13/24 20:38	II240305-3	100		95.79	mg/L	96	95	105			
WG585631ICB	ICB	03/13/24 20:44				U	mg/L		-0.6	0.6			
WG585631PQV	PQV	03/13/24 20:47	II240221-2	1.006		.96	mg/L	95	70	130			
WG585631SIC	SIC	03/13/24 20:50	II240222-2	202.206		204.6	mg/L	101	1	200			
WG585631LFB	LFB	03/13/24 20:56	II240306-3	50.00453		49.35	mg/L	99	85	115			
WG585631CCV1	CCV	03/13/24 21:26	II240313-2	50		47.76	mg/L	96	90	110			
WG585631CCB1	CCB	03/13/24 21:29				U	mg/L		-0.6	0.6			
WG585631CCV2	CCV	03/13/24 22:03	II240313-2	50		47.94	mg/L	96	90	110			
WG585631CCB2	CCB	03/13/24 22:06				U	mg/L		-0.6	0.6			
L86465-01AS	AS	03/13/24 22:16	II240306-3	50.00453	27	75.91	mg/L	98	85	115			
L86465-01ASD	ASD	03/13/24 22:18	II240306-3	50.00453	27	74.76	mg/L	96	85	115	2	20	
WG585631CCV3	CCV	03/13/24 22:25	II240313-2	50		47.92	mg/L	96	90	110			
WG585631CCB3	CCB	03/13/24 22:28				U	mg/L		-0.6	0.6			
WG585626													
WG585626ICV	ICV	03/14/24 20:39	II240305-3	100		96.93	mg/L	97	95	105			
WG585626ICB	ICB	03/14/24 20:44				U	mg/L		-0.6	0.6			
WG585626PQV	PQV	03/14/24 20:47	II240221-2	1.006		1.05	mg/L	104	70	130			
WG585626SIC	SIC	03/14/24 20:50	II240222-2	202.206		203.3	mg/L	101	1	200			
WG585626LFB	LFB	03/14/24 20:57	II240306-3	50.00453		50.45	mg/L	101	85	115			
WG585626CCV1	CCV	03/14/24 21:27	II240313-2	50		48.41	mg/L	97	90	110			
WG585626CCB1	CCB	03/14/24 21:30				U	mg/L		-0.6	0.6			
WG585626CCV2	CCV	03/14/24 22:03	II240313-2	50		48.47	mg/L	97	90	110			
WG585626CCB2	CCB	03/14/24 22:06				U	mg/L		-0.6	0.6			
L86447-08AS	AS	03/14/24 22:16	II240306-3	50.00453	U	51.14	mg/L	102	85	115			
L86447-08ASD	ASD	03/14/24 22:19	II240306-3	50.00453	U	51.05	mg/L	102	85	115	0	20	
WG585626CCV3	CCV	03/14/24 22:25	II240313-2	50		48.54	mg/L	97	90	110			
WG585626CCB3	CCB	03/14/24 22:28				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L86455***

NOTE: If the Rec% column is null, the high/low 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
WG585631													
WG585631ICV	ICV	03/13/24 20:38	II240305-3	2		1.893	mg/L	95	95	105			
WG585631ICB	ICB	03/13/24 20:44				U	mg/L		-0.03	0.03			
WG585631PQV	PQV	03/13/24 20:47	II240221-2	.0502		.038	mg/L	76	70	130			
WG585631SIC	SIC	03/13/24 20:50	II240222-2	50.1502		47.71	mg/L	95	1	200			
WG585631LFB	LFB	03/13/24 20:56	II240306-3	.501		.488	mg/L	97	85	115			
WG585631CCV1	CCV	03/13/24 21:26	II240313-2	1		.943	mg/L	94	90	110			
WG585631CCB1	CCB	03/13/24 21:29				U	mg/L		-0.03	0.03			
WG585631CCV2	CCV	03/13/24 22:03	II240313-2	1		.947	mg/L	95	90	110			
WG585631CCB2	CCB	03/13/24 22:06				U	mg/L		-0.03	0.03			
L86465-01AS	AS	03/13/24 22:16	II240306-3	.501	U	.505	mg/L	101	85	115			
L86465-01ASD	ASD	03/13/24 22:18	II240306-3	.501	U	.508	mg/L	101	85	115	1	20	
WG585631CCV3	CCV	03/13/24 22:25	II240313-2	1		.949	mg/L	95	90	110			
WG585631CCB3	CCB	03/13/24 22:28				U	mg/L		-0.03	0.03			
WG585626													
WG585626ICV	ICV	03/14/24 20:39	II240305-3	2		1.92	mg/L	96	95	105			
WG585626ICB	ICB	03/14/24 20:44				U	mg/L		-0.03	0.03			
WG585626PQV	PQV	03/14/24 20:47	II240221-2	.0502		.049	mg/L	98	70	130			
WG585626SIC	SIC	03/14/24 20:50	II240222-2	50.1502		47.27	mg/L	94	1	200			
WG585626LFB	LFB	03/14/24 20:57	II240306-3	.501		.504	mg/L	101	85	115			
WG585626CCV1	CCV	03/14/24 21:27	II240313-2	1		.958	mg/L	96	90	110			
WG585626CCB1	CCB	03/14/24 21:30				U	mg/L		-0.03	0.03			
WG585626CCV2	CCV	03/14/24 22:03	II240313-2	1		.965	mg/L	97	90	110			
WG585626CCB2	CCB	03/14/24 22:06				U	mg/L		-0.03	0.03			
L86447-08AS	AS	03/14/24 22:16	II240306-3	.501	U	.513	mg/L	102	85	115			
L86447-08ASD	ASD	03/14/24 22:19	II240306-3	.501	U	.512	mg/L	102	85	115	0	20	
WG585626CCV3	CCV	03/14/24 22:25	II240313-2	1		.96	mg/L	96	90	110			
WG585626CCB3	CCB	03/14/24 22:28				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L86455***

NOTE: If the Rec% column is null, the high/low 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
WG585635													
WG585635ICV	ICV	03/14/24 16:01	HG240226-3	.005		.00496	mg/L	99	95	105			
WG585635ICB	ICB	03/14/24 16:02				U	mg/L		-0.0002	0.0002			
WG585635PQV	PQV	03/14/24 16:03	HG240313-2	.001001		.00086	mg/L	86	70	130			
WG585635LRB	LRB	03/14/24 16:03				U	mg/L		-0.00044	0.00044			
WG585635LFB	LFB	03/14/24 16:04	HG240313-3	.002002		.00176	mg/L	88	85	115			
WG585635CCV2	CCV	03/14/24 16:14	HG240226-3	.005		.00497	mg/L	99	90	110			
WG585635CCB2	CCB	03/14/24 16:14				U	mg/L		-0.0002	0.0002			
WG585635CCV3	CCV	03/14/24 16:25	HG240226-3	.005		.005	mg/L	100	90	110			
WG585635CCB3	CCB	03/14/24 16:26				U	mg/L		-0.0002	0.0002			
L86455-02LFM	LFM	03/14/24 16:30	HG240313-3	.002002	U	.00101	mg/L	50	85	115			M2
L86455-02LFMD	LFMD	03/14/24 16:30	HG240313-3	.002002	U	.00097	mg/L	48	85	115	4	20	M2
WG585635CCV4	CCV	03/14/24 16:33	HG240226-3	.005		.00495	mg/L	99	90	110			
WG585635CCB4	CCB	03/14/24 16:34				U	mg/L		-0.0002	0.0002			
WG585637													
WG585637ICV	ICV	03/15/24 9:23	HG240226-3	.005		.00479	mg/L	96	95	105			
WG585637ICB	ICB	03/15/24 9:24				U	mg/L		-0.0002	0.0002			
WG585638													
WG585638CCV1	CCV	03/15/24 10:28	HG240226-3	.005		.00464	mg/L	93	90	110			
WG585638CCB1	CCB	03/15/24 10:29				U	mg/L		-0.0002	0.0002			
WG585638PQV	PQV	03/15/24 10:30	HG240313-2	.001001		.00092	mg/L	92	70	130			
WG585638LRB	LRB	03/15/24 10:31				U	mg/L		-0.00044	0.00044			
WG585638LFB	LFB	03/15/24 10:32	HG240313-3	.002002		.00179	mg/L	89	85	115			
WG585638CCV2	CCV	03/15/24 10:39	HG240226-3	.005		.00463	mg/L	93	90	110			
WG585638CCB2	CCB	03/15/24 10:40				U	mg/L		-0.0002	0.0002			
WG585638CCV3	CCV	03/15/24 10:51	HG240226-3	.005		.00454	mg/L	91	90	110			
WG585638CCB3	CCB	03/15/24 10:52				U	mg/L		-0.0002	0.0002			
L86455-06LFM	LFM	03/15/24 10:54	HG240313-3	.002002	U	.00191	mg/L	95	85	115			
L86455-06LFMD	LFMD	03/15/24 10:55	HG240313-3	.002002	U	.00189	mg/L	94	85	115	1	20	
WG585638CCV4	CCV	03/15/24 10:59	HG240226-3	.005		.00455	mg/L	91	90	110			
WG585638CCB4	CCB	03/15/24 11:00				U	mg/L		-0.0002	0.0002			

GCC

ACZ Project ID: ***L86455***

NOTE: If the Rec% column is null, the high/low 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
WG585707													
WG585707ICV	ICV	03/14/24 17:09	II240305-3	2.004		1.9595	mg/L	98	95	105			
WG585707ICB	ICB	03/14/24 17:14				U	mg/L		-0.024	0.024			
WG585707PQV	PQV	03/14/24 17:17	II240221-2	.04		.0397	mg/L	99	70	130			
WG585707SIC	SIC	03/14/24 17:20	II240222-2	.10012		.0925	mg/L	92	80	120			
WG585707LFB	LFB	03/14/24 17:27	II240306-3	.501		.511	mg/L	102	85	115			
L86402-01AS	AS	03/14/24 17:33	II240306-3	.501	U	.5128	mg/L	102	85	115			
L86402-01ASD	ASD	03/14/24 17:36	II240306-3	.501	U	.5089	mg/L	102	85	115	1	20	
WG585707CCV1	CCV	03/14/24 17:57	II240313-2	1.002		.9711	mg/L	97	90	110			
WG585707CCB1	CCB	03/14/24 18:00				U	mg/L		-0.024	0.024			
WG585707CCV2	CCV	03/14/24 18:33	II240313-2	1.002		.9637	mg/L	96	90	110			
WG585707CCB2	CCB	03/14/24 18:36				U	mg/L		-0.024	0.024			
WG585707CCV3	CCV	03/14/24 18:48	II240313-2	1.002		.9721	mg/L	97	90	110			
WG585707CCB3	CCB	03/14/24 18:51				U	mg/L		-0.024	0.024			
WG585626													
WG585626ICV	ICV	03/14/24 20:39	II240305-3	2.004		1.9392	mg/L	97	95	105			
WG585626ICB	ICB	03/14/24 20:44				U	mg/L		-0.024	0.024			
WG585626PQV	PQV	03/14/24 20:47	II240221-2	.04		.0356	mg/L	89	70	130			
WG585626SIC	SIC	03/14/24 20:50	II240222-2	.10012		.0922	mg/L	92	80	120			
WG585626LFB	LFB	03/14/24 20:57	II240306-3	.501		.5072	mg/L	101	85	115			
WG585626CCV1	CCV	03/14/24 21:27	II240313-2	1.002		.9664	mg/L	96	90	110			
WG585626CCB1	CCB	03/14/24 21:30				U	mg/L		-0.024	0.024			
WG585626CCV2	CCV	03/14/24 22:03	II240313-2	1.002		.9766	mg/L	97	90	110			
WG585626CCB2	CCB	03/14/24 22:06				U	mg/L		-0.024	0.024			
L86447-08AS	AS	03/14/24 22:16	II240306-3	.501	U	.5101	mg/L	102	85	115			
L86447-08ASD	ASD	03/14/24 22:19	II240306-3	.501	U	.5198	mg/L	104	85	115	2	20	
WG585626CCV3	CCV	03/14/24 22:25	II240313-2	1.002		.9804	mg/L	98	90	110			
WG585626CCB3	CCB	03/14/24 22:28				U	mg/L		-0.024	0.024			
WG585684													
WG585684ICV	ICV	03/14/24 23:01	II240305-3	2.004		1.919	mg/L	96	95	105			
WG585684ICB	ICB	03/14/24 23:07				U	mg/L		-0.024	0.024			
WG585684PQV	PQV	03/14/24 23:10	II240221-2	.04		.0389	mg/L	97	70	130			
WG585684SIC	SIC	03/14/24 23:13	II240222-2	.10012		.0945	mg/L	94	80	120			
WG585684LFB	LFB	03/14/24 23:20	II240306-3	.501		.5078	mg/L	101	85	115			
WG585684CCV1	CCV	03/14/24 23:52	II240313-2	1.002		.9647	mg/L	96	90	110			
WG585684CCB1	CCB	03/14/24 23:55				U	mg/L		-0.024	0.024			
L85240-12AS	AS	03/15/24 0:17	II240306-3	.501	.034	.5366	mg/L	100	85	115			
L85240-12ASD	ASD	03/15/24 0:20	II240306-3	.501	.034	.5426	mg/L	102	85	115	1	20	
WG585684CCV2	CCV	03/15/24 0:29	II240313-2	1.002		.9649	mg/L	96	90	110			
WG585684CCB2	CCB	03/15/24 0:33				U	mg/L		-0.024	0.024			
WG585684CCV3	CCV	03/15/24 0:53	II240313-2	1.002		.9523	mg/L	95	90	110			
WG585684CCB3	CCB	03/15/24 0:56				U	mg/L		-0.024	0.024			

GCC

ACZ Project ID: ***L86455***

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

Nitrate/Nitrite as N EPA 353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585555													
WG585555ICV	ICV	03/12/24 23:54	WI240103-7	2.416		2.449	mg/L	101	90	110			
WG585555ICB	ICB	03/12/24 23:56				U	mg/L		-0.02	0.02			
WG585555PQV	PQV	03/12/24 23:59	WI240228-18	.1		.106	mg/L	106	70	130			
WG585555LFB	LFB	03/13/24 0:01	WI240228-17	2		2.025	mg/L	101	90	110			
WG585555CCV1	CCV	03/13/24 0:09	WI240306-9	2		2.023	mg/L	101	90	110			
WG585555CCB1	CCB	03/13/24 0:13				U	mg/L		-0.02	0.02			
WG585555CCV2	CCV	03/13/24 0:26	WI240306-9	2		2.033	mg/L	102	90	110			
WG585555CCB2	CCB	03/13/24 0:30				U	mg/L		-0.02	0.02			
L86427-02AS	AS	03/13/24 0:32	WI240228-17	6	3.54	9.489	mg/L	99	90	110			
L86455-01DUP	DUP	03/13/24 0:35			U	U	mg/L				0	20	RA
WG585555CCV3	CCV	03/13/24 0:45	WI240306-9	2		2.075	mg/L	104	90	110			
WG585555CCB3	CCB	03/13/24 0:49				U	mg/L		-0.02	0.02			
WG585555CCV4	CCV	03/13/24 2:18	WI240306-9	2		2.053	mg/L	103	90	110			
WG585555CCB4	CCB	03/13/24 2:21				U	mg/L		-0.02	0.02			
WG585555CCV5	CCV	03/13/24 2:31	WI240306-9	2		2.046	mg/L	102	90	110			
WG585555CCB5	CCB	03/13/24 2:35				U	mg/L		-0.02	0.02			

Nitrite as N EPA 353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585555													
WG585555ICV	ICV	03/12/24 23:54	WI240103-7	.608		.615	mg/L	101	90	110			
WG585555ICB	ICB	03/12/24 23:56				U	mg/L		-0.01	0.01			
WG585555PQV	PQV	03/12/24 23:59	WI240228-18	.05		.049	mg/L	98	70	130			
WG585555LFB	LFB	03/13/24 0:01	WI240228-17	1		1.008	mg/L	101	90	110			
L86427-02AS	AS	03/13/24 0:03	WI240228-17	1	U	.996	mg/L	100	90	110			
L86455-01DUP	DUP	03/13/24 0:06			U	U	mg/L				0	20	RA
WG585555CCV1	CCV	03/13/24 0:09	WI240306-9	1		.989	mg/L	99	90	110			
WG585555CCB1	CCB	03/13/24 0:13				U	mg/L		-0.01	0.01			
WG585555CCV2	CCV	03/13/24 0:26	WI240306-9	1		1.01	mg/L	101	90	110			
WG585555CCB2	CCB	03/13/24 0:30				U	mg/L		-0.01	0.01			
WG585555CCV3	CCV	03/13/24 0:45	WI240306-9	1		1.006	mg/L	101	90	110			
WG585555CCB3	CCB	03/13/24 0:49				U	mg/L		-0.01	0.01			
WG585555CCV4	CCV	03/13/24 2:18	WI240306-9	1		.993	mg/L	99	90	110			
WG585555CCB4	CCB	03/13/24 2:21				U	mg/L		-0.01	0.01			
WG585555CCV5	CCV	03/13/24 2:31	WI240306-9	1		.996	mg/L	100	90	110			
WG585555CCB5	CCB	03/13/24 2:35				U	mg/L		-0.01	0.01			

GCC

ACZ Project ID: ***L86455***

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

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585631													
WG585631ICV	ICV	03/13/24 20:38	II240305-3	20		19.05	mg/L	95	95	105			
WG585631ICB	ICB	03/13/24 20:44				U	mg/L		-1.5	1.5			
WG585631PQV	PQV	03/13/24 20:47	II240221-2	1.004		1.06	mg/L	106	70	130			
WG585631SIC	SIC	03/13/24 20:50	II240222-2	1.004		1.04	mg/L	104	80	120			
WG585631LFB	LFB	03/13/24 20:56	II240306-3	100.0104		97.38	mg/L	97	85	115			
WG585631CCV1	CCV	03/13/24 21:26	II240313-2	10		9.58	mg/L	96	90	110			
WG585631CCB1	CCB	03/13/24 21:29				U	mg/L		-1.5	1.5			
WG585631CCV2	CCV	03/13/24 22:03	II240313-2	10		9.62	mg/L	96	90	110			
WG585631CCB2	CCB	03/13/24 22:06				U	mg/L		-1.5	1.5			
L86465-01AS	AS	03/13/24 22:16	II240306-3	100.0104	3.15	103	mg/L	100	85	115			
L86465-01ASD	ASD	03/13/24 22:18	II240306-3	100.0104	3.15	101.7	mg/L	99	85	115	1	20	
WG585631CCV3	CCV	03/13/24 22:25	II240313-2	10		9.68	mg/L	97	90	110			
WG585631CCB3	CCB	03/13/24 22:28				U	mg/L		-1.5	1.5			
WG585626													
WG585626ICV	ICV	03/14/24 20:39	II240305-3	20		19.49	mg/L	97	95	105			
WG585626ICB	ICB	03/14/24 20:44				U	mg/L		-1.5	1.5			
WG585626PQV	PQV	03/14/24 20:47	II240221-2	1.004		1.08	mg/L	108	70	130			
WG585626SIC	SIC	03/14/24 20:50	II240222-2	1.004		1.11	mg/L	111	80	120			
WG585626LFB	LFB	03/14/24 20:57	II240306-3	100.0104		100.2	mg/L	100	85	115			
WG585626CCV1	CCV	03/14/24 21:27	II240313-2	10		9.75	mg/L	98	90	110			
WG585626CCB1	CCB	03/14/24 21:30				U	mg/L		-1.5	1.5			
WG585626CCV2	CCV	03/14/24 22:03	II240313-2	10		9.77	mg/L	98	90	110			
WG585626CCB2	CCB	03/14/24 22:06				U	mg/L		-1.5	1.5			
L86447-08AS	AS	03/14/24 22:16	II240306-3	100.0104	U	102.3	mg/L	102	85	115			
L86447-08ASD	ASD	03/14/24 22:19	II240306-3	100.0104	U	102.1	mg/L	102	85	115	0	20	
WG585626CCV3	CCV	03/14/24 22:25	II240313-2	10		9.78	mg/L	98	90	110			
WG585626CCB3	CCB	03/14/24 22:28				U	mg/L		-1.5	1.5			

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585762													
WG585762PBW	PBW	03/15/24 13:15				U	mg/L		-20	20			
WG585762LCSW	LCSW	03/15/24 13:16	PCN626249	1000		1006	mg/L	101	80	120			
L86464-01DUP	DUP	03/15/24 13:38			1070	1044	mg/L				2	10	
WG585907													
WG585907PBW	PBW	03/19/24 9:40				U	mg/L		-20	20			
WG585907LCSW	LCSW	03/19/24 9:43	PCN626253	1000		992	mg/L	99	80	120			
L86486-02DUP	DUP	03/19/24 10:21			8960	9000	mg/L				0	10	

GCC

ACZ Project ID: ***L86455***

NOTE: If the Rec% column is null, the high/low 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
WG585937													
WG585937ICV	ICV	03/19/24 20:31	MS240109-5	.05		.05398	mg/L	108	90	110			
WG585937ICB	ICB	03/19/24 20:33				U	mg/L		-0.00022	0.00022			
WG585937LFB	LFB	03/19/24 20:35	MS240213-3	.05005		.05398	mg/L	108	85	115			
WG585937CCV1	CCV	03/19/24 20:53	MS240305-4	.1001		.10424	mg/L	104	90	110			
WG585937CCB1	CCB	03/19/24 20:55				U	mg/L		-0.0003	0.0003			
L86453-08AS	AS	03/19/24 21:11	MS240213-3	.05005	U	.06149	mg/L	123	70	130			
L86453-08ASD	ASD	03/19/24 21:13	MS240213-3	.05005	U	.06079	mg/L	121	70	130	1	20	
WG585937CCV2	CCV	03/19/24 21:15	MS240305-4	.1001		.10109	mg/L	101	90	110			
WG585937CCB2	CCB	03/19/24 21:17				U	mg/L		-0.0003	0.0003			
WG585937CCV3	CCV	03/19/24 21:28	MS240305-4	.1001		.10279	mg/L	103	90	110			
WG585937CCB3	CCB	03/19/24 21:29				U	mg/L		-0.0003	0.0003			
WG585938													
WG585938ICV	ICV	03/19/24 21:46	MS240109-5	.05		.05086	mg/L	102	90	110			
WG585938ICB	ICB	03/19/24 21:47				U	mg/L		-0.00022	0.00022			
WG585938LFB	LFB	03/19/24 21:49	MS240213-3	.05005		.05138	mg/L	103	85	115			
L86479-01AS	AS	03/19/24 22:02	MS240213-3	.05005	U	.05752	mg/L	115	70	130			
L86479-01ASD	ASD	03/19/24 22:04	MS240213-3	.05005	U	.05696	mg/L	114	70	130	1	20	
WG585938CCV1	CCV	03/19/24 22:07	MS240305-4	.1001		.09974	mg/L	100	90	110			
WG585938CCB1	CCB	03/19/24 22:09				U	mg/L		-0.0003	0.0003			
WG585938CCV2	CCV	03/19/24 22:29	MS240305-4	.1001		.09682	mg/L	97	90	110			
WG585938CCB2	CCB	03/19/24 22:31				U	mg/L		-0.0003	0.0003			
WG585938CCV3	CCV	03/19/24 22:42	MS240305-4	.1001		.0958	mg/L	96	90	110			
WG585938CCB3	CCB	03/19/24 22:44				U	mg/L		-0.0003	0.0003			

GCC

ACZ Project ID: ***L86455***

NOTE: If the Rec% column is null, the high/low 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
WG585631													
WG585631ICV	ICV	03/13/24 20:38	II240305-3	100		95.94	mg/L	96	95	105			
WG585631ICB	ICB	03/13/24 20:44				U	mg/L		-0.6	0.6			
WG585631PQV	PQV	03/13/24 20:47	II240221-2	1.005		.95	mg/L	95	70	130			
WG585631SIC	SIC	03/13/24 20:50	II240222-2	1.005		.97	mg/L	97	80	120			
WG585631LFB	LFB	03/13/24 20:56	II240306-3	99.96689		98.13	mg/L	98	85	115			
WG585631CCV1	CCV	03/13/24 21:26	II240313-2	50		48.02	mg/L	96	90	110			
WG585631CCB1	CCB	03/13/24 21:29				U	mg/L		-0.6	0.6			
WG585631CCV2	CCV	03/13/24 22:03	II240313-2	50		48.12	mg/L	96	90	110			
WG585631CCB2	CCB	03/13/24 22:06				U	mg/L		-0.6	0.6			
L86465-01AS	AS	03/13/24 22:16	II240306-3	99.96689	61.7	160.4	mg/L	99	85	115			
L86465-01ASD	ASD	03/13/24 22:18	II240306-3	99.96689	61.7	158.6	mg/L	97	85	115	1	20	
WG585631CCV3	CCV	03/13/24 22:25	II240313-2	50		49.72	mg/L	99	90	110			
WG585631CCB3	CCB	03/13/24 22:28				U	mg/L		-0.6	0.6			
WG585802													
WG585802ICV	ICV	03/18/24 16:55	II240305-3	100		98.43	mg/L	98	95	105			
WG585802ICB	ICB	03/18/24 17:01				U	mg/L		-0.6	0.6			
WG585802PQV	PQV	03/18/24 17:04	II240221-2	1.005		1.05	mg/L	104	70	130			
WG585802SIC	SIC	03/18/24 17:07	II240222-2	1.005		1.15	mg/L	114	80	120			
WG585802LFB	LFB	03/18/24 17:14	II240306-3	99.96689		99.01	mg/L	99	85	115			
WG585802CCV1	CCV	03/18/24 17:45	II240313-2	50		48.99	mg/L	98	90	110			
WG585802CCB1	CCB	03/18/24 17:48				U	mg/L		-0.6	0.6			
WG585802CCV2	CCV	03/18/24 18:24	II240313-2	50		49.3	mg/L	99	90	110			
WG585802CCB2	CCB	03/18/24 18:27				.22	mg/L		-0.6	0.6			
L86506-01AS	AS	03/18/24 18:33	II240306-3	99.96689	94.3	192.9	mg/L	99	85	115			
L86506-01ASD	ASD	03/18/24 18:37	II240306-3	99.96689	94.3	186.6	mg/L	92	85	115	3	20	
WG585802CCV3	CCV	03/18/24 18:47	II240313-2	50		49.25	mg/L	99	90	110			
WG585802CCB3	CCB	03/18/24 18:50				.25	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L86455***

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

Sulfate ASTM D516-07/-11/-16

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585711													
WG585711ICV	ICV	03/15/24 11:16	WI240307-12	20		20.6	mg/L	103	85	115			
WG585711ICB	ICB	03/15/24 11:16				U	mg/L		-2.5	2.5			
WG585711CCV1	CCV	03/15/24 11:28	WI240304-1	25		25.4	mg/L	102	85	115			
WG585711CCB1	CCB	03/15/24 11:28				U	mg/L		-2.5	2.5			
WG585711LFB	LFB	03/15/24 11:28	WI240304-2	10		10.3	mg/L	103	85	115			
WG585711CCV2	CCV	03/15/24 11:31	WI240304-1	25		25.4	mg/L	102	85	115			
WG585711CCB2	CCB	03/15/24 11:31				U	mg/L		-2.5	2.5			
WG585711CCV3	CCV	03/15/24 11:35	WI240304-1	25		24.9	mg/L	100	85	115			
WG585711CCB3	CCB	03/15/24 11:35				U	mg/L		-2.5	2.5			
WG585711CCV4	CCV	03/15/24 11:39	WI240304-1	25		25.7	mg/L	103	85	115			
WG585711CCB4	CCB	03/15/24 11:39				1.2	mg/L		-2.5	2.5			
WG585711CCV5	CCV	03/15/24 11:44	WI240304-1	25		25.4	mg/L	102	85	115			
WG585711CCB5	CCB	03/15/24 11:44				U	mg/L		-2.5	2.5			
WG585711CCV6	CCV	03/15/24 11:49	WI240304-1	25		24.9	mg/L	100	85	115			
WG585711CCB6	CCB	03/15/24 11:50				U	mg/L		-2.5	2.5			
WG585711CCV7	CCV	03/15/24 11:53	WI240304-1	25		25.4	mg/L	102	85	115			
WG585711CCB7	CCB	03/15/24 11:53				1.9	mg/L		-2.5	2.5			
WG585711CCV8	CCV	03/15/24 11:55	WI240304-1	25		25.2	mg/L	101	85	115			
WG585711CCB8	CCB	03/15/24 11:55				U	mg/L		-2.5	2.5			
WG585711CCV9	CCV	03/15/24 11:56	WI240304-1	25		25	mg/L	100	85	115			
WG585711CCB9	CCB	03/15/24 11:57				U	mg/L		-2.5	2.5			
WG585711CCV12	CCV	03/15/24 12:00	WI240304-1	25		25.5	mg/L	102	85	115			
WG585711CCB12	CCB	03/15/24 12:00				U	mg/L		-2.5	2.5			
WG585711CCV13	CCV	03/15/24 12:04	WI240304-1	25		25.5	mg/L	102	85	115			
WG585711CCB13	CCB	03/15/24 12:05				U	mg/L		-2.5	2.5			
WG585711CCV14	CCV	03/15/24 12:06	WI240304-1	25		25.4	mg/L	102	85	115			
WG585711CCB14	CCB	03/15/24 12:06				U	mg/L		-2.5	2.5			
L86455-04AS	AS	03/15/24 12:09	SO4TURB	10	3140	3083.8	mg/L	-562	85	115			M3
WG585711CCV15	CCV	03/15/24 12:09	WI240304-1	25		25.5	mg/L	102	85	115			
WG585711CCB15	CCB	03/15/24 12:10				U	mg/L		-2.5	2.5			
WG585711CCV16	CCV	03/15/24 12:12	WI240304-1	25		25.4	mg/L	102	85	115			
WG585711CCB16	CCB	03/15/24 12:12				U	mg/L		-2.5	2.5			
L86455-04ASD	ASD	03/15/24 12:18	SO4TURB	10	3140	3127.3	mg/L	-127	85	115	1	20	M3
WG585711CCV17	CCV	03/15/24 12:18	WI240304-1	25		25.6	mg/L	102	85	115			
WG585711CCB17	CCB	03/15/24 12:19				U	mg/L		-2.5	2.5			
WG585927													
WG585927ICV	ICV	03/19/24 13:40	WI240319-1	20		20.4	mg/L	102	85	115			
WG585927ICB	ICB	03/19/24 13:40				U	mg/L		-2.5	2.5			
WG585927CCV1	CCV	03/19/24 14:31	WI240319-2	25		26	mg/L	104	85	115			
WG585927CCB1	CCB	03/19/24 14:31				U	mg/L		-2.5	2.5			
WG585927LFB	LFB	03/19/24 14:32	WI240304-2	10		10.4	mg/L	104	85	115			
WG585927CCV2	CCV	03/19/24 14:35	WI240319-2	25		25.6	mg/L	102	85	115			
WG585927CCB2	CCB	03/19/24 14:35				U	mg/L		-2.5	2.5			
WG585927CCV3	CCV	03/19/24 14:38	WI240319-2	25		26.3	mg/L	105	85	115			
WG585927CCB3	CCB	03/19/24 14:39				U	mg/L		-2.5	2.5			
WG585927CCV4	CCV	03/19/24 14:41	WI240319-2	25		26	mg/L	104	85	115			
WG585927CCB4	CCB	03/19/24 14:42				U	mg/L		-2.5	2.5			
WG585927CCV5	CCV	03/19/24 14:44	WI240319-2	25		26.1	mg/L	104	85	115			
WG585927CCB5	CCB	03/19/24 14:44				U	mg/L		-2.5	2.5			

GCC

ACZ Project ID: ***L86455***

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

WG585927CCV6	CCV	03/19/24 14:45	WI240319-2	25		26	mg/L	104	85	115			
WG585927CCB6	CCB	03/19/24 14:46				U	mg/L		-2.5	2.5			
L86457-03AS	AS	03/19/24 14:47	SO4TURB5X	10	150	157.7	mg/L	77	85	115			M3
L86457-03ASD	ASD	03/19/24 14:48	SO4TURB5X	10	150	156.8	mg/L	68	85	115	1	20	M3
WG585927CCV7	CCV	03/19/24 14:48	WI240319-2	25		25.4	mg/L	102	85	115			
WG585927CCB7	CCB	03/19/24 14:48				U	mg/L		-2.5	2.5			
WG585927CCV9	CCV	03/19/24 14:51	WI240319-2	25		25.8	mg/L	103	85	115			
WG585927CCB9	CCB	03/19/24 14:51				U	mg/L		-2.5	2.5			
WG585927CCV10	CCV	03/19/24 14:56	WI240319-2	25		25.7	mg/L	103	85	115			
WG585927CCB10	CCB	03/19/24 14:56				U	mg/L		-2.5	2.5			
WG585927CCV12	CCV	03/19/24 15:09	WI240319-2	25		25.7	mg/L	103	85	115			
WG585927CCB12	CCB	03/19/24 15:09				U	mg/L		-2.5	2.5			
WG585927CCV13	CCV	03/19/24 15:10	WI240319-2	25		26	mg/L	104	85	115			
WG585927CCB13	CCB	03/19/24 15:10				1.3	mg/L		-2.5	2.5			

Vanadium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585631													
WG585631ICV	ICV	03/13/24 20:38	II240305-3	2		1.977	mg/L	99	95	105			
WG585631ICB	ICB	03/13/24 20:44				U	mg/L		-0.015	0.015			
WG585631PQV	PQV	03/13/24 20:47	II240221-2	.025025		.026	mg/L	104	70	130			
WG585631SIC	SIC	03/13/24 20:50	II240222-2	.1001		.091	mg/L	91	80	120			
WG585631LFB	LFB	03/13/24 20:56	II240306-3	.5005		.5032	mg/L	101	85	115			
WG585631CCV1	CCV	03/13/24 21:26	II240313-2	1		.982	mg/L	98	90	110			
WG585631CCB1	CCB	03/13/24 21:29				U	mg/L		-0.03	0.03			
WG585631CCV2	CCV	03/13/24 22:03	II240313-2	1		.982	mg/L	98	90	110			
WG585631CCB2	CCB	03/13/24 22:06				U	mg/L		-0.03	0.03			
L86465-01AS	AS	03/13/24 22:16	II240306-3	.5005	U	.5084	mg/L	102	85	115			
L86465-01ASD	ASD	03/13/24 22:18	II240306-3	.5005	U	.5	mg/L	100	85	115	2	20	
WG585631CCV3	CCV	03/13/24 22:25	II240313-2	1		.99	mg/L	99	90	110			
WG585631CCB3	CCB	03/13/24 22:28				U	mg/L		-0.03	0.03			
WG585626													
WG585626ICV	ICV	03/14/24 20:39	II240305-3	2		2.011	mg/L	101	95	105			
WG585626ICB	ICB	03/14/24 20:44				U	mg/L		-0.015	0.015			
WG585626PQV	PQV	03/14/24 20:47	II240221-2	.025025		.027	mg/L	108	70	130			
WG585626SIC	SIC	03/14/24 20:50	II240222-2	.1001		.092	mg/L	92	80	120			
WG585626LFB	LFB	03/14/24 20:57	II240306-3	.5005		.5166	mg/L	103	85	115			
WG585626CCV1	CCV	03/14/24 21:27	II240313-2	1		.993	mg/L	99	90	110			
WG585626CCB1	CCB	03/14/24 21:30				U	mg/L		-0.03	0.03			
WG585626CCV2	CCV	03/14/24 22:03	II240313-2	1		.996	mg/L	100	90	110			
WG585626CCB2	CCB	03/14/24 22:06				U	mg/L		-0.03	0.03			
L86447-08AS	AS	03/14/24 22:16	II240306-3	.5005	U	.523	mg/L	104	85	115			
L86447-08ASD	ASD	03/14/24 22:19	II240306-3	.5005	U	.525	mg/L	105	85	115	0	20	
WG585626CCV3	CCV	03/14/24 22:25	II240313-2	1		1.001	mg/L	100	90	110			
WG585626CCB3	CCB	03/14/24 22:28				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L86455***

NOTE: If the Rec% column is null, the high/low 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
WG585631													
WG585631ICV	ICV	03/13/24 20:38	II240305-3	2		1.892	mg/L	95	95	105			
WG585631ICB	ICB	03/13/24 20:44				U	mg/L		-0.06	0.06			
WG585631PQV	PQV	03/13/24 20:47	II240221-2	.05005		.051	mg/L	102	70	130			
WG585631SIC	SIC	03/13/24 20:50	II240222-2	.1001		.096	mg/L	96	80	120			
WG585631LFB	LFB	03/13/24 20:56	II240306-3	.50045		.511	mg/L	102	85	115			
WG585631CCV1	CCV	03/13/24 21:26	II240313-2	1		.951	mg/L	95	90	110			
WG585631CCB1	CCB	03/13/24 21:29				U	mg/L		-0.06	0.06			
WG585631CCV2	CCV	03/13/24 22:03	II240313-2	1		.948	mg/L	95	90	110			
WG585631CCB2	CCB	03/13/24 22:06				U	mg/L		-0.06	0.06			
L86465-01AS	AS	03/13/24 22:16	II240306-3	.50045	.021	.527	mg/L	101	85	115			
L86465-01ASD	ASD	03/13/24 22:18	II240306-3	.50045	.021	.521	mg/L	100	85	115	1	20	
WG585631CCV3	CCV	03/13/24 22:25	II240313-2	1		.954	mg/L	95	90	110			
WG585631CCB3	CCB	03/13/24 22:28				U	mg/L		-0.06	0.06			
WG585626													
WG585626ICV	ICV	03/14/24 20:39	II240305-3	2		1.929	mg/L	96	95	105			
WG585626ICB	ICB	03/14/24 20:44				U	mg/L		-0.06	0.06			
WG585626PQV	PQV	03/14/24 20:47	II240221-2	.05005		.056	mg/L	112	70	130			
WG585626SIC	SIC	03/14/24 20:50	II240222-2	.1001		.103	mg/L	103	80	120			
WG585626LFB	LFB	03/14/24 20:57	II240306-3	.50045		.525	mg/L	105	85	115			
WG585626CCV1	CCV	03/14/24 21:27	II240313-2	1		.957	mg/L	96	90	110			
WG585626CCB1	CCB	03/14/24 21:30				U	mg/L		-0.06	0.06			
WG585626CCV2	CCV	03/14/24 22:03	II240313-2	1		.968	mg/L	97	90	110			
WG585626CCB2	CCB	03/14/24 22:06				U	mg/L		-0.06	0.06			
L86447-08AS	AS	03/14/24 22:16	II240306-3	.50045	U	.528	mg/L	106	85	115			
L86447-08ASD	ASD	03/14/24 22:19	II240306-3	.50045	U	.533	mg/L	107	85	115	1	20	
WG585626CCV3	CCV	03/14/24 22:25	II240313-2	1		.969	mg/L	97	90	110			
WG585626CCB3	CCB	03/14/24 22:28				U	mg/L		-0.06	0.06			

GCC Rio Grande ACZ Project ID: ***L86455***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L86455-01	WG585615	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG585635	Mercury, dissolved	M245.1 CVAA	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG585555	Nitrate/Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	EPA 353.2 - 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).
	WG585937	Selenium, dissolved	M200.8 ICP-MS	D1	Sample required dilution due to matrix.
			M200.8 ICP-MS	EA	Concentration estimated. Analytical result was less than the negative MDL due to matrix interferences.
	WG585711	Sulfate	ASTM D516-07/-11/-16	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG586165	Total Alkalinity	SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L86455-02	WG585615	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG585635	Mercury, dissolved	M245.1 CVAA	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG585555	Nitrate/Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	EPA 353.2 - 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).
	WG585937	Selenium, dissolved	M200.8 ICP-MS	D1	Sample required dilution due to matrix.
			M200.8 ICP-MS	EA	Concentration estimated. Analytical result was less than the negative MDL due to matrix interferences.
	WG585711	Sulfate	ASTM D516-07/-11/-16	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG586165	Total Alkalinity	SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L86455-03	WG585615	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG585555	Nitrate/Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	EPA 353.2 - 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).
	WG585711	Sulfate	ASTM D516-07/-11/-16	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG586165	Total Alkalinity	SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

GCC Rio Grande ACZ Project ID: ***L86455***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L86455-04	WG585615	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG585555	Nitrate/Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	EPA 353.2 - 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).
	WG585711	Sulfate	ASTM D516-07/-11/-16	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG586165	Total Alkalinity	SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L86455-05	WG585938	Arsenic, dissolved	M200.8 ICP-MS	D1	Sample required dilution due to matrix.
		Cadmium, dissolved	M200.8 ICP-MS	D1	Sample required dilution due to matrix.
	WG585615	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG585938	Cobalt, dissolved	M200.8 ICP-MS	D1	Sample required dilution due to matrix.
		Lead, dissolved	M200.8 ICP-MS	D1	Sample required dilution due to matrix.
	WG585555	Nitrate/Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	EPA 353.2 - 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).
	WG585938	Selenium, dissolved	M200.8 ICP-MS	D1	Sample required dilution due to matrix.
	WG585927	Sulfate	ASTM D516-07/-11/-16	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG586165	Total Alkalinity	SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L86455-06	WG585938	Arsenic, dissolved	M200.8 ICP-MS	D1	Sample required dilution due to matrix.
		Cadmium, dissolved	M200.8 ICP-MS	D1	Sample required dilution due to matrix.
	WG585615	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG585938	Lead, dissolved	M200.8 ICP-MS	D1	Sample required dilution due to matrix.
	WG585555	Nitrate/Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	EPA 353.2 - 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).
	WG585907	Residue, Filterable (TDS) @180C	SM2540C	H1	Sample prep or analysis performed past holding time. See case narrative.
	WG585927	Sulfate	ASTM D516-07/-11/-16	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG586165	Total Alkalinity	SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

Inorganic Extended Qualifier Report

GCC Rio Grande ACZ Project ID: ***L86455***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L86455-07	WG585615	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG585555	Nitrate/Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	EPA 353.2 - 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).
	WG585762	Residue, Filterable (TDS) @180C	SM2540C	Z3	Sample volume yielded a residue less than 2.5 mg
	WG585927	Sulfate	ASTM D516-07/-11/-16	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG586165	Total Alkalinity	SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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

ACZ Project ID: L86455
Date Received: 03/12/2024 11:24
Received By:
Date Printed: 3/13/2024

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?
NA41403	1.2	<=6.0	15	Yes

Was ice present in the shipment container(s)?

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

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

Sample Receipt

GCC Rio Grande

ACZ Project ID:	L86455
Date Received:	03/12/2024 11:24
Received By:	
Date Printed:	3/13/2024

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

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive Steamboat Springs, CO 80487 (970) 879-6590 | L86455

CHAIN of CUSTODY

Report to:

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

Copy of Invoice to:

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

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

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

Are samples for SDWA Compliance Monitoring? Yes No ✓

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

Sampler's Name: Amy Rodrigues Sampler's Site Information State CO Zip code 81004 Time Zone MST

*Sampler's Signature: Amy Rodrigues

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

PROJECT INFORMATION

Quote #: GW-COMPLIANCE

PO#: 258478

Reporting state for compliance testing:

Check box if samples include NRC licensed material?

ANALYSES REQUESTED (attach list or use quote number)

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	GW-COmpliance
MW-14	3/11/2024 10:47	GW	3	✓
MW-13	3/11/2024 11:37	GW	3	✓
MW-6	3/11/2024 13:12	GW	3	✓
MW-7	3/11/2024 13:39	GW	3	✓
MW-8	3/11/2024 14:14	GW	3	✓
MW-2B	3/11/2024 12:00	GW	3	✓
Method Blank	3/11/2024 12:30	GW	3	✓

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

REMARKS

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

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
Amy Rodrigues	3/11/24 15:40		3/12/24 11:24

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

L86455 Chain of Custod

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

Analytical Report

March 26, 2024

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

cc: Landon Beck

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

Project ID:
ACZ Project ID: L86481

Amy Rodrigues:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on March 13, 2024. This project has been assigned to ACZ's project number, L86481. 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 L86481. 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 March 26, 2025. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

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

Sue Webber has reviewed and approved this report.

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

ACZ Sample ID: ***L86481-01***
Date Sampled: *03/12/24 09:21*
Date Received: *03/13/24*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	03/14/24 18:09	brc
Arsenic, dissolved	M200.8 ICP-MS	1	0.00021	B		mg/L	0.0002	0.001	03/19/24 22:16	aps
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/14/24 18:09	brc
Boron, dissolved	M200.7 ICP	1	0.435			mg/L	0.03	0.1	03/14/24 18:09	brc
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U		mg/L	0.00005	0.00025	03/19/24 22:16	aps
Calcium, dissolved	M200.7 ICP	1	71.4			mg/L	0.1	0.5	03/14/24 18:09	brc
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	03/14/24 18:09	brc
Cobalt, dissolved	M200.8 ICP-MS	1	0.000789			mg/L	0.00005	0.00025	03/19/24 22:16	aps
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/25/24 11:37	wtc
Iron, dissolved	M200.7 ICP	1	0.165		*	mg/L	0.06	0.15	03/14/24 18:09	brc
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	03/19/24 22:16	aps
Lithium, dissolved	M200.7 ICP	1	0.136			mg/L	0.008	0.04	03/14/24 18:09	brc
Magnesium, dissolved	M200.7 ICP	1	35.6			mg/L	0.2	1	03/14/24 18:09	brc
Manganese, dissolved	M200.7 ICP	1	0.030	B		mg/L	0.01	0.05	03/14/24 18:09	brc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	03/21/24 14:56	aeh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	03/14/24 18:09	brc
Potassium, dissolved	M200.7 ICP	1	3.45			mg/L	0.5	1	03/14/24 18:09	brc
Selenium, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.00025	03/19/24 22:16	aps
Sodium, dissolved	M200.7 ICP	1	414			mg/L	0.2	1	03/14/24 18:09	brc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	03/14/24 18:09	brc
Zinc, dissolved	M200.7 ICP	1	0.071			mg/L	0.02	0.05	03/14/24 18:09	brc

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

ACZ Sample ID: ***L86481-01***
Date Sampled: *03/12/24 09:21*
Date Received: *03/13/24*
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	752			mg/L	2	20	03/23/24 0:00	jck
Carbonate as CaCO3		1	<2	U		mg/L	2	20	03/23/24 0:00	jck
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	03/23/24 0:00	jck
Total Alkalinity		1	752			mg/L	2	20	03/23/24 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			03/26/24 0:00	calc
Sum of Anions			25			meq/L			03/26/24 0:00	calc
Sum of Cations			25			meq/L			03/26/24 0:00	calc
Chloride	SM4500Cl-E	5	103			mg/L	5	10	03/19/24 10:33	jqr
Fluoride	SM4500F-C	1	0.86			mg/L	0.15	0.35	03/22/24 22:00	jck
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		325			mg/L	0.2	5	03/26/24 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	03/26/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	03/14/24 0:18	pjb
Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	03/14/24 0:18	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	1420			mg/L	20	40	03/18/24 16:01	asn
Sulfate	ASTM D516-07/-11/-16	25	343		*	mg/L	25	125	03/19/24 16:50	cbp
TDS (calculated)	Calculation		1430			mg/L			03/26/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.99						03/26/24 0:00	calc

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

ACZ Sample ID: ***L86481-02***
Date Sampled: *03/12/24 09:42*
Date Received: *03/13/24*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	03/14/24 18:12	brc
Arsenic, dissolved	M200.8 ICP-MS	2	0.00271			mg/L	0.0004	0.002	03/19/24 22:18	aps
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/14/24 18:12	brc
Boron, dissolved	M200.7 ICP	1	0.902			mg/L	0.03	0.1	03/14/24 18:12	brc
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U	*	mg/L	0.0001	0.0005	03/19/24 22:18	aps
Calcium, dissolved	M200.7 ICP	1	25.7		*	mg/L	0.1	0.5	03/14/24 18:12	brc
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	03/14/24 18:12	brc
Cobalt, dissolved	M200.8 ICP-MS	2	0.000756			mg/L	0.0001	0.0005	03/19/24 22:18	aps
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/25/24 17:46	wtc
Iron, dissolved	M200.7 ICP	1	0.186			mg/L	0.06	0.15	03/14/24 18:12	brc
Lead, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	03/19/24 22:18	aps
Lithium, dissolved	M200.7 ICP	1	0.213			mg/L	0.008	0.04	03/14/24 18:12	brc
Magnesium, dissolved	M200.7 ICP	1	10.2			mg/L	0.2	1	03/14/24 18:12	brc
Manganese, dissolved	M200.7 ICP	1	0.075			mg/L	0.01	0.05	03/14/24 18:12	brc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	03/21/24 14:59	aeh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	03/14/24 18:12	brc
Potassium, dissolved	M200.7 ICP	1	4.03			mg/L	0.5	1	03/14/24 18:12	brc
Selenium, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.0005	03/19/24 22:18	aps
Sodium, dissolved	M200.7 ICP	1	971			mg/L	0.2	1	03/14/24 18:12	brc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	03/14/24 18:12	brc
Zinc, dissolved	M200.7 ICP	1	0.092			mg/L	0.02	0.05	03/14/24 18:12	brc

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

ACZ Sample ID: ***L86481-02***
Date Sampled: *03/12/24 09:42*
Date Received: *03/13/24*
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	632			mg/L	2	20	03/23/24 0:00	jck
Carbonate as CaCO3		1	<2	U		mg/L	2	20	03/23/24 0:00	jck
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	03/23/24 0:00	jck
Total Alkalinity		1	632			mg/L	2	20	03/23/24 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-2.2			%			03/26/24 0:00	calc
Sum of Anions			47			meq/L			03/26/24 0:00	calc
Sum of Cations			45.0			meq/L			03/26/24 0:00	calc
Chloride	SM4500Cl-E	20	984			mg/L	20	40	03/19/24 10:42	jqr
Fluoride	SM4500F-C	1	1.84			mg/L	0.15	0.35	03/22/24 22:08	jck
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		106			mg/L	0.2	5	03/26/24 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	03/26/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	03/14/24 0:20	pjb
Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	03/14/24 0:20	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	2710			mg/L	20	40	03/18/24 16:06	asn
Sulfate	ASTM D516-07/-11/-16	25	326		*	mg/L	25	125	03/19/24 16:51	cbp
TDS (calculated)	Calculation		2710			mg/L			03/26/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.00						03/26/24 0:00	calc

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

ACZ Sample ID: ***L86481-03***
Date Sampled: *03/12/24 11:30*
Date Received: *03/13/24*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	03/14/24 18:15	brc
Arsenic, dissolved	M200.8 ICP-MS	2	0.00092	B	*	mg/L	0.0004	0.002	03/19/24 22:20	aps
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/14/24 18:15	brc
Boron, dissolved	M200.7 ICP	1	1.40			mg/L	0.03	0.1	03/14/24 18:15	brc
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U	*	mg/L	0.0001	0.0005	03/19/24 22:20	aps
Calcium, dissolved	M200.7 ICP	1	400		*	mg/L	0.1	0.5	03/14/24 18:15	brc
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	03/14/24 18:15	brc
Cobalt, dissolved	M200.8 ICP-MS	2	0.00180			mg/L	0.0001	0.0005	03/19/24 22:20	aps
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/25/24 17:49	wtc
Iron, dissolved	M200.7 ICP	1	1.89			mg/L	0.06	0.15	03/14/24 18:15	brc
Lead, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	03/19/24 22:20	aps
Lithium, dissolved	M200.7 ICP	1	0.391			mg/L	0.008	0.04	03/14/24 18:15	brc
Magnesium, dissolved	M200.7 ICP	1	158			mg/L	0.2	1	03/14/24 18:15	brc
Manganese, dissolved	M200.7 ICP	1	0.381			mg/L	0.01	0.05	03/14/24 18:15	brc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	03/21/24 15:00	aeh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	03/14/24 18:15	brc
Potassium, dissolved	M200.7 ICP	1	8.75			mg/L	0.5	1	03/14/24 18:15	brc
Selenium, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.0005	03/19/24 22:20	aps
Sodium, dissolved	M200.7 ICP	1	809			mg/L	0.2	1	03/14/24 18:15	brc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	03/14/24 18:15	brc
Zinc, dissolved	M200.7 ICP	1	0.090			mg/L	0.02	0.05	03/14/24 18:15	brc

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

ACZ Sample ID: ***L86481-03***
Date Sampled: *03/12/24 11:30*
Date Received: *03/13/24*
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	421			mg/L	2	20	03/23/24 0:00	jck
Carbonate as CaCO3		1	<2	U		mg/L	2	20	03/23/24 0:00	jck
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	03/23/24 0:00	jck
Total Alkalinity		1	421			mg/L	2	20	03/23/24 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			3.8			%			03/26/24 0:00	calc
Sum of Anions			64			meq/L			03/26/24 0:00	calc
Sum of Cations			69			meq/L			03/26/24 0:00	calc
Chloride	SM4500Cl-E	1	44.8			mg/L	1	2	03/19/24 10:24	jqr
Fluoride	SM4500F-C	1	0.42			mg/L	0.15	0.35	03/22/24 22:16	jck
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		1650			mg/L	0.2	5	03/26/24 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	03/26/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	03/14/24 0:25	pjb
Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	03/14/24 0:25	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	4880			mg/L	40	80	03/18/24 16:11	asn
Sulfate	ASTM D516-07/-11/-16	200	2590		*	mg/L	200	1000	03/19/24 17:05	cbp
TDS (calculated)	Calculation		4270			mg/L			03/26/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.14						03/26/24 0:00	calc

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

ACZ Sample ID: ***L86481-04***
Date Sampled: *03/12/24 12:02*
Date Received: *03/13/24*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	03/14/24 18:18	brc
Arsenic, dissolved	M200.8 ICP-MS	2	0.00156	B	*	mg/L	0.0004	0.002	03/19/24 22:22	aps
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/14/24 18:18	brc
Boron, dissolved	M200.7 ICP	1	1.31			mg/L	0.03	0.1	03/14/24 18:18	brc
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U	*	mg/L	0.0001	0.0005	03/19/24 22:22	aps
Calcium, dissolved	M200.7 ICP	1	24.8		*	mg/L	0.1	0.5	03/14/24 18:18	brc
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	03/14/24 18:18	brc
Cobalt, dissolved	M200.8 ICP-MS	2	<0.0001	U	*	mg/L	0.0001	0.0005	03/19/24 22:22	aps
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/25/24 17:53	wtc
Iron, dissolved	M200.7 ICP	1	0.319			mg/L	0.06	0.15	03/14/24 18:18	brc
Lead, dissolved	M200.8 ICP-MS	2	0.00020	B	*	mg/L	0.0002	0.001	03/19/24 22:22	aps
Lithium, dissolved	M200.7 ICP	1	0.206			mg/L	0.008	0.04	03/14/24 18:18	brc
Magnesium, dissolved	M200.7 ICP	1	7.59			mg/L	0.2	1	03/14/24 18:18	brc
Manganese, dissolved	M200.7 ICP	1	0.013	B		mg/L	0.01	0.05	03/14/24 18:18	brc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	03/21/24 15:01	aeh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	03/14/24 18:18	brc
Potassium, dissolved	M200.7 ICP	1	4.13			mg/L	0.5	1	03/14/24 18:18	brc
Selenium, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.0005	03/19/24 22:22	aps
Sodium, dissolved	M200.7 ICP	1	829			mg/L	0.2	1	03/14/24 18:18	brc
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	03/14/24 18:18	brc
Zinc, dissolved	M200.7 ICP	1	0.082			mg/L	0.02	0.05	03/14/24 18:18	brc

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

ACZ Sample ID: ***L86481-04***
Date Sampled: *03/12/24 12:02*
Date Received: *03/13/24*
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	784			mg/L	2	20	03/23/24 0:00	jck
Carbonate as CaCO3		1	<2	U		mg/L	2	20	03/23/24 0:00	jck
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	03/23/24 0:00	jck
Total Alkalinity		1	784			mg/L	2	20	03/23/24 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-4.9			%			03/26/24 0:00	calc
Sum of Anions			43			meq/L			03/26/24 0:00	calc
Sum of Cations			39			meq/L			03/26/24 0:00	calc
Chloride	SM4500Cl-E	20	382		*	mg/L	20	40	03/19/24 10:43	jqr
Fluoride	SM4500F-C	1	1.40			mg/L	0.15	0.35	03/22/24 22:35	jck
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		93			mg/L	0.2	5	03/26/24 0:00	calc
Nitrate as N	Calculation: NO3NO2 minus NO2		<0.02	U		mg/L	0.02	0.1	03/26/24 0:00	calc
Nitrate/Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	1	<0.02	U	*	mg/L	0.02	0.1	03/14/24 0:27	pjb
Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	03/14/24 0:27	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	2550			mg/L	20	40	03/18/24 16:17	asn
Sulfate	ASTM D516-07/-11/-16	25	806		*	mg/L	25	125	03/19/24 16:52	cbp
TDS (calculated)	Calculation		2530			mg/L			03/26/24 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.01						03/26/24 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: ***L86481***

NOTE: If the Rec% column is null, the high/low 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
WG586165													
WG586165PBW1	PBW	03/22/24 22:02				9.1	mg/L		-20	20			
WG586165LCSW3	LCSW	03/22/24 22:14	WC240320-1	820.0001		807.2	mg/L	98	90	110			
WG586165LCSW6	LCSW	03/23/24 0:07	WC240320-1	820.0001		814.5	mg/L	99	90	110			
WG586165PBW2	PBW	03/23/24 0:14				5.4	mg/L		-20	20			
L86481-04DUP	DUP	03/23/24 1:53			784	777.8	mg/L				1	20	
WG586165LCSW9	LCSW	03/23/24 2:07	WC240320-1	820.0001		824.3	mg/L	101	90	110			
WG586165PBW3	PBW	03/23/24 2:14				4.9	mg/L		-20	20			
WG586165LCSW12	LCSW	03/23/24 4:08	WC240320-1	820.0001		819.7	mg/L	100	90	110			
WG586165PBW4	PBW	03/23/24 4:15				4.2	mg/L		-20	20			
WG586165LCSW15	LCSW	03/23/24 6:06	WC240320-1	820.0001		846.4	mg/L	103	90	110			
WG586165PBW5	PBW	03/23/24 6:13				9.1	mg/L		-20	20			
WG586165LCSW18	LCSW	03/23/24 8:08	WC240320-1	820.0001		835.7	mg/L	102	90	110			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585707													
WG585707ICV	ICV	03/14/24 17:09	II240305-3	2		2.011	mg/L	101	95	105			
WG585707ICB	ICB	03/14/24 17:14				U	mg/L		-0.15	0.15			
WG585707PQV	PQV	03/14/24 17:17	II240221-2	.25025		.239	mg/L	96	70	130			
WG585707SIC	SIC	03/14/24 17:20	II240222-2	200.45025		204.2	mg/L	102	1	200			
WG585707LFB	LFB	03/14/24 17:27	II240306-3	1.001		1.024	mg/L	102	85	115			
L86402-01AS	AS	03/14/24 17:33	II240306-3	1.001	U	1.054	mg/L	105	85	115			
L86402-01ASD	ASD	03/14/24 17:36	II240306-3	1.001	U	1.035	mg/L	103	85	115	2	20	
WG585707CCV1	CCV	03/14/24 17:57	II240313-2	1		.988	mg/L	99	90	110			
WG585707CCB1	CCB	03/14/24 18:00				U	mg/L		-0.15	0.15			
L86484-01AS	AS	03/14/24 18:27	II240306-3	1.001	U	1.024	mg/L	102	85	115			
L86484-01ASD	ASD	03/14/24 18:30	II240306-3	1.001	U	1.038	mg/L	104	85	115	1	20	
WG585707CCV2	CCV	03/14/24 18:33	II240313-2	1		.982	mg/L	98	90	110			
WG585707CCB2	CCB	03/14/24 18:36				U	mg/L		-0.15	0.15			
WG585707CCV3	CCV	03/14/24 18:48	II240313-2	1		.987	mg/L	99	90	110			
WG585707CCB3	CCB	03/14/24 18:51				U	mg/L		-0.15	0.15			

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585938													
WG585938ICV	ICV	03/19/24 21:46	MS240109-5	.05		.04995	mg/L	100	90	110			
WG585938ICB	ICB	03/19/24 21:47				U	mg/L		-0.00044	0.00044			
WG585938LFB	LFB	03/19/24 21:49	MS240213-3	.0501		.0513	mg/L	102	85	115			
WG585938CCV1	CCV	03/19/24 22:07	MS240305-4	.1002		.09775	mg/L	98	90	110			
WG585938CCB1	CCB	03/19/24 22:09				U	mg/L		-0.0006	0.0006			
L86484-01AS	AS	03/19/24 22:26	MS240213-3	.0501	.00074	.05613	mg/L	111	70	130			
L86484-01ASD	ASD	03/19/24 22:27	MS240213-3	.0501	.00074	.05558	mg/L	109	70	130	1	20	
WG585938CCV2	CCV	03/19/24 22:29	MS240305-4	.1002		.09632	mg/L	96	90	110			
WG585938CCB2	CCB	03/19/24 22:31				U	mg/L		-0.0006	0.0006			
WG585938CCV3	CCV	03/19/24 22:42	MS240305-4	.1002		.09494	mg/L	95	90	110			
WG585938CCB3	CCB	03/19/24 22:44				U	mg/L		-0.0006	0.0006			

GCC

ACZ Project ID: ***L86481***

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

Beryllium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585707													
WG585707ICV	ICV	03/14/24 17:09	II240305-3	2		1.928	mg/L	96	95	105			
WG585707ICB	ICB	03/14/24 17:14				U	mg/L		-0.03	0.03			
WG585707PQV	PQV	03/14/24 17:17	II240221-2	.05005		.05	mg/L	100	70	130			
WG585707SIC	SIC	03/14/24 17:20	II240222-2	.10015		.098	mg/L	98	80	120			
WG585707LFB	LFB	03/14/24 17:27	II240306-3	.5005		.502	mg/L	100	85	115			
L86402-01AS	AS	03/14/24 17:33	II240306-3	.5005	U	.5	mg/L	100	85	115			
L86402-01ASD	ASD	03/14/24 17:36	II240306-3	.5005	U	.503	mg/L	100	85	115	1	20	
WG585707CCV1	CCV	03/14/24 17:57	II240313-2	1		.955	mg/L	96	90	110			
WG585707CCB1	CCB	03/14/24 18:00				U	mg/L		-0.03	0.03			
L86484-01AS	AS	03/14/24 18:27	II240306-3	.5005	U	.484	mg/L	97	85	115			
L86484-01ASD	ASD	03/14/24 18:30	II240306-3	.5005	U	.486	mg/L	97	85	115	0	20	
WG585707CCV2	CCV	03/14/24 18:33	II240313-2	1		.945	mg/L	95	90	110			
WG585707CCB2	CCB	03/14/24 18:36				U	mg/L		-0.03	0.03			
WG585707CCV3	CCV	03/14/24 18:48	II240313-2	1		.946	mg/L	95	90	110			
WG585707CCB3	CCB	03/14/24 18:51				U	mg/L		-0.03	0.03			

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585707													
WG585707ICV	ICV	03/14/24 17:09	II240305-3	2		2.05	mg/L	103	95	105			
WG585707ICB	ICB	03/14/24 17:14				U	mg/L		-0.09	0.09			
WG585707PQV	PQV	03/14/24 17:17	II240221-2	.1001		.108	mg/L	108	70	130			
WG585707SIC	SIC	03/14/24 17:20	II240222-2	.1001		.105	mg/L	105	80	120			
WG585707LFB	LFB	03/14/24 17:27	II240306-3	.5005		.517	mg/L	103	85	115			
L86402-01AS	AS	03/14/24 17:33	II240306-3	.5005	.049	.567	mg/L	103	85	115			
L86402-01ASD	ASD	03/14/24 17:36	II240306-3	.5005	.049	.565	mg/L	103	85	115	0	20	
WG585707CCV1	CCV	03/14/24 17:57	II240313-2	1		1.002	mg/L	100	90	110			
WG585707CCB1	CCB	03/14/24 18:00				U	mg/L		-0.09	0.09			
L86484-01AS	AS	03/14/24 18:27	II240306-3	.5005	.08	.582	mg/L	100	85	115			
L86484-01ASD	ASD	03/14/24 18:30	II240306-3	.5005	.08	.584	mg/L	101	85	115	0	20	
WG585707CCV2	CCV	03/14/24 18:33	II240313-2	1		.999	mg/L	100	90	110			
WG585707CCB2	CCB	03/14/24 18:36				U	mg/L		-0.09	0.09			
WG585707CCV3	CCV	03/14/24 18:48	II240313-2	1		1.007	mg/L	101	90	110			
WG585707CCB3	CCB	03/14/24 18:51				U	mg/L		-0.09	0.09			

GCC

ACZ Project ID: ***L86481***

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

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585938													
WG585938ICV	ICV	03/19/24 21:46	MS240109-5	.05		.050586	mg/L	101	90	110			
WG585938ICB	ICB	03/19/24 21:47				U	mg/L		-0.00011	0.00011			
WG585938LFB	LFB	03/19/24 21:49	MS240213-3	.05005		.049891	mg/L	100	85	115			
WG585938CCV1	CCV	03/19/24 22:07	MS240305-4	.1001		.098799	mg/L	99	90	110			
WG585938CCB1	CCB	03/19/24 22:09				U	mg/L		-0.00015	0.00015			
L86484-01AS	AS	03/19/24 22:26	MS240213-3	.05005	U	.051287	mg/L	102	70	130			
L86484-01ASD	ASD	03/19/24 22:27	MS240213-3	.05005	U	.051964	mg/L	104	70	130	1	20	
WG585938CCV2	CCV	03/19/24 22:29	MS240305-4	.1001		.097771	mg/L	98	90	110			
WG585938CCB2	CCB	03/19/24 22:31				U	mg/L		-0.00015	0.00015			
WG585938CCV3	CCV	03/19/24 22:42	MS240305-4	.1001		.098415	mg/L	98	90	110			
WG585938CCB3	CCB	03/19/24 22:44				U	mg/L		-0.00015	0.00015			

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585707													
WG585707ICV	ICV	03/14/24 17:09	II240305-3	100		99.6	mg/L	100	95	105			
WG585707ICB	ICB	03/14/24 17:14				U	mg/L		-0.3	0.3			
WG585707PQV	PQV	03/14/24 17:17	II240221-2	.5025		.46	mg/L	92	70	130			
WG585707SIC	SIC	03/14/24 17:20	II240222-2	201.5025		201.4	mg/L	100	1	200			
WG585707LFB	LFB	03/14/24 17:27	II240306-3	67.94555		69.37	mg/L	102	85	115			
L86402-01AS	AS	03/14/24 17:33	II240306-3	67.94555	93.7	160.9	mg/L	99	85	115			
L86402-01ASD	ASD	03/14/24 17:36	II240306-3	67.94555	93.7	160.8	mg/L	99	85	115	0	20	
WG585707CCV1	CCV	03/14/24 17:57	II240313-2	50		49.13	mg/L	98	90	110			
WG585707CCB1	CCB	03/14/24 18:00				U	mg/L		-0.3	0.3			
L86484-01AS	AS	03/14/24 18:27	II240306-3	67.94555	279	331.8	mg/L	78	85	115			M3
L86484-01ASD	ASD	03/14/24 18:30	II240306-3	67.94555	279	332.6	mg/L	79	85	115	0	20	M3
WG585707CCV2	CCV	03/14/24 18:33	II240313-2	50		48.82	mg/L	98	90	110			
WG585707CCB2	CCB	03/14/24 18:36				U	mg/L		-0.3	0.3			
WG585707CCV3	CCV	03/14/24 18:48	II240313-2	50		48.93	mg/L	98	90	110			
WG585707CCB3	CCB	03/14/24 18:51				U	mg/L		-0.3	0.3			

GCC

ACZ Project ID: ***L86481***

NOTE: If the Rec% column is null, the high/low 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
WG585914													
WG585914ICV	ICV	03/19/24 9:57	WI231211-1	39.96		40.5	mg/L	101	90	110			
WG585914ICB	ICB	03/19/24 9:57				U	mg/L						
WG585914CCV1	CCV	03/19/24 10:15	WI240111-9	25.025		25.74	mg/L	103	90	110			
WG585914CCB1	CCB	03/19/24 10:15				U	mg/L						
WG585914PQV	PQV	03/19/24 10:15	WI240213-4	2.002		2.09	mg/L	104	50	150			
WG585914LFB	LFB	03/19/24 10:16	WI231211-4	20.02		21.13	mg/L	106	90	110			
L86402-05AS	AS	03/19/24 10:16	WI231211-4	20.02	U	21.75	mg/L	109	90	110			
L86402-06DUP	DUP	03/19/24 10:17			22.7	22.67	mg/L				0	20	
WG585914CCV2	CCV	03/19/24 10:18	WI240111-9	25.025		27	mg/L	108	90	110			
WG585914CCB2	CCB	03/19/24 10:19				U	mg/L						
WG585914CCV3	CCV	03/19/24 10:26	WI240111-9	25.025		27.06	mg/L	108	90	110			
WG585914CCB3	CCB	03/19/24 10:27				U	mg/L						
L86512-03AS	AS	03/19/24 10:28	WI231211-4	20.02	U	21.9	mg/L	109	90	110			
L86512-04DUP	DUP	03/19/24 10:28			U	U	mg/L				0	20	RA
WG585914CCV4	CCV	03/19/24 10:34	WI240111-9	25.025		27.07	mg/L	108	90	110			
WG585914CCB4	CCB	03/19/24 10:35				U	mg/L						
WG585914CCV5	CCV	03/19/24 10:36	WI240111-9	25.025		27.13	mg/L	108	90	110			
WG585914CCB5	CCB	03/19/24 10:36				U	mg/L						
WG585914CCV6	CCV	03/19/24 10:36	WI240111-9	25.025		27.05	mg/L	108	90	110			
WG585914CCB6	CCB	03/19/24 10:37				U	mg/L						
WG585914CCV7	CCV	03/19/24 10:43	WI240111-9	25.025		27.09	mg/L	108	90	110			
WG585914CCB7	CCB	03/19/24 10:43				U	mg/L						
WG585914CCV8	CCV	03/19/24 10:44	WI240111-9	25.025		27.11	mg/L	108	90	110			
WG585914CCB8	CCB	03/19/24 10:44				U	mg/L						

Chromium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585707													
WG585707ICV	ICV	03/14/24 17:09	II240305-3	2		1.942	mg/L	97	95	105			
WG585707ICB	ICB	03/14/24 17:14				U	mg/L		-0.06	0.06			
WG585707PQV	PQV	03/14/24 17:17	II240221-2	.05005		.052	mg/L	104	70	130			
WG585707SIC	SIC	03/14/24 17:20	II240222-2	.1001		.099	mg/L	99	80	120			
WG585707LFB	LFB	03/14/24 17:27	II240306-3	.5005		.503	mg/L	100	85	115			
L86402-01AS	AS	03/14/24 17:33	II240306-3	.5005	U	.504	mg/L	101	85	115			
L86402-01ASD	ASD	03/14/24 17:36	II240306-3	.5005	U	.504	mg/L	101	85	115	0	20	
WG585707CCV1	CCV	03/14/24 17:57	II240313-2	1		.959	mg/L	96	90	110			
WG585707CCB1	CCB	03/14/24 18:00				U	mg/L		-0.06	0.06			
L86484-01AS	AS	03/14/24 18:27	II240306-3	.5005	U	.488	mg/L	98	85	115			
L86484-01ASD	ASD	03/14/24 18:30	II240306-3	.5005	U	.491	mg/L	98	85	115	1	20	
WG585707CCV2	CCV	03/14/24 18:33	II240313-2	1		.952	mg/L	95	90	110			
WG585707CCB2	CCB	03/14/24 18:36				U	mg/L		-0.06	0.06			
WG585707CCV3	CCV	03/14/24 18:48	II240313-2	1		.956	mg/L	96	90	110			
WG585707CCB3	CCB	03/14/24 18:51				U	mg/L		-0.06	0.06			

GCC

ACZ Project ID: ***L86481***

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

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585938													
WG585938ICV	ICV	03/19/24 21:46	MS240109-5	.05		.052987	mg/L	106	90	110			
WG585938ICB	ICB	03/19/24 21:47				U	mg/L		-0.00011	0.00011			
WG585938LFB	LFB	03/19/24 21:49	MS240213-3	.05005		.054211	mg/L	108	85	115			
WG585938CCV1	CCV	03/19/24 22:07	MS240305-4	.1001		.099833	mg/L	100	90	110			
WG585938CCB1	CCB	03/19/24 22:09				U	mg/L		-0.00015	0.00015			
L86484-01AS	AS	03/19/24 22:26	MS240213-3	.05005	.00095	.052578	mg/L	103	70	130			
L86484-01ASD	ASD	03/19/24 22:27	MS240213-3	.05005	.00095	.051769	mg/L	102	70	130	2	20	
WG585938CCV2	CCV	03/19/24 22:29	MS240305-4	.1001		.099803	mg/L	100	90	110			
WG585938CCB2	CCB	03/19/24 22:31				U	mg/L		-0.00015	0.00015			
WG585938CCV3	CCV	03/19/24 22:42	MS240305-4	.1001		.099578	mg/L	99	90	110			
WG585938CCB3	CCB	03/19/24 22:44				U	mg/L		-0.00015	0.00015			

Copper, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG586178													
WG586178ICV	ICV	03/25/24 9:54	II240305-3	2		1.948	mg/L	97	95	105			
WG586178ICB	ICB	03/25/24 10:00				U	mg/L		-0.03	0.03			
WG586178PQV	PQV	03/25/24 10:03	II240323-2	.05005		.042	mg/L	84	70	130			
WG586178SIC	SIC	03/25/24 10:07	II240322-2	.1001		.103	mg/L	103	80	120			
WG586178LFB	LFB	03/25/24 10:13	II240306-3	.5005		.511	mg/L	102	85	115			
WG586178CCV1	CCV	03/25/24 10:46	II240313-2	1		1.005	mg/L	101	90	110			
WG586178CCB1	CCB	03/25/24 10:49				U	mg/L		-0.03	0.03			
WG586178CCV2	CCV	03/25/24 11:24	II240313-2	1		1.037	mg/L	104	90	110			
WG586178CCB2	CCB	03/25/24 11:27				U	mg/L		-0.03	0.03			
L86481-01AS	AS	03/25/24 11:40	II240306-3	.5005	U	.571	mg/L	114	85	115			
L86481-01ASD	ASD	03/25/24 11:43	II240306-3	.5005	U	.554	mg/L	111	85	115	3	20	
WG586178CCV3	CCV	03/25/24 11:46	II240313-2	1		1.05	mg/L	105	90	110			
WG586178CCB3	CCB	03/25/24 11:49				U	mg/L		-0.03	0.03			
WG586179													
WG586179ICV	ICV	03/25/24 16:49	II240305-3	2		1.979	mg/L	99	95	105			
WG586179ICB	ICB	03/25/24 16:55				U	mg/L		-0.03	0.03			
WG586179PQV	PQV	03/25/24 16:58	II240323-2	.05005		.054	mg/L	108	70	130			
WG586179SIC	SIC	03/25/24 17:02	II240322-2	.1001		.11	mg/L	110	80	120			
WG586179LFB	LFB	03/25/24 17:08	II240306-3	.5005		.525	mg/L	105	85	115			
L76852-74AS	AS	03/25/24 17:21	II240306-3	.5005	U	.532	mg/L	106	85	115			
L76852-74ASD	ASD	03/25/24 17:24	II240306-3	.5005	U	.557	mg/L	111	85	115	5	20	
WG586179CCV1	CCV	03/25/24 17:40	II240313-2	1		.983	mg/L	98	90	110			
WG586179CCB1	CCB	03/25/24 17:43				U	mg/L		-0.03	0.03			
WG586179CCV2	CCV	03/25/24 18:20	II240313-2	1		.979	mg/L	98	90	110			
WG586179CCB2	CCB	03/25/24 18:23				U	mg/L		-0.03	0.03			
WG586179CCV3	CCV	03/25/24 18:43	II240313-2	1		.985	mg/L	99	90	110			
WG586179CCB3	CCB	03/25/24 18:46				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L86481***

NOTE: If the Rec% column is null, the high/low 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
WG586161													
WG586161ICV	ICV	03/22/24 14:45	WC240322-2	2.002		2.02	mg/L	101	90	110			
WG586161ICB	ICB	03/22/24 14:50				U	mg/L		-0.3	0.3			
WG586162													
WG586162ICV	ICV	03/22/24 19:54	WC240322-2	2.002		2.09	mg/L	104	90	110			
WG586162ICB	ICB	03/22/24 20:02				U	mg/L		-0.3	0.3			
WG586162PQV	PQV	03/22/24 20:06	WC240314-1	.35		.34	mg/L	97	50	150			
WG586162LFB1	LFB	03/22/24 20:10	WC230825-1	5.005		5.45	mg/L	109	90	110			
WG586162CCV1	CCV	03/22/24 21:10	WC240322-2	2.002		2.001	mg/L	100	90	110			
WG586162CCB1	CCB	03/22/24 21:18				U	mg/L		-0.3	0.3			
L86479-04AS	AS	03/22/24 21:46	WC230825-1	5.005	U	5.5	mg/L	110	90	110			
L86479-04ASD	ASD	03/22/24 21:49	WC230825-1	5.005	U	5.43	mg/L	108	90	110	1	20	
WG586162CCV2	CCV	03/22/24 22:21	WC240322-2	2.002		2.057	mg/L	103	90	110			
WG586162CCB2	CCB	03/22/24 22:28				U	mg/L		-0.3	0.3			
WG586162LFB2	LFB	03/22/24 23:06	WC230825-1	5.005		5.28	mg/L	105	90	110			
WG586162CCV3	CCV	03/22/24 23:34	WC240322-2	2.002		2.048	mg/L	102	90	110			
WG586162CCB3	CCB	03/22/24 23:42				U	mg/L		-0.3	0.3			
WG586162CCV4	CCV	03/23/24 0:47	WC240322-2	2.002		2.125	mg/L	106	90	110			
WG586162CCB4	CCB	03/23/24 0:55				U	mg/L		-0.3	0.3			
WG586162CCV5	CCV	03/23/24 1:52	WC240322-2	2.002		2.067	mg/L	103	90	110			
WG586162CCB5	CCB	03/23/24 2:00				U	mg/L		-0.3	0.3			

Iron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585707													
WG585707ICV	ICV	03/14/24 17:09	II240305-3	2		1.959	mg/L	98	95	105			
WG585707ICB	ICB	03/14/24 17:14				U	mg/L		-0.18	0.18			
WG585707PQV	PQV	03/14/24 17:17	II240221-2	.15045		.157	mg/L	104	70	130			
WG585707SIC	SIC	03/14/24 17:20	II240222-2	200.75045		197.6	mg/L	98	1	200			
WG585707LFB	LFB	03/14/24 17:27	II240306-3	1.003		1.04	mg/L	104	85	115			
L86402-01AS	AS	03/14/24 17:33	II240306-3	1.003	U	1.177	mg/L	117	85	115			MA
L86402-01ASD	ASD	03/14/24 17:36	II240306-3	1.003	U	1.059	mg/L	106	85	115	11	20	
WG585707CCV1	CCV	03/14/24 17:57	II240313-2	1		.983	mg/L	98	90	110			
WG585707CCB1	CCB	03/14/24 18:00				U	mg/L		-0.18	0.18			
L86484-01AS	AS	03/14/24 18:27	II240306-3	1.003	U	1.002	mg/L	100	85	115			
L86484-01ASD	ASD	03/14/24 18:30	II240306-3	1.003	U	1.026	mg/L	102	85	115	2	20	
WG585707CCV2	CCV	03/14/24 18:33	II240313-2	1		.972	mg/L	97	90	110			
WG585707CCB2	CCB	03/14/24 18:36				U	mg/L		-0.18	0.18			
WG585707CCV3	CCV	03/14/24 18:48	II240313-2	1		.977	mg/L	98	90	110			
WG585707CCB3	CCB	03/14/24 18:51				U	mg/L		-0.18	0.18			

GCC

ACZ Project ID: ***L86481***

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

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585938													
WG585938ICV	ICV	03/19/24 21:46	MS240109-5	.05		.0519	mg/L	104	90	110			
WG585938ICB	ICB	03/19/24 21:47				U	mg/L		-0.00022	0.00022			
WG585938LFB	LFB	03/19/24 21:49	MS240213-3	.05005		.05137	mg/L	103	85	115			
WG585938CCV1	CCV	03/19/24 22:07	MS240305-4	.25025		.25101	mg/L	100	90	110			
WG585938CCB1	CCB	03/19/24 22:09				U	mg/L		-0.0003	0.0003			
L86484-01AS	AS	03/19/24 22:26	MS240213-3	.05005	U	.05355	mg/L	107	70	130			
L86484-01ASD	ASD	03/19/24 22:27	MS240213-3	.05005	U	.05334	mg/L	107	70	130	0	20	
WG585938CCV2	CCV	03/19/24 22:29	MS240305-4	.25025		.24955	mg/L	100	90	110			
WG585938CCB2	CCB	03/19/24 22:31				U	mg/L		-0.0003	0.0003			
WG585938CCV3	CCV	03/19/24 22:42	MS240305-4	.25025		.24662	mg/L	99	90	110			
WG585938CCB3	CCB	03/19/24 22:44				U	mg/L		-0.0003	0.0003			

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585707													
WG585707ICV	ICV	03/14/24 17:09	II240305-3	2		1.951	mg/L	98	95	105			
WG585707ICB	ICB	03/14/24 17:14				U	mg/L		-0.024	0.024			
WG585707PQV	PQV	03/14/24 17:17	II240221-2	.04012		.0388	mg/L	97	70	130			
WG585707SIC	SIC	03/14/24 17:20	II240222-2	.10012		.1007	mg/L	101	80	120			
WG585707LFB	LFB	03/14/24 17:27	II240306-3	1		.9742	mg/L	97	85	115			
L86402-01AS	AS	03/14/24 17:33	II240306-3	1	.0182	.9968	mg/L	98	85	115			
L86402-01ASD	ASD	03/14/24 17:36	II240306-3	1	.0182	1.009	mg/L	99	85	115	1	20	
WG585707CCV1	CCV	03/14/24 17:57	II240313-2	1		.9531	mg/L	95	90	110			
WG585707CCB1	CCB	03/14/24 18:00				U	mg/L		-0.024	0.024			
L86484-01AS	AS	03/14/24 18:27	II240306-3	1	.0947	1.06	mg/L	97	85	115			
L86484-01ASD	ASD	03/14/24 18:30	II240306-3	1	.0947	1.09	mg/L	100	85	115	3	20	
WG585707CCV2	CCV	03/14/24 18:33	II240313-2	1		.9524	mg/L	95	90	110			
WG585707CCB2	CCB	03/14/24 18:36				U	mg/L		-0.024	0.024			
WG585707CCV3	CCV	03/14/24 18:48	II240313-2	1		.9496	mg/L	95	90	110			
WG585707CCB3	CCB	03/14/24 18:51				U	mg/L		-0.024	0.024			

GCC

ACZ Project ID: ***L86481***

NOTE: If the Rec% column is null, the high/low 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
WG585707													
WG585707ICV	ICV	03/14/24 17:09	II240305-3	100		99.99	mg/L	100	95	105			
WG585707ICB	ICB	03/14/24 17:14				U	mg/L		-0.6	0.6			
WG585707PQV	PQV	03/14/24 17:17	II240221-2	1.006		.94	mg/L	93	70	130			
WG585707SIC	SIC	03/14/24 17:20	II240222-2	202.206		208.7	mg/L	103	1	200			
WG585707LFB	LFB	03/14/24 17:27	II240306-3	50.00453		51.08	mg/L	102	85	115			
L86402-01AS	AS	03/14/24 17:33	II240306-3	50.00453	25.3	75.64	mg/L	101	85	115			
L86402-01ASD	ASD	03/14/24 17:36	II240306-3	50.00453	25.3	75.35	mg/L	100	85	115	0	20	
WG585707CCV1	CCV	03/14/24 17:57	II240313-2	50		49.36	mg/L	99	90	110			
WG585707CCB1	CCB	03/14/24 18:00				U	mg/L		-0.6	0.6			
L86484-01AS	AS	03/14/24 18:27	II240306-3	50.00453	29.5	77.55	mg/L	96	85	115			
L86484-01ASD	ASD	03/14/24 18:30	II240306-3	50.00453	29.5	78.03	mg/L	97	85	115	1	20	
WG585707CCV2	CCV	03/14/24 18:33	II240313-2	50		48.64	mg/L	97	90	110			
WG585707CCB2	CCB	03/14/24 18:36				U	mg/L		-0.6	0.6			
WG585707CCV3	CCV	03/14/24 18:48	II240313-2	50		48.83	mg/L	98	90	110			
WG585707CCB3	CCB	03/14/24 18:51				U	mg/L		-0.6	0.6			

Manganese, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585707													
WG585707ICV	ICV	03/14/24 17:09	II240305-3	2		1.917	mg/L	96	95	105			
WG585707ICB	ICB	03/14/24 17:14				U	mg/L		-0.03	0.03			
WG585707PQV	PQV	03/14/24 17:17	II240221-2	.0502		.047	mg/L	94	70	130			
WG585707SIC	SIC	03/14/24 17:20	II240222-2	50.1502		47.15	mg/L	94	1	200			
WG585707LFB	LFB	03/14/24 17:27	II240306-3	.501		.501	mg/L	100	85	115			
L86402-01AS	AS	03/14/24 17:33	II240306-3	.501	U	.51	mg/L	102	85	115			
L86402-01ASD	ASD	03/14/24 17:36	II240306-3	.501	U	.511	mg/L	102	85	115	0	20	
WG585707CCV1	CCV	03/14/24 17:57	II240313-2	1		.956	mg/L	96	90	110			
WG585707CCB1	CCB	03/14/24 18:00				U	mg/L		-0.03	0.03			
L86484-01AS	AS	03/14/24 18:27	II240306-3	.501	U	.49	mg/L	98	85	115			
L86484-01ASD	ASD	03/14/24 18:30	II240306-3	.501	U	.492	mg/L	98	85	115	0	20	
WG585707CCV2	CCV	03/14/24 18:33	II240313-2	1		.945	mg/L	95	90	110			
WG585707CCB2	CCB	03/14/24 18:36				U	mg/L		-0.03	0.03			
WG585707CCV3	CCV	03/14/24 18:48	II240313-2	1		.949	mg/L	95	90	110			
WG585707CCB3	CCB	03/14/24 18:51				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L86481***

NOTE: If the Rec% column is null, the high/low 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
WG585965													
WG585965ICV	ICV	03/21/24 13:37	HG240226-3	.005		.0052	mg/L	104	95	105			
WG585965ICB	ICB	03/21/24 13:38				U	mg/L		-0.0002	0.0002			
WG585967													
WG585967CCV1	CCV	03/21/24 14:46	HG240226-3	.005		.00505	mg/L	101	90	110			
WG585967CCB1	CCB	03/21/24 14:47				U	mg/L		-0.0002	0.0002			
WG585967PQV	PQV	03/21/24 14:48	HG240313-2	.001001		.00084	mg/L	84	70	130			
WG585967LRB	LRB	03/21/24 14:49				U	mg/L		-0.00044	0.00044			
WG585967LFB	LFB	03/21/24 14:50	HG240313-3	.002002		.00176	mg/L	88	85	115			
L86358-01LFM	LFM	03/21/24 14:52	HG240313-3	.002002	U	.00183	mg/L	91	85	115			
L86358-01LFMD	LFMD	03/21/24 14:53	HG240313-3	.002002	U	.00175	mg/L	87	85	115	4	20	
WG585967CCV2	CCV	03/21/24 14:57	HG240226-3	.005		.00506	mg/L	101	90	110			
WG585967CCB2	CCB	03/21/24 14:58				U	mg/L		-0.0002	0.0002			
WG585967CCV3	CCV	03/21/24 15:09	HG240226-3	.005		.00499	mg/L	100	90	110			
WG585967CCB3	CCB	03/21/24 15:10				U	mg/L		-0.0002	0.0002			
WG585967CCV4	CCV	03/21/24 15:17	HG240226-3	.005		.00497	mg/L	99	90	110			
WG585967CCB4	CCB	03/21/24 15:18				U	mg/L		-0.0002	0.0002			

Nickel, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585707													
WG585707ICV	ICV	03/14/24 17:09	II240305-3	2.004		1.9595	mg/L	98	95	105			
WG585707ICB	ICB	03/14/24 17:14				U	mg/L		-0.024	0.024			
WG585707PQV	PQV	03/14/24 17:17	II240221-2	.04		.0397	mg/L	99	70	130			
WG585707SIC	SIC	03/14/24 17:20	II240222-2	.10012		.0925	mg/L	92	80	120			
WG585707LFB	LFB	03/14/24 17:27	II240306-3	.501		.511	mg/L	102	85	115			
L86402-01AS	AS	03/14/24 17:33	II240306-3	.501	U	.5128	mg/L	102	85	115			
L86402-01ASD	ASD	03/14/24 17:36	II240306-3	.501	U	.5089	mg/L	102	85	115	1	20	
WG585707CCV1	CCV	03/14/24 17:57	II240313-2	1.002		.9711	mg/L	97	90	110			
WG585707CCB1	CCB	03/14/24 18:00				U	mg/L		-0.024	0.024			
L86484-01AS	AS	03/14/24 18:27	II240306-3	.501	U	.4887	mg/L	98	85	115			
L86484-01ASD	ASD	03/14/24 18:30	II240306-3	.501	U	.491	mg/L	98	85	115	0	20	
WG585707CCV2	CCV	03/14/24 18:33	II240313-2	1.002		.9637	mg/L	96	90	110			
WG585707CCB2	CCB	03/14/24 18:36				U	mg/L		-0.024	0.024			
WG585707CCV3	CCV	03/14/24 18:48	II240313-2	1.002		.9721	mg/L	97	90	110			
WG585707CCB3	CCB	03/14/24 18:51				U	mg/L		-0.024	0.024			

Nitrate/Nitrite as N EPA 353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585640													
WG585640ICV	ICV	03/14/24 0:06	WI240103-7	2.416		2.432	mg/L	101	90	110			
WG585640ICB	ICB	03/14/24 0:07				U	mg/L		-0.02	0.02			
WG585640LFB	LFB	03/14/24 0:11	WI240228-17	2		1.958	mg/L	98	90	110			
L86478-01AS	AS	03/14/24 0:13	WI240228-17	2	.636	2.578	mg/L	97	90	110			
L86478-02DUP	DUP	03/14/24 0:16			.071	.07	mg/L				1	20	RA
WG585640CCV1	CCV	03/14/24 0:21	WI240313-5	2		1.984	mg/L	99	90	110			
WG585640CCB1	CCB	03/14/24 0:24				U	mg/L		-0.02	0.02			
WG585640CCV2	CCV	03/14/24 0:33	WI240313-5	2		1.98	mg/L	99	90	110			
WG585640CCB2	CCB	03/14/24 0:37				U	mg/L		-0.02	0.02			

GCC

ACZ Project ID: ***L86481***

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

Nitrite as N EPA 353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585640													
WG585640ICV	ICV	03/14/24 0:06	WI240103-7	.608		.639	mg/L	105	90	110			
WG585640ICB	ICB	03/14/24 0:07				U	mg/L		-0.01	0.01			
WG585640LFB	LFB	03/14/24 0:11	WI240228-17	1		.994	mg/L	99	90	110			
L86478-01AS	AS	03/14/24 0:13	WI240228-17	1	U	.985	mg/L	99	90	110			
L86478-02DUP	DUP	03/14/24 0:16			U	U	mg/L				0	20	RA
WG585640CCV1	CCV	03/14/24 0:21	WI240313-5	1		.997	mg/L	100	90	110			
WG585640CCB1	CCB	03/14/24 0:24				U	mg/L		-0.01	0.01			
WG585640CCV2	CCV	03/14/24 0:33	WI240313-5	1		1.003	mg/L	100	90	110			
WG585640CCB2	CCB	03/14/24 0:37				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
WG585707													
WG585707ICV	ICV	03/14/24 17:09	II240305-3	20		19.84	mg/L	99	95	105			
WG585707ICB	ICB	03/14/24 17:14				U	mg/L		-1.5	1.5			
WG585707PQV	PQV	03/14/24 17:17	II240221-2	1.004		.98	mg/L	98	70	130			
WG585707SIC	SIC	03/14/24 17:20	II240222-2	1.004		.96	mg/L	96	80	120			
WG585707LFB	LFB	03/14/24 17:27	II240306-3	100.0104		100.5	mg/L	100	85	115			
L86402-01AS	AS	03/14/24 17:33	II240306-3	100.0104	3.23	105.7	mg/L	102	85	115			
L86402-01ASD	ASD	03/14/24 17:36	II240306-3	100.0104	3.23	105.3	mg/L	102	85	115	0	20	
WG585707CCV1	CCV	03/14/24 17:57	II240313-2	10		9.68	mg/L	97	90	110			
WG585707CCB1	CCB	03/14/24 18:00				U	mg/L		-1.5	1.5			
L86484-01AS	AS	03/14/24 18:27	II240306-3	100.0104	3.41	103.3	mg/L	100	85	115			
L86484-01ASD	ASD	03/14/24 18:30	II240306-3	100.0104	3.41	105.5	mg/L	102	85	115	2	20	
WG585707CCV2	CCV	03/14/24 18:33	II240313-2	10		9.7	mg/L	97	90	110			
WG585707CCB2	CCB	03/14/24 18:36				U	mg/L		-1.5	1.5			
WG585707CCV3	CCV	03/14/24 18:48	II240313-2	10		9.72	mg/L	97	90	110			
WG585707CCB3	CCB	03/14/24 18:51				U	mg/L		-1.5	1.5			

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585877													
WG585877PBW	PBW	03/18/24 15:45				U	mg/L		-20	20			
WG585877LCSW	LCSW	03/18/24 15:50	PCN626253	1000		978	mg/L	98	80	120			
L86481-04DUP	DUP	03/18/24 16:22			2550	2536	mg/L				1	10	

GCC

ACZ Project ID: ***L86481***

NOTE: If the Rec% column is null, the high/low 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
WG585938													
WG585938ICV	ICV	03/19/24 21:46	MS240109-5	.05		.05086	mg/L	102	90	110			
WG585938ICB	ICB	03/19/24 21:47				U	mg/L		-0.00022	0.00022			
WG585938LFB	LFB	03/19/24 21:49	MS240213-3	.05005		.05138	mg/L	103	85	115			
WG585938CCV1	CCV	03/19/24 22:07	MS240305-4	.1001		.09974	mg/L	100	90	110			
WG585938CCB1	CCB	03/19/24 22:09				U	mg/L		-0.0003	0.0003			
L86484-01AS	AS	03/19/24 22:26	MS240213-3	.05005	.025	.08344	mg/L	117	70	130			
L86484-01ASD	ASD	03/19/24 22:27	MS240213-3	.05005	.025	.08362	mg/L	117	70	130	0	20	
WG585938CCV2	CCV	03/19/24 22:29	MS240305-4	.1001		.09682	mg/L	97	90	110			
WG585938CCB2	CCB	03/19/24 22:31				U	mg/L		-0.0003	0.0003			
WG585938CCV3	CCV	03/19/24 22:42	MS240305-4	.1001		.0958	mg/L	96	90	110			
WG585938CCB3	CCB	03/19/24 22:44				U	mg/L		-0.0003	0.0003			

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585707													
WG585707ICV	ICV	03/14/24 17:09	II240305-3	100		100.63	mg/L	101	95	105			
WG585707ICB	ICB	03/14/24 17:14				U	mg/L		-0.6	0.6			
WG585707PQV	PQV	03/14/24 17:17	II240221-2	1.005		1.02	mg/L	101	70	130			
WG585707SIC	SIC	03/14/24 17:20	II240222-2	1.005		1.07	mg/L	106	80	120			
WG585707LFB	LFB	03/14/24 17:27	II240306-3	99.96689		101	mg/L	101	85	115			
L86402-01AS	AS	03/14/24 17:33	II240306-3	99.96689	34.3	136.5	mg/L	102	85	115			
L86402-01ASD	ASD	03/14/24 17:36	II240306-3	99.96689	34.3	135.6	mg/L	101	85	115	1	20	
WG585707CCV1	CCV	03/14/24 17:57	II240313-2	50		49.01	mg/L	98	90	110			
WG585707CCB1	CCB	03/14/24 18:00				U	mg/L		-0.6	0.6			
L86484-01AS	AS	03/14/24 18:27	II240306-3	99.96689	51.8	149.6	mg/L	98	85	115			
L86484-01ASD	ASD	03/14/24 18:30	II240306-3	99.96689	51.8	151.6	mg/L	100	85	115	1	20	
WG585707CCV2	CCV	03/14/24 18:33	II240313-2	50		48.97	mg/L	98	90	110			
WG585707CCB2	CCB	03/14/24 18:36				U	mg/L		-0.6	0.6			
WG585707CCV3	CCV	03/14/24 18:48	II240313-2	50		48.93	mg/L	98	90	110			
WG585707CCB3	CCB	03/14/24 18:51				U	mg/L		-0.6	0.6			

GCC

ACZ Project ID: ***L86481***

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

Sulfate ASTM D516-07/-11/-16

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585945													
WG585945ICV	ICV	03/19/24 13:40	WI240319-1	20		20.4	mg/L	102	85	115			
WG585945ICB	ICB	03/19/24 13:40				U	mg/L		-2.5	2.5			
WG585945CCV1	CCV	03/19/24 16:32	WI240319-2	25		26.4	mg/L	106	85	115			
WG585945CCB1	CCB	03/19/24 16:32				U	mg/L		-2.5	2.5			
WG585945LFB	LFB	03/19/24 16:32	WI240304-2	10		9.8	mg/L	98	85	115			
WG585945CCV2	CCV	03/19/24 16:36	WI240319-2	25		25.3	mg/L	101	85	115			
WG585945CCB2	CCB	03/19/24 16:36				U	mg/L		-2.5	2.5			
WG585945CCV3	CCV	03/19/24 16:39	WI240319-2	25		25.3	mg/L	101	85	115			
WG585945CCB3	CCB	03/19/24 16:39				U	mg/L		-2.5	2.5			
WG585945CCV4	CCV	03/19/24 16:42	WI240319-2	25		26.2	mg/L	105	85	115			
WG585945CCB4	CCB	03/19/24 16:43				U	mg/L		-2.5	2.5			
WG585945CCV5	CCV	03/19/24 16:44	WI240319-2	25		25.9	mg/L	104	85	115			
WG585945CCB5	CCB	03/19/24 16:44				U	mg/L		-2.5	2.5			
WG585945CCV6	CCV	03/19/24 16:49	WI240319-2	25		26	mg/L	104	85	115			
WG585945CCB6	CCB	03/19/24 16:49				U	mg/L		-2.5	2.5			
WG585945CCV7	CCV	03/19/24 16:50	WI240319-2	25		25.9	mg/L	104	85	115			
WG585945CCB7	CCB	03/19/24 16:50				U	mg/L		-2.5	2.5			
WG585945CCV8	CCV	03/19/24 16:54	WI240319-2	25		26.2	mg/L	105	85	115			
WG585945CCB8	CCB	03/19/24 16:54				U	mg/L		-2.5	2.5			
WG585945CCV13	CCV	03/19/24 17:02	WI240319-2	25		25.9	mg/L	104	85	115			
WG585945CCB13	CCB	03/19/24 17:02				U	mg/L		-2.5	2.5			
WG585945CCV14	CCV	03/19/24 17:05	WI240319-2	25		26	mg/L	104	85	115			
WG585945CCB14	CCB	03/19/24 17:05				U	mg/L		-2.5	2.5			
WG585945CCV15	CCV	03/19/24 17:07	WI240319-2	25		25.6	mg/L	102	85	115			
WG585945CCB15	CCB	03/19/24 17:07				U	mg/L		-2.5	2.5			
L86487-01AS	AS	03/19/24 17:08	SO4TURB	10.01	3080	3007	mg/L	-729	85	115			M3
L86487-01ASD	ASD	03/19/24 17:09	SO4TURB	10.01	3080	3111	mg/L	310	85	115	3	20	M3
WG585945CCV16	CCV	03/19/24 17:09	WI240319-2	25		25.3	mg/L	101	85	115			
WG585945CCB16	CCB	03/19/24 17:09				U	mg/L		-2.5	2.5			

Vanadium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG585707													
WG585707ICV	ICV	03/14/24 17:09	II240305-3	2		2.007	mg/L	100	95	105			
WG585707ICB	ICB	03/14/24 17:14				U	mg/L		-0.015	0.015			
WG585707PQV	PQV	03/14/24 17:17	II240221-2	.025025		.024	mg/L	96	70	130			
WG585707SIC	SIC	03/14/24 17:20	II240222-2	.1001		.089	mg/L	89	80	120			
WG585707LFB	LFB	03/14/24 17:27	II240306-3	.5005		.5082	mg/L	102	85	115			
L86402-01AS	AS	03/14/24 17:33	II240306-3	.5005	U	.5114	mg/L	102	85	115			
L86402-01ASD	ASD	03/14/24 17:36	II240306-3	.5005	U	.515	mg/L	103	85	115	1	20	
WG585707CCV1	CCV	03/14/24 17:57	II240313-2	1		.987	mg/L	99	90	110			
WG585707CCB1	CCB	03/14/24 18:00				U	mg/L		-0.03	0.03			
L86484-01AS	AS	03/14/24 18:27	II240306-3	.5005	U	.4964	mg/L	99	85	115			
L86484-01ASD	ASD	03/14/24 18:30	II240306-3	.5005	U	.501	mg/L	100	85	115	1	20	
WG585707CCV2	CCV	03/14/24 18:33	II240313-2	1		.978	mg/L	98	90	110			
WG585707CCB2	CCB	03/14/24 18:36				U	mg/L		-0.03	0.03			
WG585707CCV3	CCV	03/14/24 18:48	II240313-2	1		.984	mg/L	98	90	110			
WG585707CCB3	CCB	03/14/24 18:51				U	mg/L		-0.03	0.03			

GCC

ACZ Project ID: ***L86481***

NOTE: If the Rec% column is null, the high/low 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
WG585707													
WG585707ICV	ICV	03/14/24 17:09	II240305-3	2		1.942	mg/L	97	95	105			
WG585707ICB	ICB	03/14/24 17:14				U	mg/L		-0.06	0.06			
WG585707PQV	PQV	03/14/24 17:17	II240221-2	.05005		.051	mg/L	102	70	130			
WG585707SIC	SIC	03/14/24 17:20	II240222-2	.1001		.098	mg/L	98	80	120			
WG585707LFB	LFB	03/14/24 17:27	II240306-3	.50045		.519	mg/L	104	85	115			
L86402-01AS	AS	03/14/24 17:33	II240306-3	.50045	U	.529	mg/L	106	85	115			
L86402-01ASD	ASD	03/14/24 17:36	II240306-3	.50045	U	.521	mg/L	104	85	115	2	20	
WG585707CCV1	CCV	03/14/24 17:57	II240313-2	1		.961	mg/L	96	90	110			
WG585707CCB1	CCB	03/14/24 18:00				U	mg/L		-0.06	0.06			
L86484-01AS	AS	03/14/24 18:27	II240306-3	.50045	.034	.529	mg/L	99	85	115			
L86484-01ASD	ASD	03/14/24 18:30	II240306-3	.50045	.034	.537	mg/L	101	85	115	2	20	
WG585707CCV2	CCV	03/14/24 18:33	II240313-2	1		.948	mg/L	95	90	110			
WG585707CCB2	CCB	03/14/24 18:36				U	mg/L		-0.06	0.06			
WG585707CCV3	CCV	03/14/24 18:48	II240313-2	1		.95	mg/L	95	90	110			
WG585707CCB3	CCB	03/14/24 18:51				U	mg/L		-0.06	0.06			

GCC Rio Grande ACZ Project ID: ***L86481***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L86481-01	WG585707	Iron, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG585640	Nitrate/Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	EPA 353.2 - 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).
	WG585945	Sulfate	ASTM D516-07/-11/-16	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L86481-02	WG585938	Cadmium, dissolved	M200.8 ICP-MS	DC	Sample required dilution. Non-target analyte exceeded calibration range.
	WG585707	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.
	WG585938	Lead, dissolved	M200.8 ICP-MS	DC	Sample required dilution. Non-target analyte exceeded calibration range.
	WG585640	Nitrate/Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	EPA 353.2 - 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).
	WG585938	Selenium, dissolved	M200.8 ICP-MS	D1	Sample required dilution due to matrix.
			M200.8 ICP-MS	EA	Concentration estimated. Analytical result was less than the negative MDL due to matrix interferences.
	WG585945	Sulfate	ASTM D516-07/-11/-16	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L86481-03	WG585938	Arsenic, dissolved	M200.8 ICP-MS	DC	Sample required dilution. Non-target analyte exceeded calibration range.
		Cadmium, dissolved	M200.8 ICP-MS	DC	Sample required dilution. Non-target analyte exceeded calibration range.
	WG585707	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.
	WG585938	Lead, dissolved	M200.8 ICP-MS	DC	Sample required dilution. Non-target analyte exceeded calibration range.
	WG585640	Nitrate/Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	EPA 353.2 - 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).
	WG585938	Selenium, dissolved	M200.8 ICP-MS	DC	Sample required dilution. Non-target analyte exceeded calibration range.
	WG585945	Sulfate	ASTM D516-07/-11/-16	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

GCC Rio Grande ACZ Project ID: ***L86481***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L86481-04	WG585938	Arsenic, dissolved	M200.8 ICP-MS	D1	Sample required dilution due to matrix.
		Cadmium, dissolved	M200.8 ICP-MS	D1	Sample required dilution due to matrix.
	WG585707	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.
	WG585914	Chloride	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).
	WG585938	Cobalt, dissolved	M200.8 ICP-MS	D1	Sample required dilution due to matrix.
		Lead, dissolved	M200.8 ICP-MS	D1	Sample required dilution due to matrix.
	WG585640	Nitrate/Nitrite as N	EPA 353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N	EPA 353.2 - 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).
	WG585938	Selenium, dissolved	M200.8 ICP-MS	D1	Sample required dilution due to matrix.
			M200.8 ICP-MS	EA	Concentration estimated. Analytical result was less than the negative MDL due to matrix interferences.
	WG585945	Sulfate	ASTM D516-07/-11/-16	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

Certification Qualifiers

GCC Rio Grande ACZ Project ID: ***L86481***

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

ACZ Project ID: L86481
Date Received: 03/13/2024 11:02
Received By:
Date Printed: 3/14/2024

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?
7586	3.8	<=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

ACZ Project ID:	L86481
Date Received:	03/13/2024 11:02
Received By:	
Date Printed:	3/14/2024

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

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L86481

CHAIN of CUSTODY

Report to:

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

Copy of Invoice to:

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

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

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

Are samples for SDWA Compliance Monitoring? Yes ☐ No ✓

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

Sampler's Name: Amy Rodrigues **Sampler's Site Information** State CO Zip code 81004 Time Zone MST

***Sampler's Signature:** Amy Rodrigues

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

PROJECT INFORMATION

Quote #: GW-COMPLIANCE

PO#: 258478

Reporting state for compliance testing:

Check box if samples include NRC licensed material? ☐

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

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	GW-COmpliance								
MW-11	3/12/2024 09:21	GW	3	✓								
MW-12	3/12/2024 09:42	GW	3	✓								
MW-9	3/12/2024 11:30	GW	3	✓								
MW-10	3/12/2024 12:02	GW	3	✓								

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

REMARKS

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

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
Amy Rodrigues	3/12/24 13:45		3/13/24 1192

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

L86481 Chain of Custod

Location ID	Sample Date	Depth to Water (ft BTOC)	Field pH (SU)	Field Specific Conductance (µS/cm)	Field Temperature (Degrees C)	Total Dissolved Solids (mg/L)	Total Alkalinity (mg/L)	Bicarbonate as CaCO3 (mg/L)	Carbonate as CaCO3 (mg/L)	Hydroxide as CaCO3 (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Fluoride (mg/L)	Nitrate (mg/L)	Nitrate/Nitrite (mg/L)	Nitrite (mg/L)	Aluminum (mg/L)	Arsenic (mg/L)	Beryllium (mg/L)
MW-5	12/9/2019	DRY																	
MW-5	9/17/2020	DRY																	
MW-5	11/23/2020	DRY																	
MW-5	5/12/2021	DRY																	
MW-5	11/18/2021	DRY																	
MW-5	3/24/2022	DRY																	
MW-5	5/10/2022	DRY																	
MW-5	11/8/2022	DRY																	
MW-5	5/30/2023	DRY																	
MW-5	11/14/2023	DRY																	
MW-6	1/3/2018	48.24	6.95	4720	14	----	----	----	----	----	----	----	----	----	<0.020	----	0.64	<0.03	<0.005
MW-6	4/27/2018	41.31	7.20	6200	16.3	5,030	----	----	----	----	----	----	<1.0	<0.10	<0.020	<0.040	<0.2	<0.03	<0.005
MW-6	9/26/2018	DRY																	
MW-6	12/12/2018	42.91	7.39	6500	14.9	----	----	----	----	----	----	----	<1.0	----	<0.020	<0.040	<0.2	<0.03	<0.005
MW-6	3/7/2019	56.03	Inadequate volume for representative field parameters or lab sample submittal																
MW-6	6/12/2019	43.92	7.14	5975	17.8	5,620	----	----	----	----	----	----	0.60	12	12.1	0.030	0.5	<0.001	<0.05
MW-6	9/19/2019	28.15	----	----	----	5,860	----	----	----	----	----	----	0.60	11	11.1	0.080	<0.3	0.0004	<0.05
MW-6	12/9/2019	30.44	----	----	----	5,460	----	----	----	----	----	----	0.80	8.1	8.12	0.020	<0.3	<0.001	<0.05
MW-6	3/9/2020	32.30	7.22	5591	16.5	5,780	----	----	----	----	----	----	0.70	2.02	2.58	0.560	<0.3	0.0005	<0.05
MW-6	9/16/2020	29.78	7.20	5405	16.7	5,480	----	----	----	----	----	----	0.50	0.05	0.05	<0.01	0.19	0.0009	<0.01
MW-6	11/23/2020	30.92	7.25	5425	14.3	5,300	----	----	----	----	----	----	0.57	1.62	1.63	0.012	<0.25	<0.001	<0.05
MW-6	2/22/2021	36.61	7.55	5684	15.8	5,780	----	----	----	----	----	----	0.62	0.07	0.067	<0.01	<0.25	<0.001	<0.05
MW-6	5/19/2021	46.32	7.43	5945	14.9	----	524	524	<2	<2	109	3200	0.57	0.03	0.032	<0.01	<0.05	0.00237	<0.01
MW-6	8/31/2021	26.18	7.32	6170	16.1	----	459	459	<2	<2	74	3390	0.58	4.2	4.24	0.038	<0.05	<0.001	<0.01
MW-6	11/18/2021	29.70	7.18	7477	14.2	----	450	450	<2	<2	76	3750	0.62	0.846	0.85	<0.01	<0.05	<0.001	<0.01
MW-6	3/22/2022	36.00	7.23	5322	14.0	5,200	321	321	<2	<2	49	3610	0.62	8.01	8.02	0.011	<0.25	<0.001	<0.05
MW-6	5/17/2022	36.94	7.03	5726	16.7	5,190	461	461	<2	<2	89	3140	0.57	3.24	3.25	0.015	<0.25	<0.0002	<0.05
MW-6	8/15/2022	36.78	7.02	5404	20.5	5,410	421	421	<2	<2	69	3700	0.50	1.02	1.09	0.070	<0.25	0.00040	<0.05
MW-6	11/7/2022	33.62	6.92	5311	15.7	5,200	445	445	<2	<2	77	3180	0.79	<0.02	<0.02	<0.01	<0.25	<0.001	<0.05
MW-6	3/6/2023	37.00	6.92	4358	15.9	5,390	491	491	<2	<2	76	3200	0.52	<0.02	<0.02	<0.01	<0.05	0.00109	<0.01
MW-6	5/30/2023	24.61	6.96	5847	18.2	5,380	493	493	<2	<2	75	3150	0.52	0.32	0.361	0.040	<0.05	<0.001	<0.01
MW-6	8/8/2023	26.90	7.00	5361	21.1	5,440	456	456	<2	<2	74	3260	0.43	0.29	0.287	<0.01	0.057	0.00076	0.012
MW-6	11/14/2023	32.12	6.99	5278	15.9	5,200	448	448	<2	<2	68	3120	0.55	0.16	0.156	<0.01	<0.25	<0.001	<0.05
MW-6	3/11/2024	34.16	6.93	5147	14.5	5,310	480	480	<2	<2	83	3230	0.53	<0.02	<0.02	<0.01	<0.25	0.00120	<0.01
MW-7	1/3/2018	42.91	6.86	4765	15	5,510	----	----	----	----	----	----	0.42	----	<0.020	<1.00	1.35	0.00949	<0.005
MW-7	4/27/2018	39.09	6.85	5820	15	5,270	----	----	----	----	----	----	<0.50	<0.050	<0.100	<0.020	<0.2	<0.03	<0.005
MW-7	9/26/2018	DRY																	
MW-7	12/12/2018	37.84	6.90	6093	14	----	----	----	----	----	----	----	<1.0	----	<0.020	<0.040	<0.2	<0.03	<0.005
MW-7	3/7/2019	40.79	6.95	6020	13.7	5,640	----	----	----	----	----	----	----	----	0.014		<0.2	<0.03	<0.005
MW-7	6/12/2019	31.25	6.95	5997	18	5,700	----	----	----	----	----	----	0.50	1.73	1.74	0.010	<0.3	<0.001	<0.05
MW-7	9/18/2019	27.89	----	----	----	6,740	----	----	----	----	----	----	0.50	10	10.1	0.020	0.40	0.0003	<0.05
MW-7	12/9/2019	29.51	----	----	----	5,320	----	----	----	----	----	----	0.50	14	14.3	0.080	<0.3	<0.001	<0.05
MW-7	3/9/2020	32.46	7.01	6459	15.8	6,540	----	----	----	----	----	----	0.40	15	14.9	0.060	<0.3	<0.0002	<0.05
MW-7	9/16/2020	29.65	7.17	4772	15.2	4,950	----	----	----	----	----	----	0.40	11	11.0	0.030	0.16	<0.0002	<0.01
MW-7	11/23/2020	30.40	7.16	4999	14.3	5,070	----	----	----	----	----	----	0.47	11	11.2	0.039	<0.25	<0.001	<0.05
MW-7	2/22/2021	32.87	7.55	6077	14.4	6,500	----	----	----	----	----	----	0.49	9.9	9.98	0.068	<0.25	<0.001	<0.05
MW-7	5/19/2021	30.83	7.51	5464	15.2	----	309	309	<2	<2	51	3430	0.40	7.51	7.54	0.027	<0.05	<0.0002	<0.01
MW-7	8/31/2021	25.79	7.15	6061	15.4	----	467	467	<2	<2	96	3360	0.52	0.91	0.91	<0.01	<0.05	<0.001	<0.01
MW-7	11/18/2021	29.45	6.94	6589	13.9	----	299	299	<2	<2	53	3700	0.53	3.84	3.84	<0.01	<0.05	<0.001	<0.01
MW-7	3/22/2022	36.70	6.95	5654	15.1	5,760	491	491	<2	<2	94	3650	0.57	1.22	1.24	0.02	<0.25	<0.001	<0.05
MW-7	5/10/2022	37.61	6.86	5593	15.2	5,660	477	477	<2	<2	104	3240	0.58	0.19	0.19	<0.01	<0.25	<0.001	<0.05
MW-7	8/15/2022	29.34	6.99	5905	20.0	6,170	484	484	<2	<2	97	3810	0.50	0.15	0.15	<0.01	<0.25	0.0004	<0.05
MW-7	11/7/2022	33.53	7.08	4727	15.2	4,690	250	250	<2	<2	41	3000	0.37	4.65	4.65	<0.01	<0.25	<0.001	<0.05
MW-7	3/6/2023	37.43	6.95	4958	15.6	6,210	545	545	<2	<2	91	3630	0.55	0.26	0.276	0.013	<0.25	<0.002	<0.05
MW-7	5/30/2023	24.50	7.03	5099	18.1	5,560	358	358	<2	<2	47	3470	0.41	8.66	8.66	<0.01	<0.05	<0.001	<0.01
MW-7	8/8/2023	26.41	6.99	5757	17.6	5,690	484	484	<2	<2	90	3500	0.41	0.11	0.113	<0.01	0.057	<0.0004	0.012
MW-7	11/14/2023	31.76	6.97	5750	16.2	5,630	552	552	<2	<2	117	3140	0.58	<0.02	<0.02	<0.01	<0.05	<0.001	<0.01
MW-7	3/11/2024	34.06	7.09	4728	14.5	4,740	260	260	<2	<2	45	3140	0.51	5.41	5.41	<0.01	<0.05	<0.001	<0.01
MW-8	3/9/2020	43.78	Inadequate volume for representative field parameters or lab sample submittal at time of water level measurement and then COVID-19 restrictions enacted before well could be revisited following purge																
MW-8	9/16/2020	29.74	Inadequate volume for representative field parameters or lab sample submittal after purge - sample collected 9/28/20 because well took 2 weeks to recover																
MW-8	9/28/2020	57.43	7.26	9179	14.7	7,900	----	----	----	----	----	----	0.90	<0.02	<0.02	<0.01	<0.25	0.0138	<0.05
MW-8	11/9/2020	37.26	Inadequate volume for representative field parameters or lab sample submittal after purge - sample collected 11/23/20 because well took 2 weeks to recover																
MW-8	11/23/2020	39.73	7.11	5327	13.9	4,060	----	----	----	----	----	----	1.14	<0.050	<0.02	<0.01	<0.25	0.00219	<0.05
MW-8	2/22/2021	34.21	7.65	5476	14.8	4,180	----	----	----	----	----	----	1.10	<0.02	<0.02	<0.01	<0.05	0.00350	<0.01
MW-8	5/19/2021	34.56	7.60	5571	16.1	----	1200	1200	<2	<2	316	1520	0.89	0.99	1.01	0.016	<0.05	0.00155	<0.01
MW-8	8/31/2021	25.75	7.32	6077	17.8	----	1080	1080	<2	<2	272	1820	1.00	<0.02	0.022	0.014	<0.05	0.00124	<0.01
MW-8	11/18/2021	24.46	7.14	3852	14.7	----	1140	1140	<2	<2	283	1920	0.90	0.07	0.096	0.028	<0.05	<0.001	<0.01
MW-8	3/28/2022	36.35	7.13	4545	15.1	3,040	1020	1020	<2	<2	204	1090	0.92	0.03	0.041	0.012	<0.1	0.00279	<0.02
MW-8	5/17/2022	37.93	7.12	5556	18.0	3,630	1130	1130	<2	<2	315	1260	1.01	<0.02	<0.02	<0.01	<0.1	0.00427	<0.02
MW-8	8/15/2022	30.25	7.18	5325	18.8	3,790	1090	1090	<2	<2	291	1510	1.09	<0.02	<0.02	<0.01	<0.1	0.00767	<0.02
MW-8	11/7/2022	32.00	7.15	5236	16.1	3,840	1130	1130	<2	<2	297	1450	0.90	<0.02	<0.02	<0.01	<0.1	0.00542	<0.02
MW-8	3/6/2023	33.76	7.19	4375	15.3	3,600	1250	1250	<2	<2	280	1470	1.03	<0.02	<0.02	<0.01	<0.1	0.00511	<0.02
MW-8	5/30/2023	27.25	7.14	5892	17.1	4,000	1400	1400	<2	<2	288	1430	0.89	0.99	0.989	<0.01	<0.05	0.00146	<0.01
MW-8	8/8/2023	23.88	7.22	5184	20.5	3,900	1250	1250	<2	<2	275	1380	0.95	<0.02	<0.02	<0.01	<0.05	0.00099	0.012
MW-8	11/14/2023	29.93	7.20	5237	16.4	3,550	1260	1260	<2	<2	275	1320	1.06	<0.02	<0.02	<0.01	<0.05	0.00095	<0.01
MW-8	3/11/2024	33.1	7.16	4969	14.4	3,660	1230	1230	<2	<2	315	1300	1.03	<0.02	<0.02	<0.01	<0.05	<0.001	<0.01
MW-9	3/28/2022	26.16	6.55	4834	15.0	4,420	223	223	<2	<2	44	3200	0.49	0.51	1.38	0.867	0.14	<0.001	<0.01
MW-9	5/17/2022	26.32	6.59	5486	16.9	4,390	232	232	<2	<2	44	2980	0.44	0.89	1.33	0.44	<0.25	<0.0002	<0.05
MW-9	8/15/2022	26.42	6.86	4998	18.9	4,640	323	323	<2	<2	45	3160	0.43	0.04	0.038	<0.01	<0.25	0.00058	<0.05
MW-9	11/7/2022	26.37	6.81	4959	16.2	4,590	347	347	<2	<2	46	2970	0.27	<0.02	<0.02	<0.01	<0.25	0.0007	<0.05
MW-9	3/7/2023	26.52	6.90	4387	13.6	4,600	389	389	<2	<2	44	2850	0.44	<0.02	<0.02	<0.01	<0.05	0.00061	<0.01
MW-9	5/31/2023	26.68	6.85	5789	18.6	4,740	407	407	<2	<2	49	3050	0.35	<0.02	<0.02	<0.01	0.052	<0.001	<0.01
MW-9	8/9/2023	26.83	6.97	5170	17.4	4,640	393	393	<2	<2	49	2870	0.39	0.05	0.053	<0.01	0.151	<0.001	<0.01
MW-9	11/15/2023	26.72	6.91	5216	17.4	4,530	414	414	<2	<2	47	2770	0.42	0.10	0.095	<0.01	<0.05	<0.001	<0.01
MW-9	3/11/2024	25.77	6.86	5087	15.6	4880	421	421	<2	<2	45	2590	0.42	<0.02	<0.02	<0.01	<0.05	0.00092	<0.01
MW-10	3/28/2022	26.35	7.43	5724	15.1	4,220	587	587	<2	<2	289	2380	0.99	<0.02	<0.02	<0.01	<0.25	0.00289	<0.05
MW-10	5/17/2022	26.73	7.50	6205	18.0	4,170	627	627	<2	<2	358	1990	1.08	<0.02	<0.02	<0.01	<0.25	0.00321	<0.05
MW-10	8/15/2022	26.04	7.56	5813	18.8	4,210	644	644	<2	<2	350	2240	1.16	<0.02	<0.02	<0.01	<0.25	0.00404	<0.05
MW-10	11/7/2022	25.45	7.57	5698	15.3	4,030	656	656	<2	<2	376	1900	1.02	<0.02	<0.02	<0.01	<0.25	0.00264	<0.05
MW-10	3/7/2023	24.88	7.65	4662	13.8	3,890	696	696	<2	<2	375	1730	1.15	<0.02	<0.02	<0.01	<0.05	0.00182	<0.01
MW-10	5/31/2023	25.50	7.68	6002	17.7	3,740	729	713	15	<2	399	1640	1.18	<0.02	<0.02	<0.01	<0.05	0.00138	<0.01
MW-10	8/9/2023	26.17	7.86	5030	16.8	3,600	696	696	<2	<2	410	1500	1.27	<0.02	<0.02	<0.01	<0.05	0.00110	<0.01
MW-10	11/15/2023	25.68	7.82	4403	16.1	3,360	727	701	27	<2	351	1240	1.26	<0.02	<0.02	<0.01	<0.05	0.00110	<0.01
MW-10	3/11/2024	25.21	7.76	3502	15.1	2,550	784	784	<2	<2	382	806	1.4	<0.02	<0.02	<0.01	<0.05	0.00156	<0.01
MW-11	3/23/2022	58.41	7.39	2265	15.5	1,500	782	782	<2	<2	133	353	0.82	<0.02	<0.02	0.017	<0.05	<0.002	<0.01
MW-11	5/17/2022	59.41	7.39	2681	17.2	1,580	842	821	20	<2	136	330	0.91	<0.02	0.03	0.033	<0.05	0.00078	<0.01
MW-11	8/15/2022	54.00	7.37	2619	18.8	1,640	839	839	<2	<2	135	401	0.93	<0.2	<0.2	<0.01	<0.05	0.00051	<0.01
MW-11	11/7/2022	57.23	7.35	2573	15.2	1,590	839	839	<2	<2	125	359	0.76	<0.02	<0.02	<0.01	<0.05	0.00029	<0.01
MW-11	3/6/2023	59.37	7.39	2039	15.8	1,570	885	885	<2	<2	125	263	0.89	<0.02	<0.02	<0.01	<0.05	<0.0002	<0.01
MW-11	5/31/2023	52.18	7.39	2861	16.6	1,700	898	898	<2	<2	138	424	0.87	<0.02	<0.02	<0.01	<0.05	0.00025	<0.01
MW-11	8/8/2023	45.09	7.34	2633	17.5	1,740	794	794	<2	<2	117	525	0.79	<0.2	<0.2	<0.01	<0.05	0.00180	0.012
MW-11	11/15/2023	34.24	7.30	2474	16.8	1,630	787	787	<2	<2	100	471	0.85	<0.02	<0.02	<0.01	0.526	0.00041	<0.01
MW-11	3/11/2024	54.60	7.25	2092	15.4	1,420	752	752	<2	<2	103	343	0.86	<0.02	<0.02	<0.01	<0.05	0.00021	<0.01
MW-12	3/28/2022	63.48	8.19	2896	15.4	1,360	409	380	29	<2	374	129	2.52	<0.02	<0.02	0.012	<0.05	0.00464	<0.01
MW-12	5/17/2022	81.76	8.04	3720	17.3	1,810	472	448	24	<2	793	88.3	2.21	0.32	1.28	0.957	<0.05	0.00233	<0.01
MW-12	8/15/2022	79.28	7.69	4219	18.0	2,370	523	523	<2	<2	954	204	1.85	8.89	9.4	0.511	<0.1	0.00157	<0.02
MW-12	11/7/2022	72.80	7.67	4399	15.2	2,450	553	553	<2	<2	1000	195	1.65	4.18	5.7	1.55	<0.1	0.00081	<0.02
MW-12	3/6/2023	65.47	7.74	3504	17.7	2,520	634	631	3.1	<2	1020	186	1.77	0.09	0.587	0.495	<0.1	0.00302	<0.02
MW-12	5/31/2023	65.23	7.79	4903	17.1	2,530	638	629	8.5	<2	1070	159	1.81	<0.02	<0.02	<0.01	<0.05	0.00203	<0.01
MW-12	8/8/2023	63.24	7.82	4492	19.0	2,580	615	615	<2	<2	1000	220	1.77	<0.02	<0.02	<0.01	<0.05	0.00241	0.012
MW-12	11/15/2023	60.60	7.76	4570	17.1	2,730	622	602	20	<2	1030	315	1.79	<0.02	<0.02	<0.01	<0.05	0.00246	<0.01
MW-12	3/11/2024	58.65	7.7	4510	14.7	2,710	632	632	<2	<2	984	326	1.84	<0.02	<0.02	<0.02	<0.05	0.00271	<0.01
MW-13	3/23/2022	117.48	8.23	3872	16.9	2,430	1060	1030	29	<2	573	234	5.41	<0.02	<0.02	<0.01	<0.1	0.00178	<0.02
MW-13	5/10/2022	118.78	8.38	3190	17.5	2,150	995	933	62	<2	566	88.5	6.06	0.11	0.11	<0.01	<0.1	0.00075	<0.02
MW-13	8/15/2022	119.21	7.89	4115	19.1	2,610	1180	1180	<2	<2	606	172	6.46	<0.02	<0.02	0.029	<0.1	0.00285	<0.02
MW-13	11/8/2022	119.31	7.96	4251	16.0	2,540	1280	1230	53	<2	643	122	6.51	0.04	0.064	0.024	<0.1	0.00102	<0.02
MW-13	3/6/2023	83.74	7.91	3668	15.7	2,730	1450	1340	111	<2	674	104	6.49	<0.02	<0.02	<0.01	<0.1	<0.001	<0.02
MW-13	5/30/2023	119.19	8.00	4842	17.7	2,640	1450	1380	75	<2	654	64	5.79	<0.02	<0.02	<0.01	<0.05	0.00044	<0.01
MW-13	8/8/2023	84.08	8.16	4054	18.0	2,590	1350	1260	89	<2	673	69	6.57	0.03	0.03	<0.01	<0.05	<0.0004	0.012
MW-13	11/14/2023	111.52	8.04	4145	18.0	2,640	1360	1290	73	<2	677	132	6.82	<0.02	<0.02	<0.01	<0.05	0.0004	<0.01
MW-13	3/11/2024	117.18	7.95	3783	15.3	2,700	1230	1230	<2	<2	656	138	6.34	<0.02	<0.02	0.012	<0.05	<0.0001	<0.02
MW-14	3/28/2022	92.54	8.07	3669	17.5	2,300	866	800	66	<2	473	353	2.35	<0.02	<0.02	<0.01	<0.1	0.00533	<0.02
MW-14	5/17/2022	108.77	7.68	6741	17.2	3,610	1320	1300	27	<2	1410	143	3.10	0.02	0.02	<0.01	<0.1	0.00382	<0.02
MW-14	8/15/2022	95.53	7.66	5626	18.2	4,240	1300	1300	<2	<2	1480	321	3.10	<0.02	<0.02	<0.01	<0.25	0.0059	<0.05
MW-14	11/8/2022	92.34	7.59	6395	15.5	4,410	1320	1320	<2	<2	1660	393	2.87	<0.02	<0.02	<0.01	<0.25	0.00448	<0.05
MW-14	3/6/2023	90.12	7.60	5744	14.7	4,690	1470	1410	62	<2	1590	460	3.10	<0.02	<0.02	<0.01	<0.25	0.00531	<0.05
MW-14	5/30/2023	86.50	7.61	8043	17.8	4,710	1490	1490	<2	<2	1730	414	2.61	<0.02	<0.02	<0.01	0.053	0.00408	<0.01
MW-14	8/8/2023	82.40	7.71	6875	18.9	4,750	1420	1420	<2	<2	1710	436	2.90	0.026	0.026	<0.01	<0.05	0.00436	0.012
MW-14	11/14/2023	99.18	7.64	6832	17.4	4,590	1500	1470	35	<2	1630	232	4.01	<0.02	<0.02	<0.01	<0.05	0.00236	<0.01
MW-14	3/11/2024	97.32	7.57	6462	14.7	4,920	1420	1420	<2	<2	1700	429	2.98	<0.02	<0.02	<0.01	<0.05	0.0036	<0.01
Field QA/QC Samples																			
MW-6 (duplicate)	9/19/2019	----	----	----	----	6,020	----	----	----	----	----	----	0.70	11	10.8	0.08	<0.3	0.0004	<0.05
MW-7 (duplicate)	6/12/2019	----	----	----	----	5,600	----	----	----	----	----	----	0.90	1.28	1.28	<0.01	<0.3	<0.001	<0.05
MW-7 (duplicate)	11/9/2019	----	----	----	----	5,510	----	----	----	----	----	----	0.50	15	14.7	0.08	<0.3	<0.001	<0.05
MW-7 (duplicate)	3/9/2020	----	----	----	----	6,530	----	----	----	----	----	----	0.40	15	14.5	0.05	<0.3	<0.0002	<0.05
MW-7 (duplicate)	9/16/2020	----	----	----	----	5,040	----	----	----	----	----	----	0.40	11	10.9	0.03	0.11	<0.0002	<0.01
MW-7 (duplicate)	2/22/2021	----	----	----	----	6,460	----	----	----	----	----	----	0.49	10	10.3	0.068	<0.05	<0.001	<0.01
MW-7 (duplicate)	5/19/2021	----	----	----	----	----	291	291	<2	<2	51	3280	0.43	7.45	7.48	0.028	<0.05	<0.0002	<0.01
MW-7 (duplicate)	8/31/2021	----	----	----	----	----	464	464	<2	<2	109	3480	0.53	0.91	0.91	<0.01	<0.05	<0.001	<0.01
MW-7 (duplicate)	3/22/2022	----	----	----	----	5,730	492	492	<2	<2	94	3720	0.56	1.18	1.20	0.018	<0.25	<0.001	<0.05
MW-7 (duplicate)	5/10/2022	----	----	----	----	5,660	490	490	<2	<2	104	3290	0.58	0.20	0.20	<0.01	<0.25	<0.001	<0.05
MW-7 (duplicate)	3/6/2023	----	----	----	----	5,870	504	504	<2	<2	89	3480	0.51	0.20	0.20	<0.01	<0.05	<0.0004	<0.01
MW-7 (duplicate)	3/11/2024	----	----	----	----	4720	247	247	<2	<2	43.1	2870	0.5	6.45	6.45	<0.01	<0.05	<0.0001	<0.01
MW-8 (duplicate)	11/23/2020	----	----	----	----	4,040	----	----	----	----	----	----	1.15	<0.050	<0.02	<0.01	<0.25	0.00234	<0.05
MW-8 (duplicate)	11/18/2021	----	----	----	----	----	1130	1130	<2	<2	288	1920	0.89	0.078	0.107	0.029	<0.05	0.00084	<0.01
MW-8 (duplicate)	8/15/2022	----	----	----	----	3,730	1100	1100	<2	<2	290	1560	1.07	<0.02	<0.02	<0.01	<0.1	0.00788	<0.02
MW-8 (duplicate)	11/7/2022	----	----	----	----	3,770	1110	1110	<2	<2	289	1460	0.93	0.26	0.26	<0.01	<0.1	0.00533	<0.02
MW-8 (duplicate)	8/8/2023	----	----	----	----	3,800	1250	1250	<2	<2	295	1350	0.95	<0.02	<0.02	<0.01	<0.05	0.00096	0.012
MW-11 (duplicate)	5/31/2023	----	----	----	----	1,700	902	898	3.3	<2	142	423	0.86	<0.02	<0.02	<0.01	<0.05	0.00022	<0.01
MW-12 (duplicate)	11/15/2023	----	----	----	----	3,660	639	613	26	<2	923	314	1.77	0.04	0.04	<0.01	<0.05	0.00293	<0.01
CDPHE Regulation 41 Table 3 Groundwater Quality Reference Standards (Agricultural Use)[1]			*6.5 -8.5*	----	----	*10,000*	----	----	----	----	----	----	*2*	----	*100*	*10*	*5.0*	*0.10*	*0.10*

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	Boron (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Calcium (mg/L)	Iron (mg/L)	Lead (mg/L)	Lithium (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Mercury (mg/L)	Nickel (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Sodium (mg/L)	Vanadium (mg/L)	Zinc (mg/L)	Barium (mg/L)
MW-5	12/9/2019																			
MW-5	9/17/2020																			
MW-5	11/23/2020																			
MW-5	5/12/2021																			
MW-5	11/18/2021																			
MW-5	3/24/2022																			
MW-5	5/10/2022																			
MW-5	11/8/2022																			
MW-5	5/30/2023																			
MW-5	11/14/2023																			
MW-6	1/3/2018	0.63	<0.005	<0.005	0.0042	0.006	----	0.47	<0.01	0.66	----	0.59	<0.0002	0.029	----	<0.03	----	<0.005	0.025	----
MW-6	4/27/2018	0.65	<0.005	<0.005	0.019	<0.01	----	0.06	<0.01	0.69	----	1.14	<0.0002	0.069	----	<0.03	----	<0.005	<0.01	0.032
MW-6	9/26/2018																			
MW-6	12/12/2018	0.62	<0.005	<0.005	0.0060	<0.01	----	<0.1	0.004	0.48	----	0.66	<0.0002	0.017	----	0.0062	----	0.0012	0.009	----
MW-6	3/7/2019	DRY																	DRY	
MW-6	6/12/2019	0.50	0.0003	<0.05	<0.05	<0.05	----	0.80	0.002	0.52	----	0.97	<0.0002	0.150	----	0.0966	----	<0.03	<0.05	----
MW-6	9/19/2019	0.30	0.00026	<0.05	0.05	<0.05	----	0.30	0.0004	0.49	----	0.58	<0.0002	0.130	----	0.1400	----	<0.03	<0.05	----
MW-6	12/9/2019	0.30	<0.0003	<0.05	<0.05	<0.05	----	<0.2	<0.0005	0.49	----	0.49	<0.0002	0.110	----	0.0880	----	<0.03	<0.05	----
MW-6	3/9/2020	0.30	0.00016	<0.05	<0.05	0.06	----	<0.2	<0.0001	0.48	----	0.40	<0.0002	0.110	----	0.0401	----	<0.03	<0.05	----
MW-6	9/16/2020	0.31	0.00011	0.01	0.03	<0.01	----	0.19	0.0006	0.49	----	0.39	<0.0002	0.088	----	0.0064	----	<0.01	0.020	----
MW-6	11/23/2020	0.33	<0.00025	<0.05	<0.05	<0.05	----	<0.3	<0.0005	0.45	----	0.33	<0.0002	0.114	----	0.0155	----	<0.05	0.110	----
MW-6	2/22/2021	0.33	<0.00025	<0.05	<0.05	<0.05	----	<0.3	<0.0005	0.476	----	0.32	<0.0002	0.0810	----	0.00487	----	<0.05	<0.1	----
MW-6	5/19/2021	0.38	0.000058	<0.02	<0.02	<0.01	315	0.13	<0.0001	0.47	344	0.36	<0.0002	0.058	9.9	0.0023	810	<0.01	<0.02	----
MW-6	8/31/2021	0.24	<0.00025	<0.02	<0.02	<0.01	410	<0.06	<0.0005	0.49	498	0.28	<0.0002	0.085	11.2	0.0148	575	<0.01	<0.02	----
MW-6	11/18/2021	0.25	<0.00025	<0.1	<0.02	<0.01	383	<0.06	<0.0005	0.47	473	0.24	<0.0002	0.076	10.3	0.0153	589	<0.01	<0.02	----
MW-6	3/22/2022	0.21	<0.00025	<0.1	<0.1	<0.05	488	<0.3	<0.0005	0.43	460	0.08	<0.0002	<0.04	11.5	0.0465	362	<0.05	<0.1	----
MW-6	5/17/2022	0.32	<0.00005	<0.1	0.012	<0.05	440	<0.3	<0.0001	0.46	422	0.20	<0.0002	0.121	10.9	0.0538	522	<0.05	<0.1	----
MW-6	8/15/2022	0.19	0.000131	<0.1	0.020	<0.05	421	0.70	<0.0001	0.43	410	0.29	<0.0002	0.409	10.8	0.0112	456	<0.05	<0.1	----
MW-6	11/7/2022	0.28	<0.00025	<0.1	0.061	<0.05	414	0.32	<0.0005	0.43	411	0.61	<0.0002	0.320	10.3	<0.0005	473	<0.05	<0.1	----
MW-6	3/6/2023	0.25	<0.00025	<0.1	0.063	<0.01	413	1.55	<0.0005	0.42	416	0.84	<0.0002	0.102	10.7	<0.0005	558	<0.01	<0.02	----
MW-6	5/30/2023	0.24	<0.00025	<0.02	0.054	<0.01	398	1.12	<0.0005	0.46	421	0.66	<0.0002	0.090	10.5	0.0032	566	<0.01	0.028	----
MW-6	8/8/2023	0.27	<0.0001	<0.02	0.043	0.011	402	1.34	<0.0002	0.49	422	0.51	<0.0002	0.078	11.5	0.0053	532	<0.01	0.039	----
MW-6	11/14/2023	0.24	<0.00025	<0.1	0.035	<0.05	414	0.86	<0.0005	0.43	408	0.42	<0.0002	0.083	11.3	0.0045	521	<0.05	<0.1	----
MW-6	3/11/2024	0.26	<0.00025	<0.02	0.036	<0.01	386	1.35	<0.0005	0.4	398	0.415	<0.0002	0.068	9.9	<0.0005	543	<0.01	0.095	----
MW-7	1/3/2018	0.46	<0.005	<0.005	0.0014	0.00555	----	1.39	<0.01	0.78	----	0.20	<0.0002	0.016	----	<0.03	----	0.0023	0.027	----
MW-7	4/27/2018	0.44	<0.005	<0.005	<0.005	<0.01	----	0.25	<0.01	0.67	----	0.17	<0.0002	0.006	----	<0.03	----	<0.005	<0.01	0.0142
MW-7	9/26/2018																			
MW-7	12/12/2018	0.45	<0.005	<0.005	<0.005	<0.01	----	0.24	<0.01	0.57	----	0.10	<0.0002	0.004	----	<0.03	----	<0.005	0.010	----
MW-7	3/7/2019	0.43	<0.005	<0.005	0.0020	<0.01	----	0.30	<0.01	0.56	----	0.15	<0.0002	0.008	----	<0.03	----	<0.005	0.010	----
MW-7	6/12/2019	0.40	<0.0003	<0.05	<0.05	<0.05	----	<0.2	<0.0005	0.62	----	0.14	<0.0002	<0.04	----	0.0087	----	<0.03	<0.05	----
MW-7	9/18/2019	0.30	0.00015	<0.05	<0.05	<0.05	----	0.80	0.001	0.48	----	0.10	<0.0002	<0.04	----	0.0762	----	<0.03	<0.05	----
MW-7	12/9/2019	0.20	<0.0003	<0.05	<0.05	<0.05	----	<0.2	<0.0005	0.44	----	<0.05	<0.0002	<0.04	----	0.0903	----	<0.03	<0.05	----
MW-7	3/9/2020	0.20	0.00011	<0.05	<0.05	<0.05	----	<0.2	<0.0001	0.60	----	<0.05	<0.0002	<0.04	----	0.0701	----	<0.03	<0.05	----
MW-7	9/16/2020	0.14	0.00007	0.01	<0.01	<0.01	----	0.15	0.0002	0.43	----	0.01	<0.0002	0.013	----	0.0655	----	<0.01	<0.02	----
MW-7	11/23/2020	0.15	<0.00025	<0.05	<0.05	<0.05	----	<0.3	<0.0005	0.38	----	<0.05	<0.0002	<0.04	----	0.0452	----	<0.05	<0.1	----
MW-7	2/22/2021	0.20	<0.00025	<0.05	<0.05	<0.05	----	<0.3	<0.0005	0.634	----	<0.05	<0.002	<0.04	----	0.0348	----	<0.05	<0.1	----
MW-7	5/19/2021	0.14	0.000057	<0.02	<0.02	<0.01	460	<0.06	<0.0001	0.47	530	<0.01	<0.0002	0.023	13.7	0.0401	393	<0.01	<0.02	----
MW-7	8/31/2021	0.31	<0.00025	<0.02	<0.02	<0.01	391	<0.06	<0.0005	0.52	397	0.07	<0.0002	0.016	10.8	0.0115	666	<0.01	<0.02	----
MW-7	11/18/2021	0.19	<0.00025	<0.1	<0.02	<0.01	429	<0.06	<0.0005	0.38	386	0.06	<0.0002	0.016	10.6	0.0284	402	<0.01	<0.02	----
MW-7	3/22/2022	0.39	<0.00025	<0.1	<0.1	<0.05	396	<0.3	<0.0005	0.55	428	0.06	<0.0002	<0.04	10.8	0.0114	671	<0.05	<0.1	----
MW-7	5/10/2022	0.37	<0.00025	<0.1	0.0023	<0.05	376	<0.3	<0.0005	0.55	392	0.09	<0.0002	<0.04	10.1	0.0055	662	<0.05	<0.1	----
MW-7	8/15/2022	0.29	0.000067	<0.1	0.0028	<0.05	346	0.44	<0.0001	0.54	371	0.07	<0.0002	<0.04	10.5	0.0008	703	<0.05	<0.1	----
MW-7	11/7/2022	0.16	<0.00025	<0.1	0.0018	<0.05	454	<0.3	<0.0005	0.34	365	<0.05	<0.0002	<0.04	11.3	0.0371	306	<0.05	<0.1	----
MW-7	3/6/2023	0.32	<0.0005	<0.1	0.0040	<0.05	384	<0.3	<0.001	0.56	449	0.06	<0.0002	<0.04	11.2	<0.001	706	<0.05	<0.1	----
MW-7	5/30/2023	0.17	<0.00025	<0.02	0.0021	<0.01	466	0.09	<0.0005	0.45	519	<0.01	<0.0002	0.023	13.1	0.0981	360	<0.01	<0.02	----
MW-7	8/8/2023	0.33	<0.0001	<0.04	0.0025	0.011	385	0.17	<0.0002	0.61	436	0.08	<0.0002	0.017	12.0	0.0080	638	<0.01	<0.02	----
MW-7	11/14/2023	0.36	<0.00025	<0.02	0.0014	<0.01	333	0.64	<0.0005	0.62	353	0.09	<0.0002	0.008	10.2	<0.0005	707	<0.01	<0.02	----
MW-7	3/11/2024	0.15	<0.00025	<0.02	0.00243	<0.01	432	<0.06	<0.0005	0.34	379	<0.01	<0.0002	0.014	11.9	0.0287	370	<0.01	0.080	----
MW-8	3/9/2020																			
MW-8	9/16/2020																			
MW-8	9/28/2020	1.2	<0.00025	<0.05	<0.05	<0.05	----	2.62	<0.0005	0.51		0.30	<0.0002	<0.04		0.0008		<0.05	<0.1	----
MW-8	11/9/2020																			
MW-8	11/23/2020	0.82	<0.00025	<0.05	<0.05	<0.05	----	<0.3	<0.0005	0.33	----	0.25	<0.0002	<0.04	----	<0.0005	----	<0.05	<0.1	----
MW-8	2/22/2021	0.848	<0.00025	<0.01	<0.01	<0.01	----	<0.06	<0.0005	0.36	----	0.31	<0.0002	<0.008	----	<0.0005	----	<0.01	<0.02	----
MW-8	5/19/2021	0.89	0.000065	<0.04	<0.02	<0.01	93	<0.06	0.00016	0.37	31	0.28	<0.0002	<0.008	6.2	0.0002	1250	<0.01	<0.02	----
MW-8	8/31/2021	0.78	<0.00025	<0.02	<0.02	<0.01	111	<0.06	<0.0005	0.38	39	0.32	<0.0002	<0.008	5.9	<0.0005	1300	<0.01	<0.02	----
MW-8	11/18/2021	0.80	<0.00025	<0.1	<0.02	<0.01	107	<0.06	<0.0005	0.38	47	0.27	<0.0002	<0.008	6.4	<0.0005	1150	<0.02	<0.02	----
MW-8	3/28/2022	0.60	<0.0001	<0.04	<0.04	<0.02	60	<0.12	0.00036	0.26	20	0.20	<0.0002	<0.016	4.3	<0.0002	805	<0.02	<0.04	----
MW-8	5/17/2022	0.88	<0.00005	<0.04	<0.04	<0.02	77	<0.12	<0.0001	0.39	29	0.30	<0.0002	<0.016	5.3	<0.0001	1180	<0.02	<0.04	----
MW-8	8/15/2022	0.81	<0.00005	<0.04	<0.04	<0.02	68	0.83	<0.0001	0.37	27	0.24	<0.0002	<0.016	5.4	<0.0002	1110	<0.02	<0.04	----
MW-8	11/7/2022	0.85	<0.0001	<0.04	0.00051	<0.02	68	0.89	<0.0002	0.37	27	0.24	<0.0002	<0.016	5.4	<0.0005	1160	<0.02	<0.04	----
MW-8	3/6/2023	0.89	<0.0001	<0.04	0.00055	<0.02	70	0.86	<0.0002	0.36	28	0.23	<0.0002	<0.016	5.6	<0.0002	1240	<0.02	<0.04	----
MW-8	5/30/2023	0.93	<0.00025	<0.02	0.00031	<0.01	60	1.02	<0.0005	0.42	25	0.19	<0.0002	<0.008	5.5	0.0009	1280	<0.01	<0.02	----
MW-8	8/8/2023	0.90	<0.0001	<0.04	0.00024	<0.01	64	0.89	<0.0002	0.44	26	0.22	<0.0002	<0.008	6.2	<0.0002	1140	<0.01	<0.02	----
MW-8	11/14/2023	0.88	<0.0001	<0.02	0.00023	<0.01	64	0.85	<0.0002	0.44	26	0.23	<0.0002	<0.008	6.4	<0.0002	1150	<0.01	<0.02	----
MW-8	3/11/2024	0.86	<0.00025	<0.02	0.00029	<0.01	59	0.71	<0.0005	0.34	25	0.19	<0.0002	<0.008	5.2	<0.0005	1210	<0.01	0.090	----
MW-9	3/28/2022	0.90	<0.00025	<0.02	<0.02	<0.01	367	<0.06	<0.0005	0.29	178	0.61	<0.0002	0.022	8.1	<0.0005	540	<0.01	<0.02	----
MW-9	5/17/2022	1.19	<0.00005	<0.1	0.0093	<0.05	478	<0.3	<0.0001	0.36	216	0.76	<0.0002	<0.04	9.3	0.0003	694	<0.05	<0.1	----
MW-9	8/15/2022	1.15	0.000065	<0.1	0.0040	<0.05	417	<0.3	<0.0001	0.36	156	0.55	<0.0002	<0.04	9.5	<0.0001	716	<0.05	<0.1	----
MW-9	11/7/2022	1.26	<0.00025	<0.1	0.0063	0.05	418	0.51	<0.0005	0.38	158	0.55	<0.0002	<0.04	9.0	<0.0001	741	<0.05	<0.1	----
MW-9	3/7/2023	1.32	<0.00005	<0.1	0.0036	<0.01	409	0.94	<0.0001	0.38	156	0.46	<0.0002	<0.008	9.0	<0.0001	779	<0.01	<0.02	----
MW-9	5/31/2023	1.39	<0.00025	<0.02	0.0025	<0.01	415	1.39	<0.0005	0.41	161	0.45	<0.0002	<0.008	8.9	<0.0005	820	<0.01	<0.02	----
MW-9	8/9/2023	1.32	<0.00025	<0.02	0.0022	<0.01	395	1.69	<0.0005	0.44	158	0.50	<0.0002	<0.008	8.6	<0.0005	747	<0.01	0.738	----
MW-9	11/15/2023	1.43	<0.00025	<0.02	0.0018	<0.01	408	1.77	<0.0005	0.37	159	0.42	<0.0002	<0.008	9.2	<0.0005	799	<0.01	<0.02	----
MW-9	3/11/2024	1.4	<0.0001	<0.02	0.0018	<0.01	400	1.89	<0.0002	0.39	158	0.38	<0.0002	<0.008	8.8	<0.0002	809	<0.01	0.090	----
MW-10	3/28/2022	0.99	<0.00025	<0.1	<0.1	<0.05	430	<0.3	0.00055	0.31	198	0.69	<0.0002	<0.04	8.9	<0.0005	615	<0.05	<0.1	----
MW-10	5/17/2022	1.59	<0.00005	<0.1	0.00102	<0.05	83	0.51	<0.0001	0.34	24	0.07	<0.0002	<0.04	6.9	0.0004	1400	<0.05	<0.1	----
MW-10	8/15/2022	1.32	<0.00005	<0.1	0.000287	<0.05	54	0.62	0.00021	0.31	16.2	<0.05	<0.0002	<0.04	6.9	<0.0002	1240	<0.05	<0.1	----
MW-10	11/7/2022	1.40	<0.00025	<0.1	<0.00025	0.06	46	0.53	<0.0005	0.32	14.7	<0.05	<0.0002	<0.04	6.3	<0.0005	1240	<0.05	<0.1	----
MW-10	3/7/2023	1.33	0.000052	<0.04	0.00017	<0.01	40	0.47	0.00028	0.30	12.4	0.03	<0.0002	<0.008	5.9	0.0001	1090	<0.01	<0.02	----
MW-10	5/31/2023	1.35	<0.0001	<0.02	<0.0001	<0.01	38	0.41	<0.0002	0.30	11.8	0.02	<0.0002	<0.008	5.6	<0.0002	1230	<0.01	<0.02	----
MW-10	8/9/2023	1.25	<0.00005	<0.02	0.000075	<0.01	33	0.33	0.0001	0.32	10.2	0.02	<0.0002	<0.008	5.5	<0.0005	1110	<0.01	<0.02	----
MW-10	11/15/2023	1.31	<0.00025	<0.02	<0.00025	<0.01	29	0.27	<0.0005	0.26	8.63	<0.01	<0.0002	<0.008	5.4	<0.0005	1170	<0.01	<0.02	----
MW-10	3/11/2024	1.31	<0.0001	<0.02	<0.0001	<0.01	25	0.32	0.0002	0.21	7.59	0.013	<0.0002	<0.008	4.1	<0.0002	829	<0.01	0.082	----
MW-11	3/23/2022	0.41	<0.0005	<0.02	<0.02	<0.01	45	<0.06	<0.001	0.15	24	<0.01	<0.0002	<0.008	3.6	<0.002	461	<0.01	<0.02	----
MW-11	5/17/2022	0.49	<0.00005	<0.02	<0.02	<0.01	52	<0.06	<0.0001	0.18	29	0.02	<0.0002	<0.008	3.4	0.1320	513	<0.01	<0.02	----
MW-11	8/15/2022	0.45	<0.00005	<0.02	<0.02	<0.01	47	<0.06	<0.0001	0.16	26	<0.01	<0.0002	<0.008	3.5	0.1250	477	<0.01	<0.02	----
MW-11	11/7/2022	0.43	<0.00005	<0.02	0.0023	<0.01	68	<0.06	<0.0001	0.15	34	0.02	<0.0002	0.011	3.7	0.1620	412	<0.01	<0.02	----
MW-11	3/6/2023	0.46	<0.00005	<0.02	0.00043	<0.01	53	<0.06	<0.0001	0.14	28	<0.01	<0.0002	<0.008	3.4	0.1140	435	<0.01	<0.02	----
MW-11	5/31/2023	0.48	<0.00005	<0.02	0.0001	<0.01	46	<0.06	<0.0001	0.17	29	0.02	<0.0002	<0.008	3.7	0.0386	563	<0.01	<0.02	----
MW-11	8/8/2023	0.47	<0.0001	<0.02	0.0002	0.01	68	0.06	<0.0002	0.19	36	0.11	<0.0002	<0.008	4.1	0.0007	494	<0.01	<0.02	----
MW-11	11/15/2023	0.44	<0.00005	<0.02	0.00054	<0.01	91	0.19	<0.0001	0.16	44	0.07	<0.0002	<0.008	4.4	0.0421	422	<0.01	<0.02	----
MW-11	3/11/2024	0.44	<0.00005	<0.02	0.000789	<0.01	71	0.17	<0.0001	0.14	36	0.03	<0.0002	<0.008	3.5	<0.0001	414	<0.01	0.071	----
MW-12	3/28/2022	0.60	<0.00005	<0.02	<0.02	<0.01	11	<0.06	<0.0001	0.11	3.12	0.01	<0.0002	<0.008	2.2	<0.0002	488	<0.01	<0.02	----
MW-12	5/17/2022	0.80	<0.00005	<0.02	<0.02	<0.01	14	<0.06	<0.0001	0.17	4.55	0.03	<0.0002	<0.008	2.9	0.0007	707	<0.01	<0.02	----
MW-12	8/15/2022	0.79	<0.00005	<0.04	<0.04	<0.02	26	<0.12	<0.0002	0.19	6.19	<0.02	<0.0002	<0.016	3.7	<0.0002	805	<0.02	<0.04	----
MW-12	11/7/2022	0.84	<0.0001	<0.04	0.0017	<0.02	26	<0.12	<0.0002	0.20	7.38	0.07	<0.0002	0.099	4.1	0.0008	861	<0.02	<0.04	----
MW-12	3/6/2023	0.87	<0.0001	<0.04	0.00095	<0.02	24	<0.12	0.00021	0.21	8.32	0.04	<0.0002	0.048	4.0	0.0004	967	<0.02	<0.04	----
MW-12	5/31/2023	0.89	<0.0001	<0.02	0.00037	<0.01	21	0.30	0.00028	0.21	8.70	0.10	<0.0002	<0.008	3.9	<0.0002	958	<0.01	<0.02	----
MW-12	8/8/2023	0.93	<0.0001	<0.02	0.00062	0.013	24	0.19	0.00021	0.27	9.05	0.11	<0.0002	<0.008	4.8	<0.0005	879	<0.01	<0.02	----
MW-12	11/15/2023	0.93	<0.0001	<0.02	0.00082	<0.01	27	0.12	<0.0002	0.26	10.3	0.09	<0.0002	<0.008	5.2	<0.001	909	<0.01	<0.02	----
MW-12	3/11/2024	0.902	<0.0001	<0.02	0.000756	<0.01	26	0.186	<0.0002	0.213	10.2	0.075	<0.0002	<0.008	4.03	<0.001	971	<0.01	0.092	----
MW-13	3/23/2022	0.94	<0.0001	<0.04	<0.04	<0.02	5.46	<0.12	<0.0002	0.18	1.45	<0.02	<0.0002	<0.016	2.9	<0.0002	885	<0.02	<0.04	----
MW-13	5/10/2022	0.95	<0.0001	<0.04	<0.04	<0.02	4.13	<0.12	<0.0002	0.18	1.00	<0.02	<0.0002	<0.016	2.4	0.0184	782	<0.02	<0.04	----
MW-13	8/15/2022	1.00	<0.00005	<0.04	<0.04	<0.02	7.84	<0.12	<0.0001	0.21	1.74	<0.02	<0.0002	<0.016	3.1	<0.0002	910	<0.02	<0.04	----
MW-13	11/8/2022	1.03	<0.00025	<0.04	<0.00025	<0.02	6.65	<0.12	<0.0002	0.23	1.67	<0.02	<0.0002	<0.016	3.1	<0.0002	977	<0.02	<0.04	----
MW-13	3/6/2023	1.09	<0.00025	<0.04	<0.00025	<0.02	7.60	<0.12	<0.0005	0.24	2.21	<0.02	<0.0002	<0.016	3.1	<0.0002	1060	<0.02	<0.04	----
MW-13	5/30/2023	1.04	0.00012	<0.02	0.00022	<0.01	6.22	<0.06	0.00043	0.28	1.82	<0.01	<0.0002	<0.008	2.9	<0.001	1050	<0.01	<0.02	----
MW-13	8/8/2023	1.06	<0.0001	<0.02	<0.0001	<0.01	5.65	<0.06	<0.0002	0.28	1.82	0.01	<0.0002	<0.008	3.8	<0.0005	945	<0.01	<0.02	----
MW-13	11/14/2023	1.07	<0.0001	<0.02	<0.0001	<0.01	6.70	<0.06	<0.0002	0.27	1.74	<0.01	<0.0002	<0.008	3.6	<0.0002	891	<0.01	<0.02	----
MW-13	3/11/2024	1.07	<0.00025	<0.02	<0.00025	<0.01	7.24	<0.06	<0.0005	0.22	1.93	<0.01	<0.0002	<0.008	2.9	<0.0005	976	<0.02	0.067	----
MW-14	3/28/2022	1.46	<0.0001	<0.04	<0.04	<0.02	85	<0.12	<0.0002	0.32	23	<0.02	<0.0002	<0.016	7.1	0.0098	1260	<0.02	<0.1	----
MW-14	5/17/2022	1.26	0.000066	<0.04	<0.04	<0.02	16	<0.12	<0.0001	0.40	4.75	<0.02	<0.0002	<0.016	4.6	0.0012	1390	<0.02	<0.04	----
MW-14	8/15/2022	1.17	<0.00005	<0.1	0.00075	<0.05	17	<0.3	<0.0002	0.36	4.86	<0.05	<0.0002	<0.04	5.3	<0.0002	1450	<0.05	<0.1	----
MW-14	11/8/2022	1.24	<0.0005	<0.1	0.00086	<0.05	18	0.36	<0.001	0.36	4.99	<0.05	<0.0002	<0.04	5.7	<0.001	1610	<0.05	<0.1	----
MW-14	3/6/2023	1.32	<0.00025	<0.1	0.00066	<0.05	19	0.81	<0.0005	0.38	6.44	<0.05	<0.0002	<0.04	5.3	<0.0005	1740	<0.05	<0.1	----
MW-14	5/30/2023	1.21	<0.00025	<0.02	0.00062	<0.01	17	0.68	0.00084	0.50	5.47	0.04	<0.0002	<0.008	5.0	<0.002	1770	<0.01	0.063	----
MW-14	8/8/2023	1.30	<0.0001	<0.1	0.00036	0.01	19	1.10	<0.0005	0.52	5.89	0.06	<0.0002	<0.008	6.2	<0.0005	1750	<0.01	<0.02	----
MW-14	11/14/2023	1.23	<0.00025	<0.02	<0.00025	<0.01	16	0.53	<0.0005	0.56	5.39	0.03	<0.0002	<0.008	5.7	<0.0005	1590	<0.01	<0.02	----
MW-14	3/11/2024	1.29	<0.00025	<0.02	<0.00025	<0.05	18	0.98	<0.0005	0.42	5.91	0.03	<0.0002	<0.008	5.4	<0.0005	1850	<0.01	0.093	----
Field QA/QC Samples																				
MW-6 (duplicate)	9/19/2019	0.30	0.00031	<0.05	0.05	<0.05	----	0.30	0.0005	0.48	----	0.57	<0.0002	0.150	----	0.1410	----	<0.03	<0.05	----
MW-7 (duplicate)	6/12/2019	0.40	<0.04	<0.05	<0.05	<0.05	----	0.20	<0.0005	0.61	----	0.14	<0.0002	<0.04	----	0.0084	----	<0.03	<0.05	----
MW-7 (duplicate)	11/9/2019	0.20	<0.0003	<0.05	<0.05	<0.05	----	<0.2	<0.0005	0.44	----	<0.05	<0.0002	<0.04	----	0.0903	----	<0.03	<0.05	----
MW-7 (duplicate)	3/9/2020	0.10	0.0001	<0.05	<0.05	<0.05	----	<0.2	<0.0001	0.60	----	<0.05	<0.0002	<0.04	----	0.0704	----	<0.03	<0.05	----
MW-7 (duplicate)	9/16/2020	0.13	0.00007	0.01	<0.01	<0.01	----	0.12	0.0002	0.43	----	0.01	<0.0002	0.010	----	0.0654	----	<0.01	<0.02	----
MW-7 (duplicate)	2/22/2021	0.17	<0.00025	<0.01	<0.01	<0.01	----	<0.06	<0.0005	0.619	----	0.020	<0.0002	0.0197	----	0.0329	----	<0.01	<0.02	----
MW-7 (duplicate)	5/19/2021	0.14	0.000068	<0.02	<0.02	<0.01	457	<0.06	<0.0001	0.47	528	<0.01	<0.0002	0.012	13.9	0.0398	390	<0.01	<0.02	----
MW-7 (duplicate)	8/31/2021	0.31	<0.00025	<0.02	<0.02	<0.01	390	<0.06	<0.0005	0.52	396	0.07	<0.0002	0.017	10.9	0.0109	661	<0.01	<0.02	----
MW-7 (duplicate)	3/22/2022	0.35	<0.00025	<0.1	<0.1	<0.05	383	<0.3	<0.0005	0.52	431	<0.05	<0.0002	<0.04	10.5	0.0119	642	<0.05	<0.1	----
MW-7 (duplicate)	5/10/2022	0.39	<0.00025	<0.1	0.0022	<0.05	373	<0.3	<0.0005	0.56	389	0.10	<0.0002	<0.04	10.3	0.0061	675	<0.05	<0.1	----
MW-7 (duplicate)	3/6/2023	0.29	<0.0001	<0.1	0.0039	<0.01	388	0.09	<0.0002	0.54	443	0.07	<0.0002	0.026	11.7	0.0056	677	<0.01	<0.02	----
MW-7 (duplicate)	3/11/2024	0.144	<0.00025	<0.2	0.00193	<0.02	446	<0.06	<0.0005	0.329	382	<0.01	<0.0002	0.0131	12	0.0294	354	<0.01	0.085	----
MW-8 (duplicate)	11/23/2020	0.83	<0.00025	<0.05	<0.05	<0.05	----	<0.3	<0.0005	0.34	----	0.25	<0.0002	<0.04	----	<0.0005	----	<0.05	<0.1	----
MW-8 (duplicate)	11/18/2021	0.81	<0.0001	<0.04	<0.02	<0.01	104	<0.06	<0.0002	0.38	43	0.27	<0.0002	<0.008	6.3	<0.0002	1150	<0.02	<0.02	----
MW-8 (duplicate)	8/15/2022	0.80	<0.00005	<0.04	<0.04	<0.02	68	0.83	<0.0001	0.36	27	0.24	<0.0002	<0.016	5.4	<0.0002	1100	<0.02	<0.04	----
MW-8 (duplicate)	11/7/2022	0.87	<0.0001	<0.04	0.00052	<0.02	70	0.86	<0.0002	0.37	28	0.25	<0.0002	<0.016	5.7	<0.0005	1160	<0.02	<0.04	----
MW-8 (duplicate)	8/8/2023	0.90	<0.0001	<0.02	0.0003	0.01	66	0.87	<0.0002	0.45	27	0.24	<0.0002	<0.008	6.3	<0.0002	1160	<0.01	<0.02	----
MW-11 (duplicate)	5/31/2023	0.48	<0.00005	<0.02	0.0001	<0.01	46	<0.06	<0.0001	0.17	29	<0.01	<0.0002	<0.008	3.3	0.0019	549	<0.01	<0.02	----
MW-12 (duplicate)	11/15/2023	0.93	<0.00025	<0.02	0.0008	<0.01	27	0.10	<0.0005	0.21	10.1	0.09	<0.0002	<0.008	4.5	<0.0005	973	<0.01	<0.02	----
CDPHE Regulation 41 Table 3 Groundwater Quality Reference Standards (Agricultural Use)[1]		*5.0*	*0.01*	*0.10*	*0.05*	*0.2*	----	*5.0*	*0.10*	*2.5*	----	*0.20*	*0.01*	*0.20*	----	*0.02*	----	*0.10*	*2.0*	----

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